HEDONISM AND HAPPINESS

Ruut Veenhoven

In: Journal of Happiness Studies, 2003 vol. 4. (special issue on 'Art of living') pp. 437-457

ABSTRACT
Hedonism is a way of life, characterised by openness to pleasurable experience. There are many qualms about hedonism. It is rejected on moral grounds and said to be detrimental to long-term happiness. Several mechanisms for this 'paradox of hedonism' have been suggested and telling examples of pleasure seekers ending up in despair have been given. But is that the rule? If so, how much pleasure is too much? An overview of the available knowledge is given in this paper.

The relation between hedonism and happiness has been studied at two levels: that of the nation and the individual. At the national level average happiness is correlated with moral acceptance of pleasure and with active leisure. At the individual level it is similarly linked with hedonistic attitudes and also correlated with hedonistic behaviours such as frequent sex and use of stimulants. In most cases the pattern is linearly positive. The relation between happiness and consumption of stimulants follows an inverted U-curve, spoilsports and guzzlers are less happy than modest consumers.

Yet these data cannot settle the issue, since the observed relations may be spurious or due to the effects of happiness on hedonism rather than the reverse. Even if we can prove a positive effect of (mild) hedonism on happiness, there is still the question of how that gains balances against a possible loss of health. A solution is to assess the effect of hedonistic living on the number of years lived happily.

1 INTRODUCTION

The term 'hedonism' is used in several contexts. In moral philosophy it denotes the view that a good life should be a pleasurable life. In psychology it stands for the theory that pleasure seeking is a main motivator of human behaviour. In this paper I use the term for a way of life in which pleasure plays an important role. Hedonists are people who are positive about pleasure and who pluck the fruits of pleasure when possible. The reverse is asceticism, which involves the moral rejection of pleasure and abstinent behaviour.

There is a longstanding discussion about the merits of this hedonism. Some praise it as natural and healthy, but others equate hedonism with overindulgence and moral decay. The mixed feelings about hedonism are reflected in the connotations surrounding the word. On one hand hedonism is associated with good taste and the art of living well, on the other hand with addiction, superficiality, irresponsible behaviour and shortsighted egoism.

Correspondence: Prof. Dr. Ruut Veenhoven Erasmus University Rotterdam, Faculty of Social Sciences, P.O.B. 1738 3000 DR Rotterdam, The Netherlands www2.eur.nl/fsw/research/veenhoven
Printed version: www.SpringerLink.com
Most of the arguments in this discussion rest on conviction. For instance, some
religions reject hedonism on the ground that God drove men out of Paradise and does not
expect us to behave as if we were still in this heavenly place. I do not enter these matters of
principle in this paper. Instead I focus is on another part of the discussion, that is, on
arguments about the reality effects of hedonism, that is, the consequences of hedonism for
happiness. I begin by summarising the contradictory claims about the effects of hedonism
and then take stock of the available evidence.

1.1 The negative view
Human kind, down the ages, has always been warned to avoid the lures of lustful living.
Religious leaders have voiced much of this admonition, for instance Calvin in 16th century
Europe and currently fundamentalists in the Middle East and the USA. The message is also
preached by politicians and by health advisors. Hedonism has even been criticised by
novelists, for example by Aldous Huxley in his 'Brave New World'.

There are two main lines in the critique of hedonism. One is that hedonism is bad for our
environment, the other that it is bad for us as individuals.

The environmental argument holds that hedonism gives rise to over-consumption, and
that this will add to the ongoing depletion of natural resources and consequently will hasten
the destruction of the environment. Aeroplane tourism is just one of the dirty dogs in this
reasoning. Following this line of argument it is suggested that hedonism reduces ones
awareness of danger, because self-indulgences smothers awareness and critical thinking. The
land of the lotus-eaters will be destroyed! Similar claims are made about the deleterious
effects of hedonism on society. The daily treadmill of conspicuous consumption
impoverishes social quality in many ways, undermining morals and destroying the work ethic
within society. Again hedonists are seen to be blind to these dangers, since pleasure induces
an unrealistic and rosy outlook. These views are often presented as part of a broader critique
of consumer society and modernisation.

At the individual level there are also two lines of critique. The first is that hedonism
undermines health. This argumentation applies in particular to the pursuit of sensory
pleasures such as drinking alcoholic beverages, smoking tobacco, eating sweets and abundant
sex. This way of thinking has been reviewed at length in several publications of the ARISE
group (Warburton 1994, 1996, 2002), so I will not go into it further here. The second line of
criticism is that hedonism reduces happiness in the long term; this claim provides the focus
of this paper.

Paradox of hedonism
The claim that pleasure seeking leads to unhappiness takes the attack to the heart of
hedonism. If hedonism does not lead to pleasure after all, then the true hedonist should reject
it. In this reasoning happiness is often defined, as hedonists would have it, that is, as
'enjoyment of one's life'. The claim holds that a hedonistic lifestyle contributes to happiness
in the short run, but not in the longer term, with the paradoxical outcome being attributed to
several mechanisms.

How hedonism might reduce happiness
One reason why hedonists might end up unhappy is that pleasure might fade with time. This
would leave the pleasure seeker unsatisfied and give rise to an urge for ever-stronger stimuli.
This could involve increasingly hazardous behaviour and also lead, inevitably, to
disappointment, because experience blunts sensitivity, the result for the hedonist being one of emptiness.

A related theme is that hedonism leads into addiction. For one thing, pleasure seeking can lead one into risky experimentation and to making the wrong friends. Furthermore habituation would lead to craving forever-increasing levels of stimulation, with the risk of self-destruction.

The addiction point is part of a wider claim that hedonism leads into a loss of reality control. In this argument, hedonism can also reduce control because it spoils people. Pursuit of pleasure makes people evade challenges and therefore leaves them untrained. Evasion of experiences judged potentially painful would also reduce the hedonists stress tolerance, all this making hedonists more vulnerable in the long term and thereby also likely to be more anxious. Growing anxiety in its turn might enhance dependency on stimulants.

Hedonism is also seen as leading into idleness. Pleasure seeking is considered as antithetical to active involvement, and hedonists are depicted as passive lotus-eaters. Since there is good evidence that enjoyment is a by-product of self-actualisation, it is inferred that the pursuit of pleasure yields less pleasurable experiences in the end than a life devoted to a cause or to self-development. The argument goes that hedonism addresses only a limited part of the human repertoire and therefore leaves many higher pleasures untasted.

This links with the theory that happiness requires first of all that one sees meaning in one's life. Since there is little meaning in mere enjoyment, hedonists face bankruptcy in this respect. Such a lack would make itself felt when habituation breaks the spell of lust and when sickness and old age reduce the hedonist's capacity for enjoyment, leading to the end of life in an existential vacuum.

Still another claim is that hedonism erodes social bonds. In this reasoning the pursuit of individual pleasures makes people less sensitive to the needs of others, which links up with the earlier mentioned notion that hedonism leads to moral decay; and further isolation, with the hedonists left 'bowling alone'. That is obviously not much fun and the lack of companionship may make the hedonist even more vulnerable to addiction.

1.2 The positive view

Less ink has been spent on the merits of hedonism, probably because these are seen to be self-evident. Advocates of hedonism argue that pleasure is a natural signal that we should not disregard. It is assumed that evolution has implanted in us the need to do what is good for us, and hence that the pursuit of pleasure, something that comes naturally to homo-sapiens, will lead us to behave in beneficial ways. It is also argued that pleasurable experiences reduce stress and thereby preserve health (e.g. Warburton 1996).

How hedonism might foster happiness

In this view hedonism is likely to contribute to happiness. The main reason is that happiness is seen to result from a positive balance of enjoyable experiences over unpleasant ones, i.e. the sum of pleasures and pains, and that this balance is likely to be more positive if one reaches out for enjoyment.

Next to this direct effect, several indirect contributions are mentioned. One such indirect effect is that enjoyment enhances ones capacity to cope with the problems of life, i.e. by raising an individual’s tolerance for stress and by encouraging reality control over emotion focussed coping (Iversen & Erwin 1997). Another indirect effect that is mentioned is that enjoyment makes people more sociable. We talk and laugh most over a glass of wine and during a good meal. This is seen to strengthen social bonds, which sets the scene for more
pleasurable experiences in the future. Hedonism is also believed to contribute to happiness by its positive effect on physical health (e.g. Warburton and Sherwood 1996).

What is wrong with the idea that hedonism will not make you happy?
As advocates of hedonism deem these positive effects rather obvious, they are more concerned with attacking the theory that negative effects prevail. One counter argument is that the criticism is about a caricature of hedonism, which equates pleasure seeking with uncontrolled greediness and a preference for primitive pleasures, commonly of the flesh. Following this line it is retorted that one derives most pleasure from a rich mix of moderate pleasures, which appeals both to the body and the mind. It is also denied that pleasure seeking interferes with involvement in work and social obligations, because enjoyment rather facilitates performance of these tasks. Another line of defence is that the critics of hedonism are unable to view reality without a taste in their mouth, and thus fail to provide convincing empirical proof for their improbable assertions. I will consider the latter point later in this paper.

2 RESEARCH QUESTIONS

Both these contradictory theories can be illustrated with casuistic evidence. Probably neither is entirely wrong. Still one may fit reality better than the other and this general fit can be assessed empirically.

There are two ways to check the reality value of the theories. One is to test the mechanisms mentioned above. An advantage of this approach is that it shows us in what ways hedonism affects happiness. The other approach is to consider the net effect. This shows us how much hedonism affects happiness. This paper follows that latter approach, and the following issues are considered.

Balance of effects
If we accept that hedonism may exert positive and negative effects on happiness, the following questions arise: How often do these effects occur? What is their relative impact? The balance of effects will be manifest in the statistical relationship with happiness. If adverse effects prevail the relationship will be negative, if beneficial effects dominate the relationship will be positive and if the adverse and beneficial effect balance, and therefore cancel out, there will be no statistical relationship. So the first goal of this exploration is to see which of the three possible patterns appears in the research findings. The focus is then on the size and direction of the relationship.

Optimal enjoyment
The negative view involves overindulgence, while the positive view concerns modest enjoyment. This brings us to the question: What is the optimal level? Just how much enjoyment is too little, how much is too much? To find answers we need to look for utility curves, and to focus on the shape of the relationship.

Generality of the pattern
Both theories assume general effects of hedonism, that are largely independent of the specific pleasures pursued, and this would imply that we see a similar pattern over different enjoyments. To test this hypothesis we must focus on consistency of the data.
Contingency of effects
It is well possible that the effects of hedonism on happiness differ across persons and situations. For instance, hedonism may add to happiness for well-controlled persons in affluent nations, but just the opposite for impulsive people living in chronic poverty. When looking for evidence for such variations the focus is on the universality of effects.

Micro- and macro level
These effects can be studied at the individual and at the societal level. At the individual level we compare, within a culture, people who pursue a more or less hedonistic lifestyle. At the societal level we compare more and less hedonistic cultures. These differences are not necessarily parallel. It is possible that average happiness is higher in hedonistic cultures, but that in the most hedonistic cultures the most hedonistic individuals are less happy relatively.

3 AVAILABLE DATA
Most of the research findings on happiness are available in the World Database of Happiness (WDH, Veenhoven 2001a). This is a 'finding-browser', which documents the research in a field at the level of observed relationships. The World Database of Happiness is limited to findings arising from indicators of happiness that fit the definition of 'the overall appreciation of one's life-as-a-whole'. That concept and its operationalization are discussed in detail in Veenhoven 2000. Currently the World Database of Happiness contains some 8000 findings resulting from 705 studies in 140 nations. That is, at present, about half of the appropriate data. The database contains findings at the micro level, i.e., comparisons between individuals, and the macro level data, i.e., comparisons of average happiness in nations.

For the purpose of this study the WDH was searched for findings on the relationship between happiness and hedonism. It was found that this matter has not received any very prominent research as yet. The database contains only a handful of findings. All these findings are at the individual level; that is, they concern differences in happiness between more or less hedonistic individuals within a society.

In addition I have made some analyses at the macro level. Comparing average happiness in nations of a more or less hedonistic culture, I used the database 'States of Nations' (Veenhoven 2001b).

4 OBSERVED ASSOCIATIONS
Hedonism manifests itself in two ways, in a general mind-set and in specific behaviours. There are data about the relationship with happiness of these two manifestations, both at the individual level and at the societal level.

4.1 Hedonic mind-set and happiness
Hedonism manifests itself first in values, in particular in the moral appreciation of enjoyment. As yet only one study has investigated the relationship between hedonic values and happiness. This is a study by Fordyce (1972) that analysed essays written by university students on their philosophy of life. Fordyce found that happy students mentioned hedonic themes more often. On other themes he found little difference between happy and unhappy students, for instance with respect to work ethic or altruism.

This matter has also been investigated at the societal level. Some studies on value
preferences among managers in different nations have assessed support for hedonic values. When crossed with average happiness in these nations we see a positive relationship (Data not shown here).

Hedonism also manifests itself in life-goals. In this context a study by Sears (1977) is worth mentioning. This investigation involved a follow-up of high IQ women post school age. At age 60 these women were asked to rate retrospectively how important several life-goals had been for them in young adulthood. They rated six goals, one of which was to take 'joy in living'. All these importance ratings appeared to be unrelated to their present happiness, so the earlier hedonists did not stand out as happier. There are also studies that relate the content of present life-goals to happiness. For instance Ventegodt (1995: 372-4) has compared happiness across current concerns. He also found little difference either; the happy did not rate the hedonic themes any higher than the unhappy.

The relation between life-goals and happiness has not yet been investigated at the societal level.

Hedonism is also reflected in personality, especially in a trait called 'sensation seeking', which is the tendency to pursue varied and intense experiences. The relationship of this trait to happiness has been investigated among university students (Gorman 1971). It appeared that sensation seekers are happier, which links up with the well-known relationship between activity level and happiness. Possibly it is the activity that produces the association rather than the sensation seeking. In this light it is telling that Ludwig (1970) found no correlation between happiness and a mere 'desire for excitement'. About this issue we have no data at the societal level.

Another indication of hedonism is found in the degree to which people actually enjoy activities for pleasure and do so without guilt. This matter has been assessed in 8 western nations (ARISE 1996). Respondents were first asked how much pleasure they took in 13 mundane pleasures such as drinking, smoking, shopping and watching TV. They were also asked whether they felt any guilt when indulging in these activities. When average scores are compared across nations we see more enjoyment in the happiest nations and no relation with guilt. The data on enjoyment are presented on figure 1.

A last clue is found in studies that relate appreciation of 'aspects of life' to satisfaction with 'life as a whole', in particular in studies that looked into satisfaction with 'fun' and 'enjoyment' in life. Though close to happiness this is not quite the same. This relationship has been studied by Andrews & Withey (1976: 20, 112, 141) in several general population samples in the USA. They found quite strong correlations, even when other domain satisfactions were controlled. The pattern is not limited to libertines, it is also observed among nuns (Forti & Huy 1983), nor is the correlation restricted to the happy-go-lucky; it exists also among low-spirited high-school pupils (Brenner 1970).

This matter has also not been investigated at the societal level.

More data are available about the relationship between specific enjoyments and happiness. There are several studies about the relationship between use of stimulants and happiness and also studies that link leisure behaviour to happiness. Lastly there are some data about sex and happiness. For the latter two cases we have data about both attitudes and behaviour.
4.2 Use of stimulants and happiness

Though there has been considerable research into the use of stimulants, there are only a few studies that relate this matter to happiness. These studies concern the use of alcohol, tobacco and psychotropic drugs. Consumption of coffee, sweets and food has yet to be studied. The available data on this matter concern self-reported behaviour. There are no data on the relationship between attitudes to the use of stimulants and happiness.

Alcohol

The best-investigated issue in this context is the use of alcohol. Several studies have compared the happiness of abstainers, moderate and heavy drinkers. Correlations tend to be low and non-significant, but inspection of the shape of the relationship reveals a reversed U pattern. This is best visible in a recent large-scale health survey carried out in Denmark by Ventegodt (1995). The bar-diagram on figure 2 shows that moderate drinkers are the happiest and that the optimum is at 3 to 4 glasses a day. This pattern corresponds with the observed relation between alcohol use and number of years lived (Snel 2000).

The relationship between alcohol use and happiness has also been studied longitudinally. Bachman (1978) followed a large sample of high-school boys over eight years. Correlational analysis did not reveal any relationship between alcohol use and happiness, initially unhappy pupils did not tend to drink more later, nor were early drinkers found to be less happy later. Unfortunately this study did not single out moderate drinkers.

This issue can also be studied at the national level. We know yearly consumption of alcohol per head and average happiness for 49 nations; data are presented in the scattergram on figure 3. At first sight there is no relationship, neither a linear nor a curvilinear pattern. However, there is reason to doubt the data about alcohol use in East European nations. These scores are at the same level as in West-European nations; while there is much evidence of excessive drinking in Eastern Europe in mortality from alcohol related diseases. The report from which the data are drawn notes that East European data are unreliable (World Drinking Trends 1998). If East-Europeans do drink more than suggested by these data, the East-European cases move to the right in figure 3, reproducing the convex pattern we saw in figure 2.

Smoking

As in the case for alcohol use, correlational analysis reveals little relation between smoking and happiness at the individual level (e.g. Schulz et al. 1985). In this case, inspection of the bar chart does not reveal a clear curve. Non-smokers are as happy as moderate smokers are, while heavy smokers are somewhat less happy. See figure 4.

The above-mentioned 8-year follow-up of high-school boys by Bachman (1978) also looked at the effects of smoking on happiness and its converse. It found no effect of smoking on current happiness and later happiness, but there was a significant correlation between earlier unhappiness and later smoking. Together these results could mean that smoking does help to restore happiness. Again we meet with the limitation that this study only reported correlations.

The relationship between smoking and happiness has also been studied at the national level. At this level a clear negative relationship emerges. See figure 5.

Drugs

The use of psychotropic drugs is slightly negatively related to happiness, especially the use of hard drugs. The bar chart in figure 6 shows that Danes who have never tried drugs are half a point happier than their compatriots who have are. Bachman's follow-up of high-school pupils
found that earlier use of drugs did not predict later happiness, but that early unhappiness did predict later drug use. Comparable data at the national level are not available.

4.3 Leisure
Hedonism is likely to manifest itself in a positive attitude to leisure and in involvement in leisure activities. The link with happiness has been considered in several studies, both at the individual level and at the national level.

Attitude to leisure
The German Welfare Survey involves questions about the perceived importance of various life-domains, such as job, income, religion, health and leisure time. All importance ratings are slightly related to happiness, with the importance of leisure time having the strongest relationship (own computation, data not shown). Analysis of the more recent World Value Survey reveals that this pattern exists all over the world (own computation, data not shown).

We see a similar pattern at the national level. People tend to be happier in nations where leisure time is seen to be very important. See figure 7. Interestingly, valuing leisure highly does not go with less concern for the meaning of life, which means that hedonism does not imply a superficial approach to life.

Leisure behaviour
Many studies have shown that active leisure behaviour is more common among the happy than among the unhappy (Veenhoven 1984: 304-5). This holds for all kinds of leisure activities, especially outdoor activities. The happy eat out more often and visit theatres more frequently. They spend more time with friends. There is also an association between sporting activities and happiness, even with involvement in solo-sports. A similar pattern was found in a three-month follow-up study among young adults. Three times each day subjects noted what they were doing and how they felt. The ones that had been most involved in parties, travelling and sports appeared to have been in a better mood on average (Clark & Watson 1988).

Not surprisingly there is also a correlation between membership in leisure organisations and happiness. This latter pattern also appears at the national level. The greater the membership of leisure organisations in a country, the more happy its citizens are on average (Data not shown).

4.4 Sex
Hedonism will manifest itself in a permissive attitude to sex and in the active pursuit of sexual pleasures. So if hedonism harms happiness in the long term, we should find that libertines tend to be less happy.

Attitudes to sex
Several studies have observed a positive correlation between permissive attitudes towards sex and personal happiness, in particular acceptance of pre-marital sex and homosexuality. These correlations appear both at the individual level and at the national level.

Sexual activity
Ventegodt's (1995) study compared the happiness of sexually active and sexually non-active people and found that the formers are much happier than the latter. Other studies have looked at the frequency of intercourse among sexually active people and also found positive relationships. Obviously part of this correlation is due to the presence of a steady partner and to the quality of
that bond. In this context it is worth noting that a positive association remains when the analysis is restricted to people with a partner and when satisfaction with that partner is controlled (Schulz 1985).

This pattern is not reproduced at the national level. Among the few nations for which we know both the average frequency of intercourse and the level of reported happiness we see no clear trend (Data not shown). There is also no relation between average happiness in the nation and adherence to the statement that there should be 'complete sexual freedom'. On the other hand, happiness is higher in nations that accept premarital sex and homosexuality (Data World Value Survey, analysis not reported here). This may mean that moderate sex is conducive to happiness, while not anything goes.

5 RESEARCH AGENDA

The data presented above do not support the theory that hedonism leads into unhappiness. We have not found any negative relationships; the observed correlations are either positive or zero, which rather suggests that hedonism tends to raise happiness. This is a nice start, but no definite answer. The presently available data have many limitations, and the overcoming of these should be on the agenda for further research.

Complete indicators
The available data tap several aspects of hedonism but do not cover the subject completely. This is most apparent in the empty cells to be found in the overviews presented above, e.g., in overview 1, where there is no national level data about hedonic life-goals and happiness. Less visible but no less important are the indicators that are missing altogether in the overviews, for instance the amount of time spent on pleasure seeking, repertoire of pleasurable activities, skill for pleasures, the consumption of coffee and sweets, … etc. A well-focussed study could provide a more complete view the stray findings gathered here.

Weed out artifacts
The correlations presented are not beyond doubt. One source of doubt is systematic measurement error, for instance social desirability bias. If norms for self-presentation inflate self-reports of modest drinking and happiness, the observed curve could be artifactual. That is probably not the case, because we saw a similar pattern between alcohol sales and mortality at the national level, but we cannot rule out that such bias is involved in other cases. This kind of bias can be identified in several ways. One way is to compare self-reports in face-to-face interviews with answers to the same question on a written questionnaire.

Another problem is that correlations may be spurious. One could for instance imagine that physical health figures as a confounding variable. If healthy people engage more often in hedonic activities and are also happier, the latter are statistically related, but not causally. It is even possible that confounding variables veil a negative effect. Some of the correlations reported above have been controlled for some possible confounders but in most cases there was not any check for spuriousness. This point also needs a focussed investigation.

Identify contingencies
Heath can also intervene in another way. Possibly pleasure seeking ads more to the happiness of chronically ill people, because these have less opportunity to derive happiness from involvement in work. One can imagine many more such contingencies. The identification of such pattern requires systematic exploration of the available literature (which is meagre as yet) and preferably a focussed investigation.
Next to contingencies at the individual level there could also be contingencies at the macro level. The happiness yields of hedonism could be greater in modern individualistic society than in collectivistic contexts. This requires that individual level corrections are compared across nations, or better, that full-blown multi-level analysis is performed. This would require that an international survey that involves data on both hedonism and happiness. Such data are not available as yet.

**Distinguish cause and effect**

Even if we can establish that there is a statistical relationship between hedonism and happiness, there is still the question whether this is due to an effect of hedonism on happiness or to the reverse. There are good arguments for both directions of causality.

Disentangling cause and effect requires that both hedonism and happiness be followed over time. That could be rather easily done if panel-studies on consumption and (healthy) lifestyle would also combine items on happiness. This combination however is rare and the panels that do involve items on happiness have only added these recently. I know of only one long-term lifestyle panel that has taken happiness into account from inception. This is the Dutch Longitudinal Study of the Elderly (Deeg & Van Zonneveld 1989). Yet this study did not follow up on happiness. A focussed search might bring more such panels to the light. If so a secondary analysis is due. At the same time it is also wise to press for inclusion of items on happiness in current panels so that we will be able to investigate the matter in the coming decades.

**Balance gains in happiness against possible losses in health**

Even if the above does demonstrate convincingly that hedonism adds to happiness, for most people, there is still a last question: How long does that happiness last? If hedonistic behaviour is as unhealthy as some doctors say it is, it could shorten an otherwise happy life.

Though much of this advice may be exaggerated, it is not without grounds. In the case of smoking it is evident that pursuit of this pleasure can come at the cost of longevity. This is not the only piece of evidence for negative effects of hedonism on survival. The above-mentioned life long follow-up of highly intelligent Americans found two personality traits assessed at age 12 to be predictive of longevity. Subjects who were most 'conscientious' as a child lived longer than average and their 'cheerful' age-mates had shorter than average life (Friedman et all 1993). Optimism and sense of humour measured cheerfulness in this case. This is not quite the same as hedonism, but close enough to see that there may be truth in admonitions against living light-heartedly.

These possible losses in length of life can be balanced against higher satisfaction with life by using the number of happy life-years as the outcome variable. This measure is analogous to 'healthy life-years' or 'disability adjusted life-years' (DALYs). The number of years lived happily can be computed by multiplying the actual number of years lived by average happiness on a scale of 0-1. I have described this measure in more detail elsewhere (Veenhoven 1998).

Application of this measure at the individual level requires that people be followed until they die. So for the present we must make do with the few seasoned panels that have included items on happiness. These sources should be subjected to secondary analysis. If my call for including items on happiness in current panels is heard we should get better data on this subject in the next decades.

Happiness adjusted life-years can be most easily assessed at the national level by multiplying average life expectancy by average 0-1 happiness. All the above analyses (figures 1, 3, 5 and 7) can be run using happy life-years rather than just happiness. A check of these cases showed no differences (data not shown), but things may be different when other aspects of hedonism are investigated.
REFERENCES

*Social indicators of wellbeing*
Plenum, Press, New York

ARISE (1996)
*The value of pleasure and the question of guilt*
International data tabulations, Harris Research Centre, Richmond UK

Bachman, J.G., O'Malley, P.M. & Johnston, J. (1978)
*Youth in transition, vol. VI: Adolescence to adulthood, change and stability in the lives of young men*
Institute for Social Research, University of Michigan, Ann Arbor, USA
(Additional data provided by the authors)

Brenner, B. (1967)
*Patterns of alcohol use, happiness and the satisfaction of wants*
Quarterly Journal of Studies on Alcohol, vol. 28, pp. 667-675

*Mood and the mundane: relations between daily life-events and self-reported mood*
Journal of Personality and Social Psychology, vol. 54, pp. 296-308

*Does happiness lengthen life? The prediction of longevity in the elderly*
In: Veenhoven, R. (ed.) 'How harmful is happiness? Consequences of enjoying life or not'
Universitaire Pers Rotterdam, The Netherlands, pp. 29-43

Fordyce, M.W. (1972)
*Happiness, its daily variation in relation to values*
Dissertation, US International University

*A documented evaluation of primary prevention through consultation*
Community Health Journal, vol 19, pp.290-304

*Does childhood personality predict longevity?*

Gorman, B.S. (1971)
*A multi-variate study of the relationship of cognitive control and cognitive style principles in relation to reported daily mood*
Dissertation, The City University, New York, USA
Huxley, A. (1932)
*Brave New World*
Continental Book Co., Stockholm

Iversen, R.D. & Irwin, P.J. (1997)
*Predicting occupational injury: The role of affectivity*
Journal of Occupational and Organisational Psychology, vol. 70, pp. 113-128

*Intra- and inter-individual relationships between elation-depression and desire for excitement*
Journal of Personality, vol 38, pp 167-176

Schulz, W., Költringer, R., Norden, G. & Tüchler, H. (1985)
*Lebensqualität in Österreich*

Sears, P.S. & Barbee, A.H. (1977)
*Career and Life Satisfactions among Terman’s Gifted Women*

Snel, J. (2002)
*The pleasure of moderate drinking*
In: Warburton 2002

Veenhoven, R. (1984a)
*Conditions of happiness*
Kluwer Academic, Dordrecht, Netherlands

Veenhoven, R. (1996b)
*Happy life expectancy. A comprehensive measure of quality of life in nations*
Social Indicators Research, vol 39, pp. 1-58

Veenhoven, R. (2000c)
*The four qualities of life. Ordering concepts and measures of the good life*
Journal of Happiness Studies, vol 1 pp.1-39

Veenhoven, R. (2001a)
*World Database of Happiness, ongoing register of empirical research findings on overall enjoyment of life.*
Available at: www.eur.nl/fsr/research/happiness

Veenhoven, R. (2001b)
*States of Nations*
Erasmus University Rotterdam

*Liskvalitet i Danmark. (Quality of Life in Denmark)*
Forskningscentrets Forlag, 1995, Copenhagen, Denmark
Pleasure: The politics and reality
Wiley, Chichester, UK

The functions of pleasure
In: Warburton, D.M. & Sherwood, N. Eds. 'Pleasure and Quality of life', Wiley, Chichester

Pleasure and Quality of life
Wiley, Chichester

The senses, pleasure and health. Proceedings of the 7th ARISE Symposium, 2001 Nice
Associates for the Research Into the Science of Enjoyment, London, UK

World Drinking Trends (1998)
Produktschap voor Gedistilleerde Dranken
NCT Publications, Henley-on-Thames, UK
Figure 1
Average enjoyment of mundane pleasures and happiness in 8 nations 1996
Figure 2
Drinking and happiness among adult Danes 1993


r = -.02  p=ns

number of alcoholic drinks consumed last week


r = -.02  p=ns
Figure 3
Drinking and happiness in 49 nations mid 1990s

1997 consumption of liters pure alcohol p/c
Figure 4
Smoking and happiness among adult Danes 1993

number of cigarettes a day

N: 0:835, <2:28, <5:60, <10:144, <21:74, <40:74

r = -.03  p=ns
Figure 5
Smoking and happiness in 68 nations, mid 1990s

1993-97 cigarettes smoked per year p/c

1990-98 4-step happiness

Venezuela
USA
Ukraine
Switzerland
Sweden
Spain
Slovakia
S-Korea
S-Africa
Russia
Romania
Portugal
Poland
Pakistan
Nigeria
New Zealand
Netherlands
Iceland
Ireland
India
Iceland
Greece
Germany
France
Finland
Croatia
Colombia
China
Britain
Brazil
Bulgaria
Britain
Austria
Africa
Azerbaijan
Austria
Australia
Argentina
America
Azerbaijan
Australia
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argentina
Argi
Experience with drugs and happiness among adult Danes 1993

Psychotropic drugs ever tried

N: 1:1081, 2a:454, 2b:367, 2c:17, 2d:18, 2e:49, 2f:17, 2g:6, 2h:6

1 vs 2: Kendall's tau c = -.06  p=ns
Figure 7
Perceived importance of leisure time and happiness in the mid 1990s
NOTES

1 Earlier versions of this paper have been presented at the 7th ARISE Symposium ‘The Senses, Pleasure and Health’, 2001 Nice, France, and at the annual ISQOLS conference in 2001, Washington, USA

2 Association for the Research Into the Science of Enjoyment (ARISE) was established in order to create a better understanding of the benefits of pleasure. It encourages research into the subject and provides a forum for the presentation and discussion of the various aspects of enjoyment. Internet address: www.arise.org

3 Happiness has also been defined as leading a life that meets an (moral) ideal. When such ideals praise acsetism happiness is antithetical to hedonism by definition.