THE STUDY OF LIFE SATISFACTION

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ABSTRACT

This chapter reviews the literature on life satisfaction. Six questions are considered: 1) What is the point of studying life-satisfaction? 2) What is life-satisfaction? 3) Can life-satisfaction be measured? 4) How satisfied are we? 5) What causes us to be satisfied or dissatisfied with life? 6) Can the level of life-satisfaction be increased? These questions are considered at the individual level as well as the societal level. In the concluding section a general overview is given of the work presented in this book.

1 RELEVANCE CONTEXT

The subject of life-satisfaction is part of a b

roader field of enquiry, commonly referred to as

Quality Of Life (QOL). The prime concern in that field is to develop criteria for the 'good' life. Further aims are to asses how well reality fits these standards and to establish what would be required to come closer to the ideal. The thrust of much of this work is to create a better society. It is part of a wider tradition in social research; that of social engineering.

1.1 Historical background

Ideologically, this line of research is rooted in 18th century Enlightenment thinking. From this perspective, the purpose of existence is life itself, rather than the service of King or God. Selfactualisation and happiness become central values. Society itself is seen as a means for providing citizens with the necessities for a good life. In the 19th century, this conviction manifested itself in the Utilitarian Creed that the best society is one which provides 'the greatest happiness for the greatest number'. In the 20th century it has inspired large scale attempts at social reform and influenced the development of the Welfare State. Efforts towards the creation of a better society manifested themselves in attacks on the evils of ignorance, illness and poverty. Consequently, progress was measured by literacy, control of epidemic disease and the elimination of hunger. Social statistics were developed to record the extent to which progress in these areas had been achieved. Advances in the combat of these social ills were followed by efforts to create welfare-states that ensure a good life for everybody, in particular a good material standard of living. The extent of progress in that area was expressed in terms of monetary gains, security of income and the degree of income-equality. This gave rise to an abundance of social research on poverty and social-inequality, which today is still a major research tradition.

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In the 1960s, by which time most Western Nations had extensive Welfare-States, the new theme of 'limits to economic growth' appeared on the political agenda, and values came to shift to 'post-materialism'. This called for a broader conceptualisation of the good life and its measurement. As a result, the term 'quality of life' was introduced. The initial use of the concept was polemical, serving to denote that there is more to human existence than material welfare.

1.2 Social indicator movement

Disenchantment with the traditional economic criteria of welfare led to the development of 'social' indicators. And since economic indicators guide economic policy, it was argued that social indicators were required to guide social policy. The search for suitable indicators of noneconomic welfare began in the early 1970's. Various pioneering studies were initiated at that time (see below). International agencies organised expert conferences (OECD, UN). In many Western Nations social-indicator study centres emerged; either as semi-government foundations (USA, Netherlands), or as departments added to the bureau's of statistics (Sweden), or as long term research-programs at universities (Germany). In several countries periodical quality of life surveys were started; for example the 'Level of Living Survey' in Sweden, the 'General Social Survey' in the USA and (parts of) the bi-annual 'Eurobarometer' in the European Union. Results from such activities are regularly presented in Social-Indicator-Reports, such as the three annual 'Socio-Cultural Report' in the Netherlands. These developments are frequently referred to as the 'Social Indicator Movement'. The economic recessions of 1975-76 and 1980-82 and the related development of mass unemployment soon diverted attention from noneconomic goals. Though policy interest and funding dwindled, the field matured scientifically. In the 1980's the fruits of the early studies started in the early 1970's began to be harvested. Several important books in this area were published, such as 'The Quality of American Life' (Campbell et al., 1976), 'Social Indicators of Well-being' (Andrews and Withey 1976), 'The Social Progress of Nations' (Estes 1984), and 'Lebensqualität in der Bundesrepublik' (Glatzer and Zapf 1984).

Today the field of social indicator research can be characterised as one of many well established social scientific specialisations. There is an international journal, called 'Social Indicators Research', which publishes contributions from economists, sociologists and psychologists¹. There is also an international newsletter, entitled 'Social Indicator Network' (SINET)². Specialists from various countries meet regularly at conferences of the International Sociological Association (ISA), which has an active Working Group on Social Indicators (WG05)³. Recently a new study group has established: the international society for the study of Quality of Life (ISSQOL)⁴.

1.3 Conceptions of quality of life

Currently, the term 'quality of life' denotes two meanings: 1) the presence of conditions deemed necessary for a good life, and 2) the practice of good living as such. When used at the societal level, only the former meaning applies. When we say that the quality of life of the people in a country is poor, we mean that essential conditions are lacking, such as sufficient food, housing and health care. In other words: the country is not 'liveable' for its inhabitants. At the individual level, the term quality of life can take on both meanings. When we say that somebody doesn't have a good life, we may mean that he/she lacks things deemed indispensable and/or that this person does not thrive. These conditions may coincide, but this is not necessarily the case. A person can be rich, powerful and popular, but still be troubled. On the other hand, someone who is poor, powerless and isolated, may nevertheless be thriving both mentally and physically. I refer to these variants as respectively: 'presumed' quality of life and 'apparent' quality of life⁵.

1.4 Use of life satisfaction

Life-satisfaction is one of the indicators of 'apparent' quality of life. Together with indicators of mental and physical health, it indicates how well people thrive. Data about life-satisfaction is used for several purposes.

Measuring quality of life

The most elementary use of life-satisfaction data is to estimate apparent quality of life within a country or a specific social group. This is typically done to assess the extent of a social problem or issue and to recommend possible policy interventions. High satisfaction suggests that the quality of life, in the population concerned, is good. Though conditions may not be ideal, it is apparently acceptable for most of the population. Low satisfaction marks serious shortcomings of some kind. An example is the assessment of life-satisfaction among single people. In all modern nations, single persons express less pleasure with life than married persons, and the divorced and widowed frequently express the lowest levels of satisfaction with life. This difference in life-satisfaction between those who are single and those with a partner is in fact greater than that expressed between rich and poor (Veenhoven, 1984:6/4). This is commonly explained in terms of 'deprivation'. Apparently, singles lack something essential in life. A problem is that dissatisfaction with life means that *something* is wrong, but it does not indicate *what*. The discontent of the unmarried could be due to negative labelling, but it can also be attributed to loneliness and lack of social support.

Monitoring social progress

A related application of life-satisfaction data is the monitoring through time. If average satisfaction levels increase, this suggests that the quality of life in the country or social group has improved. When satisfaction declines, this indicates possible problems. An example of monitoring at the national level is Easterlin's (1974) analysis of the development of life-satisfaction and economic growth in the post-war decades in the USA. He observed stable life-satisfaction in spite of a doubling of economic welfare, and concluded that money does not buy happiness. An example of following social groups is the study of age-differences in life-

satisfaction during 1950-1970 in the USA by Witt et al., (1979). This study showed that the aged have become relatively more satisfied during the last decades.

Policy-evaluation

Life-satisfaction data has also been used to assess policy effects; in particular for social policy aimed at improvements in the quality of life. Effects of interventions can be measured by changes in satisfaction before and after, or by differences in satisfaction between beneficiaries and non-beneficiaries.

This success criterion is commonly applied in the evaluation of policies concerning the aged; for instance in assessing the benefits of separate housing (Hinrichsen, 1985) and judging the usefulness of activation programs (Ray et al., 1982).

Identification of conditions for a good life

One of the most interesting uses of life-satisfaction data is the empirical validation of ideas about conditions for the *good life*, and related ideas about the *good society*. Such ideas can of course be erroneous. For instance, people may derive less satisfaction from 'proper' housing than most politicians think. If so, people in good houses may appear to be about as satisfied as - otherwise comparable people - in poor houses. Life-satisfaction may also remain unaffected by moves from shoddy to good housing, and vice versa. Such checks are vital for any policy that seriously tries to surpass ideological prepossessions and vested interests. A notable study of this kind is 'The market experience' by Lane (1991), which tries to evaluate Western economic order by its effects on life-satisfaction⁶.

Most studies that assess life-satisfaction aim at socio-economical differences, such as income, education and employment status. That emphasis is due to the significance of these topics in social policy. If, for example, socio-economically deprived citizens take less pleasure in life, that is an argument for egalitarian interventions. However, socio-economic differences appear to be largely irrelevant for life satisfaction; at least in modern industrialised nations. That pattern of non-difference is demonstrated in this book as well (See Chapter 16). The greatest differences in life-satisfaction tend to be in socio-emotional matters, such as intimate relationships and mental health. The policy relevance of the latter difference in limited however, because public policy tends to refrain from interventions in private spheres of life.

1.5 Key literature

The first survey studies which used measures of life-satisfaction were performed in the USA in the 1960's. The emphasis at that time was on mental health. The results from some of this research appeared in books by Gurin et al (1960) and Bradburn (1969). At that time, life-satisfaction was also a topic in an innovative cross-national study on human 'concerns' by Cantril (1965). In the 1970's, life-satisfaction was a central theme in several American Social Indicator studies. Landmark books were published by Campbell et al (1976) and Andrews and Withey (1976). Outside the United States of America studies were reported from the Nordic countries by Allardt (1975) and in Germany by Glatzer and Zapf (1984). In the 1980's the first large-scale longitudinal survey on life-satisfaction was performed in Australia by Heady and

Wearing (1992). Review studies have been published by Veenhoven (1984), Argyle (1987) and Meyers (1992). Recently a bibliography has appeared, which includes 2475 contemporary studies on subjective appreciation of life (Veenhoven 1993a). This bibliography is part of the `World Database of Happiness,' which also involves the ongoing cataloguing of new data on life-satisfaction and its correlates⁷.

1.6 Questions on life satisfaction

The literature on life-satisfaction can be summarised by means of the questions that arise if one follows the utilitarian lead of creating greater happiness for a greater number of people. The first question is what life-satisfaction is precisely. One cannot create greater happiness without a clear definition of happiness. Next, a preliminary methodological question is then whether or not life-satisfaction can be measured. If not, attempts to make life more enjoyable will remain a matter of subjective belief. Without a gauge we remain uncertain about both the necessity to intervene and the effects of such interventions. Provided this question of measurement can be answered affirmatively, then the first substantive question is how satisfied people are, and whether people differ in degree of satisfaction. If everyone is satisfied with life, then there is little need to search for ways in which levels of satisfaction can be improved. Further, if people don't differ, then there would be no clues as to how life satisfaction could be improved. If people appear not to be equally satisfied with their life, the next substantive question is why. Determinants of life-satisfaction can be searched for at two levels; external conditions and inner psychological processes. If we can identify external circumstances in which people tend to be satisfied, we could potentially try to create such conditions for everybody. On the other hand, if we could understand the mental processes involved in obtaining high levels of life satisfaction, then it would be theoretically possible to assist others to acquire them. Both approaches have a long tradition.

A related substantive question is whether or not levels of life-satisfaction can be permanently raised. Two theories about its determinants suggest it cannot. The first theory is that life-satisfaction is *relative*. According to this theory, improvements in living conditions would raise life-satisfaction only temporarily, because the standards on which the comparison is based would simply change. The second theory is that life-satisfaction is an immutable *trait*, rather than a variable state; people are either satisfied or dissatisfied, irrespective of their circumstances. From this perspective, improvements in the quality of life are unlikely to be reflected in life-satisfaction. If these theories hold truth, there is little sense in trying to achieve greater happiness for the greater number. Consequently, they imply that the study of life satisfaction is of limited use.

2 CONCEPT OF LIFE SATISFACTION

Satisfaction is a state of mind. It is an evaluative appraisal of something. The term refers to both 'contentment' and 'enjoyment'. As such it covers cognitive- as well as affective-appraisals. Satisfaction can be both evanescent and stable through time.

2.1 Definition

Life-satisfaction is the degree to which a person positively evaluates the overall quality of his/her life as-a-whole. In other words, how much the person likes the life he/she leads.

Synonyms

Current synonyms for life satisfaction are: 'happiness' and 'subjective well-being'. One advantage in using the term life-satisfaction rather than the word 'happiness' is that it emphasises the subjective character of the concept. The word happiness is also used to refer to an objective good; especially by philosophers. Further, the term life-satisfaction has the advantage over the label of 'subjective well-being' is that life-satisfaction refers to an overall evaluation of life rather than to current feelings or to specific psychosomatic symptoms.

Scope of evaluation

The concept of life-satisfaction denotes an *overall* evaluation of life. So the appraisal that life is 'exciting' does not necessarily mean that it is 'satisfying'. There may be too much excitement in life, and too few other qualities. An overall evaluation of life involves all relevant criteria in the mind of the individual: for example, how good one feels, how well expectations are likely to be met and how desirable various factors are deemed to be, etc. The object of evaluation is *life-as-a-whole*; not a specific area of life, e.g., employment. Enjoyment of work may add to the appreciation of life, but does not constitute it. This book considers four kinds of satisfaction; (1) global life-satisfaction (GLS), (2) satisfaction with housing (SH), (3) satisfaction with finances (SF) and (4) satisfaction with social contacts (SC). Only the first kind (GLS) meets this definition of life satisfaction. The others are "domain satisfactions".

Temporal range

Appraisals of life can concern different periods in time: how life has been, how it is now, and how it will probably be in the future. These evaluations do not necessarily coincide; one may be positive about one's past life, but negative about the future. The focus of this book is on satisfaction at the present point in time. The evaluation of present life is not the same as the way one feels at the moment. One may feel depressed one day, but still know that life is not that bad, and be confident that one will feel better tomorrow. Likewise, basically dissatisfied people can be cheerful now and then. The period depicted as 'the present' is not equally long for all people. Most adults seem to refer to the last few years when talking about their present life. Life-changes, such as recent illness or divorce may shorten that perspective. Someone who has lost his spouse a month ago, will focus on life since that event.

2.2 Variable aspects

Evaluations of life may differ in several respects. One difference is in their *certainty*; some people are fairly certain about how they appraise life, whereas others are plagued by doubts. Another difference is in how *well formed* various judgements are: some people judge rather intuitively, while others engage in elaborate contemplation. A related difference is the *stability* of the judgements. Some people keep the same evaluation over time, whereas others vacilitate. Uncertain and unstable judgements are clearly less valuable as an indicator of quality of life. Still such judgements denote life-satisfaction. Furthermore, appraisals of life are probably not always equally *appropriate*. Like any perception they can be distorted in various ways, such as through mis-attribution and self-deceit. This is commonly referred to as 'false happiness'. Distorted judgements of life are clearly less valuable as an indicator of apparent quality of life. Nevertheless, inappropriate life-satisfaction is still life-satisfaction. The concept of life-satisfaction is not limited to judgements which are considered to be correct by others, but in essence relies on the person's own judgements.

3 MEASUREMENT OF LIFE SATISFACTION

In the 1960's, life-satisfaction became a common topic in survey research. This development was accompanied by a critical discussion regarding the validity of survey questions about life satisfaction. It was even doubted that life-satisfaction could be measured adequately by means of standard interviews or questionnaires. Measurement has long been understood as 'objective' and 'external' assessment, analogous to the measurement of blood-pressure by a doctor. It has now become apparent that life-satisfaction cannot be measured in a similar manner. Steady physiological correlates have not been discovered, and the modern understanding of higher mental functioning does not suggest that they ever will be. Nor have any overt behaviours been found to be consistently linked to inner enjoyment of life. Like most attitudinal phenomena, life-satisfaction is only partially reflected in behaviour.

Though some social behaviours tend to be more frequent among the satisfied (active, outgoing, friendly), such conduct can also be observed among the dissatisfied. Likewise, non-verbal behaviours such as frequent smiling or enthusiastic movements appear to be only modestly related to self-reports of life-satisfaction. Consequently, estimates of someone's lifesatisfaction by his peers are often wrong. Suicidal behaviour is probably more indicative of life-satisfaction than any other behaviour. Almost all people who attempt or commit suicide are dissatisfied with life. However, not all dissatisfied people resort to suicide. Since lifesatisfaction cannot be inferred from overt behaviour, we have to read off inner consciousness by questioning. Questions on life-satisfaction can be posed in various contexts; clinical interviews, life-review questionnaires and through surveys. The questions can be posed in many different ways; directly or indirectly, and by means of single or multiple items. Some common questions are presented in Scheme 1. Life-satisfaction is commonly assessed by single direct questions within the context of a survey interview. However, that practice meets much criticism. It is claimed that such simple self-reports measure life satisfaction neither validly nor reliably. Social critics in particular refuse to believe that survey studies give a good estimate of average happiness. Elsewhere, I have considered the objections against measuring life-satisfactions by means of simple survey-questions and inspected the empirical evidence for claims about bias. I will summarise the main points below. For more detail, see Veenhoven, 1984

Chapter 3.

3.1 Validity doubts

Critics have suggested that responses to questions on life-satisfaction actually measure other phenomena. Rather than indicating how much the respondent enjoys life, answers would simply reflect normative notions and desires.

Notion of life-satisfaction

One of the misgivings is that most people have no opinion at all about their satisfaction with life. They are, according to the critics, more aware of how satisfied they are supposed to be, and report this instead. Though this may sometimes be true, it does not appear to be the rule. Most people know quite well whether or not they enjoy life. For example, eight out of ten Americans report thinking of this issue every week. Further, responses to questions about life-satisfaction tend to be given promptly. 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 will think they should be, given their circumstances. If this is so, people considered to be well off should typically report high life-satisfaction, and people regarded as disadvantaged should follow suit with low satisfaction-reports. That pattern does occur, but it is not general. For instance, in the Netherlands good education is seen as a pre-requisite for a good life, but the highly educated appear slightly less satisfied with life in comparison to their less educated counterparts.

Honesty of answers

Even if questions on life-satisfaction are interpreted correctly, may be, responses are false. In this line it is objected that responses are systematically biased. People who are actually dissatisfied with their life would tend to answer that they are quite content. Both ego-defence and social-desirability could cause such distortions. This bias is seen to manifest itself in the over-reporting of contentment; since most people claim to be very or fairly satisfied, and most perceive themselves as happier than average. Another indication of bias is seen in the finding that psycho-somatic complaints are not uncommon among the satisfied. The observations referred to are largely correct, but their interpretation is one sided. There are other explanations than dishonest reporting. Firstly, the fact that more people appear to be satisfied than dissatisfied does not necessarily imply an over-reporting of satisfaction. It is quite possible that most people are truly satisfied with life (some reasons will be discussed later). Secondly, there are also good reasons why most people think that they are more satisfied than average. One such reason is that many people may believe that most others are dissatisfied because suffering is more salient than satisfaction. Thirdly, the occurrence of headaches and worries among the satisfied does not prove response distortion. Life can be a trial at times, yet, on balance, still be satisfying. The strongest support for bias would be the situation where the

response could be shown to be distorted. Some clinical studies have tried to do just this by comparing responses to single direct questions with ratings based on intensive interviews and projective tests. The results have generally not been much different from responses to single direct questions posed by an anonymous interviewer.

3.2 Reliability doubts

Though single questions on life-satisfaction seem to measure what they are supposed to measure, they measure it rather imprecisely. When the same question is asked twice in an interview, responses are not always identical. Correlations are around .70. Over a period of a week, test-retest reliability drops to around .60. Though responses seldom change from 'satisfied' to 'dissatisfied', switches from 'very' to 'fairly' are common, indicating that the differences between response-options are often ambiguous. The respondent's notion about his/her life-satisfaction tends to be more global than the options on the rating scale. Because the choice is often arbitrary, subtle differences in interrogation can exert considerable effect. For instance: variation in the time and the place where the interview is held, characteristics of the interviewer, sequence of questions and wording of the question. Such effects can occur in different phases of the response process; (a) when the question is first thought about and (b) when communicating a response to the question.

Bias in appraisal

Though most people have an idea of how satisfied they are with their life, responding to questions on this matter involves more than making a judgement based on memory. For the most part, memory can only indicate a range of satisfaction. Typically, the respondent has to make an assessment in a short period of time. This appraisal may be limited to recent change (are there any reasons to be more or less satisfied than I used to be?), but it can also involve quick re-evaluation of life (what are my blessings and frustrations?). In making such instant judgements, people use various heuristics. These mental simplifications are attended with specific errors. For instance, the 'availability' heuristic involves orientation to pieces of information which are readily available. If the interviewer is in a wheelchair, the benefit of good health is more likely to be salient for the respondent. In that case, respondents in good health will rate their life-satisfaction somewhat higher, and hence, the correlation of life-satisfaction ratings with health variables will be more pronounced. Several of these heuristical effects have been demonstrated by Schwarz and Strack (1991).

Bias in response

Once a respondent has formed a private judgement, the next step is to communicate it. At this stage reports can be biased in various ways.

One source of bias is inherent to semantics; respondents interpret words differently and some interpretations may be emphasised by previous questions. For example, questions on 'satisfaction' are more likely to be interpreted as referring to 'contentment' when preceded by questions on success in work, rather than items on mood.

Another source of response-bias is found in considerations of self-presentation and socialdesirability. Self-rating of life-satisfaction tends to be slightly higher in personal interviews than in anonymous questionnaires. However, direct contact with an interviewer does not always inflate satisfaction rating. If the interviewer is in a wheel-chair, modest selfpresentation is encouraged. Possibly many of these biases are random, and can be balanced out through the use of large samples. In this case, the imprecision of individual observations does not affect the accuracy of satisfaction-averages, though it does attenuate correlations. However, some biases may be systematic, especially those produced by the method of inquiry and sequencing of questions. They also affect the correlations, unless the random measurement error is compensated by systematic effects due to the use of the same measurement instruments for several questions. This book reports an attempt to asses the amount of measurement error in satisfaction ratings and to correct correlations on that basis, see Chapter 2).

3.3 Comparability across nations

Average life-satisfaction differs markedly between nations. For example in 1980, Hungarians scored 5.9 on a 0-10 scale, and the Swedes 7.8. Does that mean that Hungarians really took less pleasure in life? Several claims to the contrary have been advanced. Elsewhere I have checked these doubts (Ouweneel and Veenhoven, 1991, Veenhoven, 1993b). The results of that inquiry is summarised below.

The first objection is that differences in *language* hinder comparison. Words like 'happiness' and 'satisfaction' may not have the same connotations in different languages. Questions using such terms would therefore measure slightly different things. I checked this hypothesis by comparing the rank orders produced by three types of questions on life-satisfaction: a question about 'happiness', a question about 'satisfaction' with life and a question which invited the respondent to rate between the 'best-' and 'worst possible life'. The rank orders appeared to be almost identical. I also compared responses on questions of happiness and satisfaction in two bi-lingual countries, and again found no evidence for linguistic bias.

A second objection is that responses are differentially distorted by *desirability-bias*. In countries where happiness ranks high in value, people would be more inclined to overstate their satisfaction with life. I inspected this claim by checking whether reported satisfaction is indeed higher in countries where hedonic values are most endorsed. This appeared not to be the case. As a second check, I inspected whether reports of general life-satisfaction deviate more from feelings in the past few weeks in these countries; the former measure of life-satisfaction being more vulnerable for desirability distortion than the latter. Again no evidence for a desirability bias could be found.

A third claim is that *response-styles* distort the answers dissimilarly in different countries. For instance, collectivistic orientation would discourage 'very' satisfied responses, because modest self-presentation is more appropriate within that cultural context. I tested this hypothesis by comparing life-satisfaction in countries differing in value-collectivism, but found no effects in the predicted direction. This hypothesis failed several other tests as well. A related claim is that life-satisfaction is a typical *western concept*. Unfamiliarity with it in non-western nations would lead to lower scores. I checked that hypothesis by considering the frequency of 'don't know' and 'no answer' responses in non-western nations. Hardly any difference appeared. The frequency of these responses is about 1% in all parts of the world. See Scheme 2.

These first tests did not settle the issue definitively. This book reports several further checks. Yet for the present we can assume that the observed differences in average life-satisfaction between nations are not simply an artefact of cultural differences. The issue of 'cultural bias in the measurement' of life-satisfaction, must be distinguished from the question of 'cultural influence on the appraisal' of life. Hungarians can be truly less satisfied than the Swedes, but be so because of a more gloomy outlook-on-life, rather than as a result of an inferior quality-of-life. This latter matter will be discussed in the section about the possibility of greater life satisfaction.

4 PATTERN OF LIFE SATISFACTION

Assuming for the moment that life-satisfaction can be fairly well measured, we can go on to consider how satisfied people are with life and to determine the extent to which their judgements may differ.

4.1 Level of satisfaction

Throughout time, the literature on quality-of-life is dominated by pessimists who bemoan the miseries of life. In this tradition, man is believed to be basically dissatisfied. Real enjoyment of life is projected in past paradise or future utopia. Such claims have always been denounced by optimists, who stressed human adaptability and social progress. Due to the lack of an empirical gauge, the discussion has long remained inconclusive. During the last few decades many surveys have been carried out, some drawing on world samples. These surveys support the optimist view.

Above subsistence level most people enjoy life

The first representative surveys were carried out in Western countries and showed an uneven distribution of happy and unhappy citizens; the happy outweighing the unhappy by about 3 to 1. This finding raised much doubt about the validity of survey questions (as discussed previously). However, later cross-national studies showed that dissatisfaction prevails in third world nations, where a large proportion of the population lives at subsistence levels. This latter finding put to rest many of the aforementioned validity doubts. Scheme 2 presents the results of a world-survey which includes both rich and poor nations.

No mere resignation

Nevertheless some social critics are still reluctant to believe that in modern western nations most citizens are really satisfied. Reported satisfaction-with-life is discounted as sullen adjustment. Rather than really enjoying their life, people have just given up hope for a better one and try to adjust to the inevitable (e.g. Ipsen, 1978). Various defensive strategies would be used: simple denial of one's misery, downward comparison and a tendency to see things rosier than they actually are. In addition to the above discussion on validity of current measures of life-satisfaction, two counter-arguments can be mentioned: Firstly, such resignation should give itself away in a discrepancy between the 'adjusted' judgement of life and 'raw' affective experience. The appraisal of general affect is less vulnerable to cognitive adaptation, because it is a direct experience and thus less open to defensive distortion. It is less threatening to admit that one felt depressed in the last few weeks than to admit disappointment in life. Various

surveys have assessed both general life-satisfaction and the previous weeks' affect-balance. The results do not suggest that people claim to be satisfied with life, but actually feel lousy (research reviewed in Veenhoven, 1984:106/113). Time-sampling of mood-states also shows that pleasant experiences are more usual than unpleasant ones (see e.g. Bless and Schwarz, 1984 for a meta-analysis of 18 studies). Secondly, people are typically dissatisfied with life when they live in miserable conditions. As we have seen, dissatisfaction is the rule in poor third world countries. In western nations life-satisfaction is typically lower where adverse conditions accumulate, such as in persons who are poor, lonely and ill (Glatzer and Zapf, 1984:282-397). Together these findings suggest that people tend to enjoy their lives once conditions are tolerable. From an adaptive-biological point of view this does not seem strange. Nature is unlikely to have burdened us with chronic dissatisfaction. Like 'health', happiness would seem to be the normal condition. Neither is it likely that nature has programmed us to be happy only in ideal conditions. Evolution did not take place in Utopia. This issue is discussed in the section about the determinants of life-satisfaction.

Why are there still so many complaints?

The prevalence of satisfaction with life-as-a-whole does not wash away the multitude of suffering and complaining. As noted in the foregone paragraph, even the happy are not without complaints. The German Welfare Survey found that half of the highly satisfied report frequent worries (Glatzer and Zapf, 1984:180). If not due to response distortion, what else can explain this pattern of worried satisfaction? Firstly, it is important to note that satisfaction and complaining do not exclude each other logically. One can be fairly satisfied with life-as-a-whole, but still be aware of serious deficits. In fact, both stem from a reflection on life. Secondly, worrying may to some extent contribute to overall satisfaction. Only through a realistic acknowledgement of the threats to one's happiness can such a state be maintained.

4.2 Differences in life satisfaction

Though most people are satisfied with their life, not everybody is equally satisfied. There are sizeable differences between individual citizens within countries, as well as disparities in average life-satisfaction between countries. See again Scheme 2.

Individual differences

In all countries there are citizens who are satisfied and dissatisfied. Though distributions vary, the full range between extremely satisfied and extremely dissatisfied can be found everywhere. Scheme 2 shows that even in Western-Europe 1% of the population marks the most negative scale category, whereas in economically poorer parts of the world (south-east Asia) only 2% report maximal satisfaction. Differences in life-satisfaction between citizens of a country result partly from dissimilarity in life-chances and partly from variation in ability to cope. We will consider this matter in more detail in the section on determinants of life-satisfaction.

Nation differences

Scheme 2 also shows that the pattern of life-satisfaction is not the same everywhere. Both level and dispersion differ considerably across various parts of the world. Within these areas, there are also noticeable differences between nations. Other questions on life-satisfaction show

almost identical cross-national differences (Veenhoven, 1993b). Differences in average lifesatisfaction in countries are largely a matter of variation in the quality of living conditions between countries. Below we will see that 81% of these differences can be explained by variation in material wealth, social equality, political freedom and access to knowledge.

5 DETERMINANTS OF LIFE SATISFACTION

Having established *that* people differ in satisfaction with life, the next question is *why*. The aim of creating greater happiness for the greater number requires an understanding of the determinants of life-satisfaction. So far, the determinants of life-satisfaction are only dimly understood. Still, it is clear that the matter is very complex. Various levels of human functioning are involved; collective action and individual behaviour, simple sensory experiences and higher cognition, stable characteristics of the individual and his environment as well as chance factors. Scheme 3 presents a tentative ordering of factors and processes involved in the assessment of life satisfaction⁸. The model presumes that we judge life by drawing on the *flow of life-experiences*; particularly on positive and negative experiences. This is what the utilitarian philosophers referred to as 'pleasures and pains'. The flow of experiences is a mental reaction to the course of life-events. This includes major one-time events, such as marriage or migration, as well as repetitious mundane events, like getting up in the morning and doing the dishes. The events which happen in life are partly a matter of good or bad luck; such as in the case of accidents. The occurrence of life-events also depends on given conditions and capacities. Traffic accidents are likely to be less frequent in well organised societies and are less likely to occur among more attentive individuals. Thus the chance of 'rewarding' and 'aversive' events are not the same for everybody. This is commonly referred to as *life-chances*⁹.

Present life-chances are rooted in past events and chance-structures; in societal history as well as individual development. An example may illustrate this four-step model: A person's life-chances may be poor, because he/she lives in a lawless society, is in a powerless position in that society, and is personally neither smart nor pleasant (step 1). Such a person is likely to encounter a lot of adverse experiences. He/she may be robbed, duped, humiliated and excluded (step 2). As a result that person will frequently feel anxious, angry and lonely (step 3). Based on this flow of experience, the person will conclude "I feel lousy most of the time" and "My wife is not good". Striking an overall balance he/she will evaluate life as-a-whole as dissatisfying (step 4).

Causality can skip a step. For instance, poor legal protection (step 1) may instigate feelings of anxiety (step 3) directly, because the person anticipates events that are likely to happen, but have not occurred. Or life-chances (step 1) can even enter the evaluation of life (step 4) right away, when comparisons shape the judgement. Likewise, not all life-events in step 2 follow from life-chances at step 1. Some events are a matter of good or bad luck and happen irrespective of social position or psychological capabilities. Nor is the flow of life-experiences

(step 3) entirely shaped by the course of events (step 2). How pleasant or unpleasant we feel also depends on dispositions and interpretations as well.

5.1 Life chances

Research on determinants of life-satisfaction has focused almost exclusively on life-chances; particularly at the individual level. A lot of correlational studies have tried to identify conditions which predispose one to a positive appreciation of life. Elsewhere I have summarised the results of this literature (Veenhoven, 1984; 1994a). Below I will mention the main points.

5.1.1 Quality of society

As noted above, average satisfaction with life differs greatly across nations. These differences can probably not be explained by cultural bias in the measurement of life-satisfaction. As will be seen at the end of this chapter, they cannot be attributed either to cultural variation in outlook on life. On the other hand, there is strong support for an interpretation of the variation in life-satisfaction in terms of differential quality of living-conditions. Scheme 4 shows that lifesatisfaction is typically greater in the economically most *prosperous* nations. This relationship appears to be curvilinear; among poorer nations this relationship is more pronounced than in affluent societies. This is in line with the law of diminishing returns. Below we will see a similar pattern at the individual level: correlations between life-satisfaction and incomeposition are strong in poor countries and weak or zero in richer nations. The difference can partly be explained by sufficiency of nutrition, but not entirely. Apparently, material welfare provides more gratification's than that of mere subsistence. Life-satisfaction also tends to be higher in more socially egalitarian societies. This difference is partly due to the greater economic prosperity in these societies. However, the relationships with gender-equality and income-equality remain quite strong even after controlling for income per capita. Social inequality involves greater risk of adverse life-events and is a source of frustration in itself. The correlation may also be a reflection of related matters, such as suboptimal allocation of human resources and a culture of intolerance. Average life-satisfaction is also greater in nations where *human rights* and *political freedom* are highly respected. The partial correlations suggest that these differences are partly due to the higher income in these countries. The effects of political freedom are also likely to result from better protection against injustice and assault. Freedom can also make people choose life-styles that better fit their personal needs and situational opportunities, which is likely to result in more rewarding life-experiences. Furthermore, life is found to be most satisfying in the countries that provide the best access to knowledge, as measured by literacy, school-enrolment and use of mass media (radio, newspapers, TV etc.). The partial correlations also show that the correlation remains after control for economic wealth.

So far, it is still unclear as to what extent knowledge itself is involved in the creation of gratifying life-experiences, and to what extent the relationship is due to related cultural effects. Together, the above mentioned characteristics explain 81% of the differences between countries in life satisfaction. One of the problems in this field is the limited number of countries on which comparable data on life-satisfaction is available. For this reason, spurious effects and conditional correlations are hard to demonstrate empirically. A related problem is that the lack of time-series hinders the distinction between cause and effects. However, the amount of data is growing every year. World Value Study II will yield data on some 50 nations in the early 1990's. Data on life-satisfaction is gathered in the ongoing World Database of Happiness, which already involves some interesting time-series (Veenhoven, 1993b). Another problem is that current measures of societal quality are very limited; in particular the indicators of the 'cultural climate' in countries. As of yet there are few reports of improvement in this area.

5.1.2 Position in society

Numerous studies all over the world have considered differences in life-satisfaction across *age* and *gender*. The differences tend to be small and variable. At this point in time the contextual differences involved have not been identified; for example, why are males slightly happier in some countries and females in others? Another commonly investigated issue is the relationship of life-satisfaction with *income*. Studies in affluent Welfare Societies typically report only small correlations, but in other countries quite substantial differences are observed. The poorer the nation, the higher the correlations tend to be. See Scheme 5.

This pattern does not fit the theory that life-satisfaction derives from social comparison, but rather suggests that it depends on the gratification of needs that are finite. This implication will be discussed in more detail at the end of this chapter. The pattern of correlation with *education* is similar. Again there are high correlations in poorer countries and weaker correlations in more prosperous ones. Recent studies in richer nations have even shown slightly negative correlations with level of education. This does not mean that education itself breeds dissatisfaction. As we have seen, the most educated countries are the happiest. The slight dissatisfaction among the highly educated is probably due to a lack of jobs at that level and possibly to the loss of earlier advantages in the process of greater social equalisation. The correlation between life-satisfaction and *occupation* has generally been more stable. All over the world, professionals and managers tend to be those who are most satisfied with life. It is not clear to what extent this difference results from the rewards of work tasks, related advantages in income and social prestige or differential selection.

Together, the above *socio-demographic variables* invariably explain not much more than 10% of the variance in individual happiness; at least in richer societies. One of the purposes of this

book is to check this result. It inspects whether measurement error reduced the explained variance to this low level. If this were the case, it would mean that these variables explain in fact much more of satisfaction than so far observed, (see Chapter 16). Next to social-status matters, social-participation has been considered. Life-satisfaction tends to be higher among persons who have *paid work*. However housewives are not less satisfied. Neither does retirement make life less satisfying. Life-satisfaction is more consistently related to participation in *voluntary organisations*. Life-satisfaction is also quite consistently related to the presence and quality of *intimate ties*. However, not all kinds of ties are equally related to life-satisfaction in all countries. In western nations, *marriage* is more important than contacts with friends and relatives. Studies in western nations have reported that *children* do not add to the life-satisfaction of married persons. However, among those who have children, life-satisfaction is closely related to quality of contacts with children. Together these variables explain typically another 10% of the variance in life satisfaction in developed nations.

5.1.3 Personal abilities

The strongest correlations invariably concern personal capability in dealing with the problems of life. Life-satisfaction tends to be greater among those who are in good *physical health* and who have a lot of *energy*. The satisfied also share characteristics of good *mental health* and *psychological resilience*. Curiously, life-satisfaction tends to be unrelated to intelligence; at least to school-intelligence as measured by current IQ-tests. However social skills do differentiate between satisfied and dissatisfied. High life-satisfaction is typically accompanied by social *assertiveness* and good *empathy* attributes. With respect to personality, the satisfied tend to be socially *extrovert* and *open* to experience. There is a notable tendency towards *internal control* beliefs, whereas those who are dissatisfied tend to feel they have little control over events. Many of the findings regarding individual variation in life-satisfaction can be seen as differences in *ability to control one's environment*. It has not been established to what extent this pattern is universal. Possibly, the characteristics enumerated here are more instrumental to life-satisfaction in modern individualised Western Societies than in collectivistic societies. The common variance explained by such personal variables tends to be around 30%.

There are several problems with these correlational findings. Firstly, it is not always clear whether or not the reported correlations are spurious. For instance, the positive correlation of life-satisfaction with marital status is partially produced by a selection effect; the married typically being in better mental health. This problem can be solved by systematic checks. A growing number of studies have carried out elaborate checks for spuriousness. A second problem can be seen in the direction of causality. It is not always clear what is cause and what is effect. In the example of marital status, the positive correlation could have resulted from the possible advantages of married life or, on the other hand, from the better marriage prospects for those who are the most satisfied. (In actual fact, both effects are probably involved. (See Veenhoven, 1989b). This problem can be solved by considering longitudinal data. As of yet, such data are scarce. However, the amount is growing. A final problem is that effects can be conditional. For example, married status adds more to life-satisfaction in some modern Western Societies such as Denmark and the Netherlands than in more traditional countries such as Ireland and Italy. Identification of such contingencies requires comparable data in a

sizeable number of countries; preferably from different epochs. More and more of such data is becoming available. The data needed for solving these problems is gathered in the previously mentioned World Database of Happiness.

5.2 Course of life events

The effect of life-events on life-satisfaction has received little attention. One of the few sophisticated studies that considered the matter is the four wave 'Australian Quality of Life Panel Study' by Heady and Wearing (1992). First of all, this study showed that the course of life-events is not the same for everybody. Some people encounter troubles over and over again; they have accidents, get laid off work, quarrel with family, fall ill, etc. On the other hand, there are also people who are lucky most of the time; they meet nice people, get promoted, have children who do well, etc.

These systematic differences in the course of events depend to some extent on life-chances. Favourable events appeared to happen more often to persons who were well-educated and psychologically extroverted. Adverse events were reported more frequently among neurotics, but occurred less to people with good intimate attachments. Both favourable and unfavourable events happened more to those who were young and psychologically open. Altogether, life-chances explained about 35% of the variation in life-events over eight years. This study also demonstrated that the course of life-events affects satisfaction-with-life. First it was found that the balance of favourable and adverse events in one year predicts reported life-satisfaction in the next year. The more positive that balance, the greater the satisfaction with life. Life-events explained some 25% of the differences in life-satisfaction, of which about 10% was independent of social position and personality. Further, longitudinal analysis showed that change in the characteristic pattern of events was followed by change in life-satisfaction. Respondents who shifted to a more positive balance became more satisfied with their life.

5.3 Flow of experience

As of yet, hedonic experience is not well understood. Though feelings of disgust and delight are quite tangible, it is not always clear either how they come about or why.

Function of hedonic experience

Many of our likes and dislikes seem to be inborn reactions to situations that are good or bad for human survival. Evolution has probably eliminated our forefathers who did not enjoy food, shelter and company, and those too fond of danger. As such, certain life-events are likely to elicit pleasant experiences, while others invoke unpleasant feelings. Playing tennis with friends is typically more fun than sitting in jail alone. Though it is quite plausible that hedonic experience reflects the fulfilment of basic needs, it is not so clear what these needs might be. Current theory suggests that there are various 'organic needs' (food, shelter, sex), 'social needs' (belonging, esteem) and broader 'self-actualisation' needs (mastery, control, variety, meaning, etc.). Conceptions differ however, and it is difficult to establish to what extent these strivings are inborn and how they are linked to hedonic experience. Cognitive theories suggest that pleasant experience can also be induced by perceived realisation of goals. For instance, the playing of tennis may be enjoyable because we are engaging in a chosen behaviour. On the other hand, a person in prison, who does not have this freedom of action, is likely to be very dissatisfied because he/she cannot realise desired goals. The gratifying effects of the fit between perceived reality and wants may draw on an underlying need to control.

Like and Dislike

Many adverse events evoke similar reactions in most people; particularly events that exceed human adaptability. Everybody suffers when burned or starved. However, within the limits of human faculties, reactions tend to differ. For instance, not everybody feels equally as bad when his/her house burns down. Reactions may vary depending upon (a) previous exposure to hardship, (b) the meaning attributed to the event and (c) the person's psychological resilience. Nevertheless, most people do get upset by the loss of their property. Much greater variability is probably to be found in life's more pleasurable experiences. Though most of us enjoy parties, this is not true for everyone. Some people lack the social skills required for parties, or have a limited capacity for enjoying themselves. The various personal characteristics that mould experiential reactions to life-events belong to the same class of 'life-chances' that also influence the course of events. Low social status may result in fewer invitations to parties and to feelings of unease at having to attend such an event. Nevertheless, it is life-events which evoke experiences and not life-chances. The effects of daily events on experiences has been studied by means of time-sampling. In this method, respondents note several times during the day how they feel at that moment and describe what they are doing. On the basis of such studies Csikszentmihalyi (1991) found that we tend to feel better in company than we do alone, and to feel better when engaged in leisure activities than we do at work. Also structured leisure activities such as sport appeared more rewarding than unstructured pastimes, such as television-viewing. Personality explains about 30% of the variance in pleasant affect, while the situation explains another 10% and the person-situation interaction 20%.

Inner manufacturing of feeling

Though it is clear *that* events evoke experiences, it is not so clear *how* such effects come about. In fact, little is known of how likes and dislikes are processed. We have some idea about the psycho-physiology of sensations, but the inner fabrication of affective experience is hardly understood. Psychology has been more successful in grasping thinking than affect. In the 1960's the discovery of pleasure centres in the brain seemed to promise a break-through (Olds and Milner, 1954; Rolls, 1979). That promise has become somewhat bleak by now. There is no such thing as a single happiness gland. Pleasurable experience seems to result from different bio-chemical signals in both the body and the brain, the interactions of which are still largely unknown.

Capacity for enjoyment

Wherever situated, the human capacity for enjoyment is great. Reward areas in the brain seem to be greater than areas that produce unpleasant experience and most people tend to feel good most of the time (Bless and Schwarz, 1984). Suffering may be more salient than satisfaction, but apparently it is not more frequent. There is some logic in this phenomenon. Why would nature doom us to be dissatisfied most of the time? If experiences of like and dislike serve to indicate conditions that are good and bad for the organism, we should expect that satisfaction

will be the rule. Evolution tends to produce a good fit of species to its environment, which will be reflected in predominance of pleasurable experiences. Dysphoric experience has to keep us away from harmful situations; it instigates withdrawal. In this view dissatisfaction can be permanent only in adverse living conditions, from which no escape is possible. In such conditions species tend to die out. So, chronic dissatisfaction can at best be a temporary phenomenon in the declining stage. However, the human species does not seem to be drawing to its end, and if we become extinct it will be due to ecological disaster rather than to maladaptation to our living environment. The organic disposition to enjoy things may not be equally strong in everybody. There can be temperamental differences in satisfactionproneness. Twin-studies show greater resemblance in satisfaction between monozygotic twins than dizygotic twins, even when reared apart. However, this does not necessarily mean that satisfaction is an inherited trait; the similarity in satisfaction can also have resulted from traits other than satisfaction, such as heritable variation in 'energy' and 'resilience'. The results from longitudinal studies, which have followed children from a young age, have found little evidence for a stable trait of satisfaction/dissatisfaction. Babies observed to be cheerful did not appear to exhibit higher levels of life-satisfaction in adulthood. (Research reviewed in Veenhoven, 1994b.).

5.4 Inner process of evaluation

What goes on inside a person's head when he/she evaluates life? Speculation on such matters was a major theme in the study of happiness by the early philosophers. This issue has received a considerable amount of renewed interest during the present century. It is not just curiosity about the inside of the 'black box' which has led to renewed interest, but rather the farreaching consequences which follow from the different perspectives on the possibility of creating greater happiness for a greater number of people (to be discussed in the next section).

Calculus or inference?

Utilitarian philosophers spoke of happiness as the 'sum of pleasures and pains', established in a 'mental calculus'. This view on the evaluation process is still dominant today. It is believed that life-satisfaction is assessed in a similar way to accountants calculate profit. We would count our blessings and sufferings and then strike a balance. The judgement is then a 'bottomup' process, in which appraisals from various aspects of life are combined into an overall judgement. Following this line, Andrews and Withey (1976) suggested that satisfaction with life-as-a-whole is calculated on the basis of satisfactions with various aspects of life. In this view, we first evaluate domains of life, such as our job and marriage, by comparing the reality of life with various standards of success. Only then would we compute an average, weighted by perceived importance of domains and standards. Andrews and Withey demonstrated high correlations between satisfaction with life-as-a-whole and appraisals of various aspects of life, but found no evidence for the presumed weighing. Michalos' (1985) Multiple-Discrepancy-Theory also depicts life-satisfaction as the balance of various sub-evaluations. Sub-evaluations are assessments of the discrepancy between perceptions of how one's life is, with notions of how one would like it to be. The five main standards for comparison are: what one 'wants', what one 'had' earlier in life, what one 'expected' to have, what one thinks 'other people' have, and what one thinks is 'deserved'. Michalos provides ample evidence that small discrepancies are accompanied by high satisfaction with life-as-a-whole. Multiple regression

analysis showed that life-satisfaction is primarily a function of the perceived discrepancy between reality and 'wants'.

Though satisfaction with life-as-a-whole is statistically correlated with appraisals of various aspects of life, it has not been established that life-satisfaction is causally determined by these sub-evaluations. The correlation could also be due to 'top-down' effects. For instance, when assessing one's job-satisfaction, a person may reason "I am generally happy, so apparently I like my job". Panel-analysis has demonstrated strong effects of this kind. Actually, the effect of life-satisfaction on the perceived discrepancy between what one has, as against what one wants, is greater than the effect on the respective life satisfaction evaluation for some domains (Heady and Veenhoven, 1989). These findings have been criticised on methodological grounds by Scherpenzeel and Saris (1996).

Inference on the basis of feeling

A rival theory is that evaluations of life draw on cues that provide indications of the quality of life as a whole. An internal cue of this kind is how well one generally feels. If pleasant feelings dominate, then it is assumed that life can't be bad. This could be called 'affective inference'. An external cue is how satisfied other people think one is. This is called 'reflected appraisal'. The available evidence suggests that internal affective cues are far more important than external social ones. Life-satisfaction is much more related to matters of mood than to reputation. Reports of daily feelings correspond closely to satisfaction with life-as-a-whole, whereas peer-ratings of life-satisfaction correlate only modestly with self-ratings. In assessing how we generally feel, we seem to focus on the relative frequency of positive and negative affects, rather than on the remembered intensity of joy and suffering (Diener et al., 1991). A typical heuristic seems to involve departing from the mood of the moment, which can be read quite vividly. If there are no reasons to assume that this mood is atypical, it is used to appraise satisfaction; "I feel generally good, hence I seem to be satisfied with life" (Schwarz and Strack, 1991).

Differences in evaluating life-as-a-whole and life-domains

The evaluation-process is not identical for all objects. Global inference is the rule in evaluations of life-as-a-whole, and piecemeal calculations most common in evaluations of domains of life. Schwarz and Strack (1991) showed that evaluations of life-as-a-whole focus on how one generally feels. This facilitates the judgmental task. Most people know fairly well how they generally feel. The alternative of 'calculating' life-satisfaction is more difficult and time-consuming. It requires selection of standards, assessments of success and integration of the appraisals into an overall judgement. Not only does this involve more mental operations, but it also entails many arbitrary decisions. Still, people sometimes choose to follow this more difficult road. A condition which encourages people to make this choice, is the presence of ambiguity when trying to define one's typical mood; for instance, a state of depression may not fit one's idea of how one generally feels. Another factor that encourages the calculative approach may be the availability of salient information for the purposes of comparison, such as the earlier mentioned confrontation with a person in a wheelchair. Evaluations of specific

aspects of life are hard to derive from estimates of general feelings. Affect is less informative in this case. One can be satisfied with one's job, but still feel generally dissatisfied, because of a bad marriage and poor health. On the other hand, calculating is less difficult when specific life domains are concerned. Domains of life are easier to oversee than life-as-a-whole, and standards of success are often more evident. The differences in evaluative strategies are depicted in Scheme 6.

Relationship between life satisfaction and domain-satisfaction

Both evaluation strategies will result in a sizeable relationship between satisfaction with lifeas-a-whole and satisfaction with life domains. If life satisfaction is calculated, people will probably estimate a weighted average of life-domain/aspect satisfactions as Andrews and Withey suggest. This so called 'bottom-up' appraisal will result in firm correlations between life satisfaction and domain-satisfactions, because the former is based on the latter. If people rather 'infer' life-satisfaction, life-satisfaction and domain-satisfactions will be statistically related as well. Firstly, because all satisfaction judgements draw on affect (though lifesatisfaction more than most domain-satisfactions). Secondly, because satisfaction in domains is derived from general satisfaction with life (the so called top-down appraisal). Both views on the appraisal process can explain differences in correlations across domains, but for different reasons. If general life-satisfaction is 'calculated' from domain satisfactions, we can expect stronger correlations with more important domains. If life-satisfaction is 'inferred' from how well one feels generally, life-satisfaction will correspond most closely with domainsatisfactions that are most likely to draw on affect level. This means that life-satisfaction will correlate stronger with marriage-satisfaction than with government-satisfaction and life satisfaction will also correlate stronger with domain-satisfactions that are most likely to be appraised in the top-down way.

The two views on the appraisal process also imply differences in strength of correlations across nations, but again for different reasons. If life-satisfaction is 'calculated' from domain-satisfactions, and if important domains get a greater weight in that computation, we can expect the strongest correlations with those domains satisfactions which rank the highest in a country, while the ranking can vary from country to country due to the situation the country is in. If life-satisfaction is 'inferred' from affect, the strength of the correlation will depend on the degree to which domain-experience elicits affect. In the case of correlation between life-satisfaction and income-satisfaction that could mean that a stronger correlation in poor countries where the poor really suffer more, than in rich nations, where differences in income are of less consequence for affective life. Later in this book we will inspect the relationship between life-satisfaction and domain-satisfaction in more detail. We will do so on the basis of correlations that we corrected for correlated measurement error, (see Chapter 18).

6 POSSIBILITY OF GREATER LIFE SATISFACTION

Much of the research on determinants of life-satisfaction is prompted by the hope of finding ways to create greater happiness for a greater number. However, the search could also lead to the conclusion that this hope is false. For instance, further research may confirm theories of satisfaction which imply that the improvement in living conditions does not reduce discontent.

One such theory is that life-satisfaction is relative. Another is the theory that life-satisfaction is a stable trait.

6.1 Is life satisfaction relative?

As we have seen above, one theory of how we evaluate life assumes that satisfaction is the result of a comparison between 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 on comparison with others. These standards of comparison are thought to vary. The more money we earn and the more our neighbours have, the higher the amount of money we would deem necessary for a decent living.

Together these assumptions imply that it is not possible to create lasting satisfaction; neither at the individual level, nor the societal level. At the individual level, this theory predicts that satisfaction is a short lived phenomenon. We would be satisfied when life comes close to ideal, but as we come closer to our ideal we would tend to set higher demands and hence end up as dissatisfied as before. Likewise, social comparison would not provide lasting satisfaction. When we have surpassed the Jones, reference drifts upwards to the Petersons, and we again feel dissatisfied. At the societal level, this theory implies that average satisfaction tends to neutral as well. If satisfaction and dissatisfaction balance out in the lives of individual citizens, the average in the country cannot be far from zero. Social comparison is also likely to result in a neutral average; the satisfaction of the citizens who do better is neutralised by the dissatisfaction of the ones who do worse. Another implication of this theory is that life-satisfaction should be approximately the same in all countries.

Empirical evidence

Elsewhere, I have reviewed the empirical evidence for the theory that life-satisfaction is relative (Veenhoven, 1991; 1995). The main points are summarised below.

The study reported in this book provides another check. One implication of this theory is that changes in living conditions, from good to bad, or vice versa, will have no lasting consequences for life-satisfaction. However there is good evidence that we do not adjust to everything; for instance, we don't adjust to the misfortune of having a handicapped child or the loss of a spouse. Another implication which appears questionable is that earlier hardship favours later satisfaction. This is not supported by the evidence. For example, survivors of the Holocaust were found to be less satisfied with life than Israeli's of the same age who had not undergone this experience. One further empirical check to be mentioned is the correlation between life-satisfaction and income. The theory that life-satisfaction is relative should predict a strong correlation in all countries, irrespective of their wealth. Income is a salient criterion for social comparison, and one on which we typically make comparisons with others. As we have seen in Scheme 6, this prediction is not confirmed by the data. In several rich countries the correlation is close to zero. This book shows that the correlations between satisfaction and income are also modest in not-so-rich countries, see Chapter 16. (The data presented in that chapter are corrected for measurement error and confirm earlier studies without such a correction). Predictions at societal level are not confirmed either. Average life-satisfaction is

typically positive, rather than neutral and differs widely between nations (Scheme 2). Contrary to prediction it is higher in rich countries than in poor ones (Scheme 3). The cross-national study reported in this book confirms that pattern (Chapter 15). It can therefore be concluded that there is so far little or no empirical support for the theory that life-satisfaction is relative.

Theoretical flaws

The theory that 'life-satisfaction is relative' assumes that life-satisfaction is a purely cognitive matter and does not acknowledge affective experience. It skips step 3 in scheme 3, and acknowledges only one of the evaluation strategies mentioned in step 4. Thereby, it focuses on conscious standards and neglects less conscious needs. The basic fault in this theory is that the evaluation of life is assumed to be a piece meal mental calculus (the route on the right in Scheme 6), rather than a global inference on the basis of general mood (the route on the left in Scheme 6).

As argued above, affective experience signals the gratification of basic needs. Contrary to 'wants', 'needs' are not relative. Needs are absolute demands for human functioning, that do not adjust to any and all conditions; in fact, they mark the limits of human adaptability. To the extent that it draws on need-gratification, life-satisfaction is not relative.

Difference with domain satisfactions

There is good evidence that satisfaction with income is largely a matter of comparison and that standards of comparison in this domain tend to shift (Van Praag, 1989). This is further supported by research on satisfaction with health and work. Thus, the theory that satisfaction is relative does apply to some domain-satisfactions. As argued above, the evaluation of specific life-domains tends to follow the right hand route in Scheme 6. However, the evaluation of life as a whole typically follows the left-hand route. Therefore, the theory does not apply to global life-satisfaction.

6.2 Is life satisfaction a trait?

Another theory, which suggests that the hope of creating greater happiness for the greater number is futile, holds that satisfaction is a fixed disposition. This theory figures at the individual level as well as the societal level. Both variants imply that a improvement of society does not make people more satisfied.

Personal character trait?

The individual level variant sees satisfaction as a personal trait; a general tendency to like or dislike things. This tendency can stem from an inborn temperament as well as early experience. This trait is believed to shape the perception of life-experiences (step 3 in Scheme 3) as well as the overall evaluation of life (step 4). In this view, improvement of living conditions will not result in greater satisfaction with life. The evaluative reaction will remain the same; the discontented will always be disgruntled while the satisfied will always see the better side of things. Elsewhere, I have taken stock of the empirical evidence for the theory that life-satisfaction is a trait (Veenhoven, 1994b; 1995). In this previous work I examined whether or not life-satisfaction is 1) temporally stable, 2) cross-situationally consistent and 3)

internally caused. Life satisfaction does not appear to be a stable trait. The results can be summarised as follows: Firstly, life-satisfaction does not remain the same over a period of time; particularly not over the length of a lifetime. Individuals revise their evaluation of life periodically. Consequently life-satisfaction changes quite often; both absolutely (f.e. happy persons becoming unhappy) and relatively (f.e. the most happy person in a group becomes the least happy). Secondly, life-satisfaction is not insensitive to change in living conditions. The improvement or deterioration in living conditions is typically followed by a rise or decline in the appreciation of life. This appears for instance in the aftermath of widowhood and divorce. Thirdly, satisfaction is not entirely an internal matter. It is true that evaluations of life are influenced by personal characteristics and collective orientations. However, these inner alignments modify the impact of environmental effects rather than overshadow them.

National character trait?

The societal variant of this theory (folklore-theory) assumes that this tendency to like or dislike life is part of a common national-character. Some cultures would tend to have a gloomy outlook on life, whereas others are optimistic. France is often mentioned as an example of the former kind, and the USA as an example of the latter. Even if the quality of life in France would be improved substantially, French character would prevent the French from taking more pleasure in life. Elsewhere I have examined the empirical evidence for this theory (Veenhoven, 1993: ch5; 1994b; 1995). In this previous work I examined whether the differences in subjective satisfaction were indeed unrelated to variation in the objective quality of life. I considered five qualitative differences: economic affluence, social equality, political freedom and access to knowledge. I found strong correlations (remember Scheme 4). Improvements in these societal conditions tend to be followed by an increase in average life-satisfaction. Not all improvements produce greater satisfaction however: economic growth adds to life-satisfaction in poor countries, but not in rich ones. I also examined the residual variances for any indication of cultural patterns, such as possible underrating of life-satisfaction in Mediterranean nations or an overstatement in Anglo-Saxon countries. However, no such patterns appeared. Latin countries are not systematically less satisfied than their standard of living would predict. Nor is satisfaction in Anglo-Saxon countries typically higher. Furthermore, I have compared the life-satisfaction of migrants with satisfaction in the countryof-settlement and in the country-of-origin. If life-satisfaction reflects the quality of the conditions in which one lives then the life-satisfaction of migrants in a country must be close to the level of others in their adopted society. If however, life-satisfaction is a matter of socialised outlook, the satisfaction of migrants should be closer to the level reported in their former country. First generation migrants in two nations were considered: In Australia, migrants from Britain, Greece, Ireland, Italy, Netherlands and former Yugoslavia. In Germany, migrants from Greece, Italy, Spain, Turkey and the former Yugoslavia. The 'outlook hypothesis' failed this test as well. Together these findings seriously undermine the argument that life-satisfaction is a static phenomenon.

In summary then, there is sense in trying to make life more satisfying for a greater number of people. Although, it is not quite clear *how* this can be achieved, there is nevertheless little doubt that it is *possible* in principle.

7

QUESTIONS ADDRESSED IN THIS BOOK

The subject of life-satisfaction has for long been the subject of philosophical speculation. Lack of valid measures of life-satisfaction has meant that the various propositions could not be empirically tested. Hence, knowledge on life-satisfaction has remained speculative and uncertain. Survey-research methods introduced by the social sciences have brought about a break-through. Fairly dependable measures of life-satisfaction have been developed, and by means of these measures a significant body of knowledge has evolved. Hence, we are now in a position to empirically weigh the evidence in support of the various theoretical positions. This chapter summarised the present state of art. Since the invention of survey research brought about this breakthrough, further advancement in the understanding of life satisfaction will require further development of survey-research techniques. In that context, this book is concerned with the consequences of measurements error in life satisfaction research and the effect of correction for it on the substantive results in the field. Though we can measure lifesatisfaction fairly validly, we cannot as yet measure it very precisely. Responses are probably in error in various ways; systematically as well as randomly. Advancement in the study of lifesatisfaction requires that we inspect whether and to what extent such distortions are involved, and that ways are found to neutralise them. Studies in this book are reported within a context which takes cognisance of these distortions.

This book reports studies on life-satisfaction in 12 European nations. All these studies use the same multiple methods for measuring satisfaction, in order to estimate unbiased correlations of satisfaction with other variables. Chapter 2 starts with an introduction to the methodology. It will be shown that measurement error, which is always present, can cause serious problems and may have done so in previous work. The results can be biased differently and not compatible across countries. It will also be shown how measurement error can be assessed in a fairly simple way and how correlations can be corrected for measurement error. The rest of this book reports an application of this method in a cross-national study. The main purpose is to verify earlier findings on correlates of satisfaction (as summarised above). For that purpose, traditional 'uncorrected' correlations are compared with newly 'corrected' ones.

Part II of this book reports the studies by nation. Each nation-report will consider both level of satisfaction and correlates of satisfaction (correlations with socio-positional variables and inter-correlations of life- and domain-satisfactions).

Next part III takes a comparative view. It compares both level of satisfaction in nations (Chapter 14 and 15), and correlates of satisfaction (Chapter 16 and 18). Finally Chapter 19 proposes a theory which explains most of the empirical findings.

NOTES

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3 Secretariat: Heinz Herbert Noll, ZUMA, POB 122155, D68159, Manheim, Germany.

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5The current distinction in the literature is between 'objective' and 'subjective' quality of life. 'Objective' means that the quality judgement is based on criteria that can be applied by people other than the person himself, such as his friends or a doctor. Such criteria must be explicit and measurable. 'Subjective' means the person's own appraisal of his life. This type of judgement can be made by that person only. Criteria need not be explicit. A person may know he enjoys life, without precisely knowing why. 'Objective' judgements by other people are partly based on 'presumed' quality of life. Typical criteria are how well the person is doing in work or school, how much support he receives from friends and relatives and whether his prospects look good. However, external judges also look for indications of actual thriving ('apparent' QOL). That is: whether the person radiates energy and enthusiasm, how sane he seems and how healthy. 'Subjective' appraisals by the subject himself concern part of the 'apparent' quality-of-life; how much he likes the life he lives. However, not all 'apparent' quality-of-life is a subjective'. Neither are all judgements by the subject necessarily 'subjective'. A person can evaluate his/her life on the basis of given criteria; for example, the quality of his/her living conditions and the actual functioning in these conditions.

6 The theoretical approach in this study is sound. However, the data on life-satisfaction which it presents are incomplete. For that reason, some of the conclusions reached are questionable.

7 The World Database of Happiness is kept at Erasmus University Rotterdam, The Netherlands, Department of Sociology. It involves four elements: 1) Bibliography of Happiness, 2) Catalogue of Happiness in Nations, 3) Catalogue of Happiness Correlates, 4) Directory of Happiness Investigators. Computer files are freely available on Internet. Electronic address: ftp.eur.nl Directory: pub/database.happiness The latest book-publications are Veenhoven 1993a, 1993b and 1994.

8 In my view this last item is not appropriate. One can be quite satisfied with life, but still be open to the opportunity to try something else.

9 This model is inspired by the "Stocks and Flows" framework proposed by Heady and Wearing (1991). What these authors call "stocks" is referred to as individual "life-chances" here. Heady and Wearing did not include societal differences. The term "flows" covers both 'life-events' and derived 'psychic income'. Here these matters are distinguished. The reason is that reactions to events may differ. Not everybody suffers when a they loss a job, some actually revive.

10 The concept of 'life-chances' is used here in a broad sense, and refers to all conditions that affect probabilities of fortune or adversity. The term can also be used in a more narrow sense. Sometimes it refers to societal conditions only; for instance when we say that life-chances are poor in developing countries. On other occasions the term refers to positional differences within societies; for example, when we say that unskilled manual workers have less chances in life. Mostly the concept is restricted to opportunities provided by society, and does not include differences in individual capacities.

Scheme 1.

Some currently used questions about life satisfaction.

Single questions

- Taking all together, how happy would you say you are: very happy, quite happy, not very happy, not at all happy? (item used in the World Value Studies, see a.o. Harding, 1986)
- How satisfied are you with the life you lead? Very satisfied, fairly satisfied, not very satisfied, not at all satisfied? (standard item in Eurobarometer surveys, see a.o. Inglehart, 1990)
- Here is a picture of a ladder. Suppose the top of the ladder represents the best possible life for you and the bottom of the ladder the worst possible life. Where on the ladder do you feel you personally stand at the present time? (0-10 rating scale using a picture of a ladder) (Cantril's, 1965, present life ladder rating)
- How do you feel about your life-as-a-whole? Delighted, pleased, mostly satisfying, mixed, mostly dissatisfying, unhappy, terrible? (Andrews and Withey's, 1976, Delighted-Terrible scale)

Multiple questions

- Two identical questions asked twice. Rated on 1-7 Delight-Terrible scale (see above)

 How do you feel about your life-as-a-whole? (asked at beginning of interview)
 How do you feel about your life-as-a-whole? (same question asked again at end of interview) (Andrews and Withey's, 1976, Life 3)
- Five questions, rated on a 1-7 scale ranging from strongly agree to strongly disagree. -In most ways my life is close to ideal.
 - -The conditions of my life are excellent.
 - -I am satisfied with my life.
 - -So far I have gotten the important things I want in life.
 - -If I could live my life over, I would change almost nothing.¹⁰ (Diener's, 1985 Satisfaction With Life Scale SWLS)

Scheme 2.

Life satisfaction in six parts of the world 1975.

Question "All things considered, how satisfied or dissatisfied are you with your life these days?" Rated on a graphical 10-0 step mountain scale.

	very satisfied								not satisfied		NA	Mean SD		
	10	9	8	7	6	5	4	3	2	1	0			
Australia	15	18	35	15	9	5	1	1	-	-	-	1	7.9	1.5
Anglo-America	18	15	25	18	9	8	3	2	1	-	-	1	7.7	1.8
Western-Europe	9	11	24	20	16	10	5	2	1	1	1	-	7.0	2.0
Latin-America	13	11	19	15	14	12	6	5	3	-	1	1	6.8	2.3
South-Sahara Afr	rica 1	4	7	13	17	16	13	15	10	3	1	-	5.0	2.2
South-east Asia	2	1	6	7	11	22	12	13	13	6	5	1	4.3	2.3

Source: Gallup, 1976 table Q54. - = <1%

Scheme 3. Evaluation of life; a sequence model of conditions and processes.

$\stackrel{Life}{chances} \rightarrow$	$\begin{array}{c} \text{Course of} \\ \text{events} \end{array} \rightarrow$	$\begin{array}{c} Flow \ of \\ experience \end{array} \rightarrow$	Evaluation of life
Societal resources			
-economic welfare -social equality -political freedom -cultural lush -moral order -etc	Confrontation with:	Experiences of:	Appraisal of average effect
	-need or affluence	-yearning or satiation -anxiety or safety	
Personal resources -social position	-attack or protection -solitude or company	-loneliness or love -rejection or respect	Comparison with standards of the good life
-material property -political influence -social prestige -family bonds -etc.	-humiliation or honour -routine or challenge -ugliness/beauty -etc.	-dullness or excitement -repulsion/rapture -etc.	Striking an overall balance
Individual abilities -physical fitness -psychic fortitude -social capability			
-intellectual skill -etc.			

conditions for life satisfaction

appraisal process

Scheme 4. Life satisfaction and quality of life in 25 nations in the 1980's.

Quality-of-life	Correlation with	Life Satisfaction	Ν	
	zero-order	income pc controlled		
Material comfort				
Nutrition	+.37*	+.14	25	
Real income per capita	+.64**		25	
Social equality				
Social security	+.42*	01	25	
Gender equality	+.54**	+.37*	25	
Income equality	15	+.38*	23	
Political freedom				
Freedom of press	+.59**	+.36*	25	
Political democracy	+.35	31	22	
Access to knowledge				
Education	+.70**	+.40*	25	
Mass media use	+.44**	02	24	
Explained variance (R ²)	.81**		22	

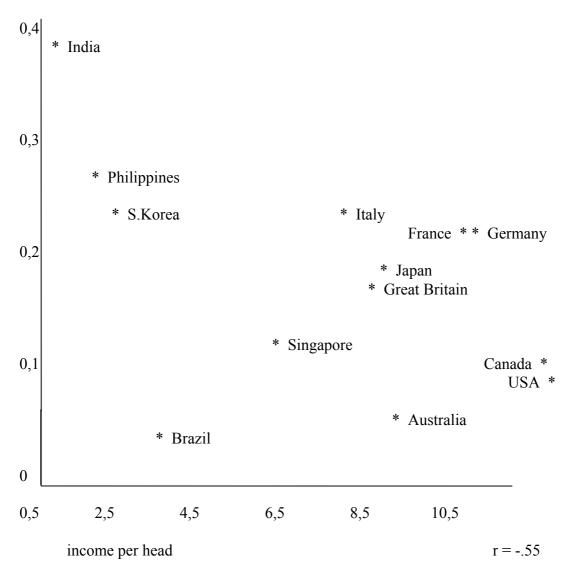
Data:

* Life-satisfaction: Veenhoven, 1993b, tables 1.2.1a+b+c

* Quality of life: Nutrition (caloric intake), UNDP (1990); Real income pc, Summers and Heston (1988:125); Social security (expenditures % gnp, reversed), IMF (1987); Gender equality (women status, reversed), Estes (1984:184-5); Income equality (Gini-coefficients, reversed) UN (1985); Freedom of press (1970's), Kurian (1979:362); Political Democracy, Estes (1984,175-187); Education, Estes (1984:169,183-4); Media attendance (1970's), Kurian (1979:347-359).

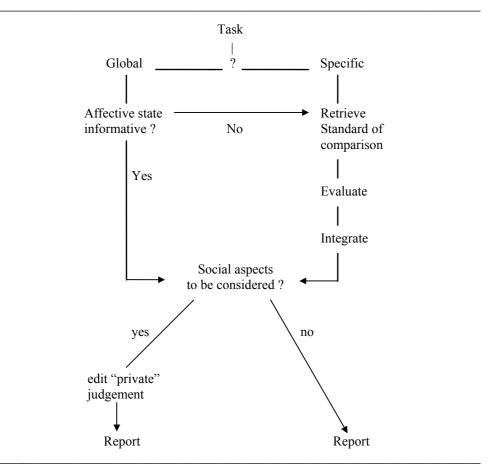
* = p <.05 ** = p <.01

Correction between income and life-satisfaction



Source: World Database of Happiness, Catalogue of Correlates (Veenhoven, 1994a).

Scheme 6. Model of life evaluation.



Source: Schwarz and Strack, 1991:43.

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