

## Chapter 5

### HAPPINESS AS INDICATOR OF LIVABILITY

#### Validity tests

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#### 5/1 **Some global validity tests**

##### 5/1.1 Congruent validity tests

- *Less mental distress in happier nations?*
- *Less suicide in happier nations?*
- *Longer life-expectancy in happier nations?*

##### 5/1.2 Concurrent validity test: Better living conditions in happier nations?

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- *Differences a matter of desirability bias?*
- *Differences due to response style?*
- *Differences a matter of familiarity with the concept?*

##### 5/2.2 Tests for cultural influence in appraisal of life

- *Unhappy countries characterized by cynicism?*
- *Migrants happiness more similar to country-of-origin than to country-of-settlement?*
- *East Germans equally happy as West Germans?*
- *Cultural patterns in happiness that cannot be explained by quality of living conditions?*

#### 5/3 **Summary**

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Even if we can validly measure happiness, it is still questionable whether high average happiness of individuals signifies a good livable society. Happiness may say more about how people look at their life, than about the actual quality of their life. Also, happiness may depend more on what people want, than on what society provides. If so, people can be happy in a bad society and unhappy in a good one.

This is certainly possible, but is it plausible? Whether the average happiness of individuals is a good indicator of societal livability cannot be established by reasoning alone. The theoretical debate between Utilitarians and their opponents remained inconclusive at this point. Therefore we must rely on empirical validity testing.

There are two ways to establish the validity of survey assessed happiness for measuring livability of nations. One is to consider whether the outcomes seem sound. That is: whether they correspond with other known indicators of the matter. This is called *global* validity testing. Some global validity tests are reported below in section 5/1. One can also try to check specific objections that have been raised against the use of happiness for this purpose. That can be called specific validity testing. Some tests of that kind are reported in section 5/2.

## 5/1 SOME GLOBAL VALIDITY-TESTS

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### 5/1.1 **Congruent validity tests**

- *Less mental distress in happier nations?*
- *Less suicide in happier nations?*
- *Longer life-expectancy in happier nations?*

### 5/1.2 **Concurrent validity test: Better living conditions in happier nations?**

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The global validity of happiness as a measure of livability can be assessed by comparing its correspondence with other indicators of livability. This is called 'external' validity testing. There are two ways of external global validity testing.

A first way of external validity testing is assessing correspondence with other indicators in the same class. This is called *congruent* validity. As noted in chapter 3, happiness is one of the output indicators of livability; it infers the fit of societal provisions/demands with its members needs/capacities from the degree to which people 'flourish' in it. Other indicators of human flourishing mentioned were: 'physical health', 'mental health', 'alienation' and 'suicide'. In section 5/1.1 we will establish the correspondence with these indicators.

The second way of external validity testing is to assess correspondence with indicators of another kind. This is called *concurrent* validity. Here we use the other kind of indicators of livability, referred to as 'input' indicators. If happiness is a good indicator of livability, it must be highest in the countries that provides the best input; in other words the most highly regarded living conditions. At least it must be low in countries that fail to guarantee the biological minimum. Whether or not that is the case considered in section 5/1.2.

### 5/1.1 Congruent validity tests:

#### *correspondence with other indicators of human flourishing*

As we have seen, happiness is only one of the indicators of the degree to which people flourish in a society. Other indicators are average 'length of life', 'mental health', 'suicide', and other subjective appraisals, such as 'alienation'. We can use these other indicators in a test of congruent validity. As we have no cross-national data on 'alienation', the analysis is restricted to 'mental health', 'suicide' and 'longevity'.

#### *5/1.1.1 Less mental distress in happier nations?*

If happiness is a relevant indicator of livability of society, we can expect a negative correlation between average happiness in nations and incidence of mental disturbance. A positive correlation would be fatal to the validity hypothesis.

#### *Data:*

As noted in section 3/2.1, comparison of mental disturbance across borders is beset with methodological problems. In order to escape some of these problems we limit to industrialized nations and use a multiple index of mental distress. This index is the 'Anxiety Score' which Lynn (1971,1982) computed for several nations. This score is based on behavioral manifestation of mental distress. It involves consumption of stress related stimulants (coffee, tobacco, alcohol and high caloric food), risky behavior (accidents, murder, crime), mental disorganization (hospitalization for psychosis), deviant behavior (divorce, illegitimate birth) and despair behavior (suicide). The nation scores on this behavioral index appear to be related to anxiety, extroversion and neuroticism as observed in comparative survey studies. Lynn analyzed trends in this distress index between 1935 and 1970. He observed a peak at World War II and noted a greater drop in the nations that had escaped defeat or occupation (Lynn, 1988:239).

By themselves the constituents of this index are debatable as an indicator of mental distress; the incidence of alcoholism for instance depends on cultural habits and social control too. For lack of a better alternative we will go with this indicator and assume that the weakness of its constituents more or less outweigh each other. The data are presented in [exhibit 5/1.1.1](#). Note that the data concern slightly different periods: distress 1970 and happiness 1980. This may suppress the correlation.

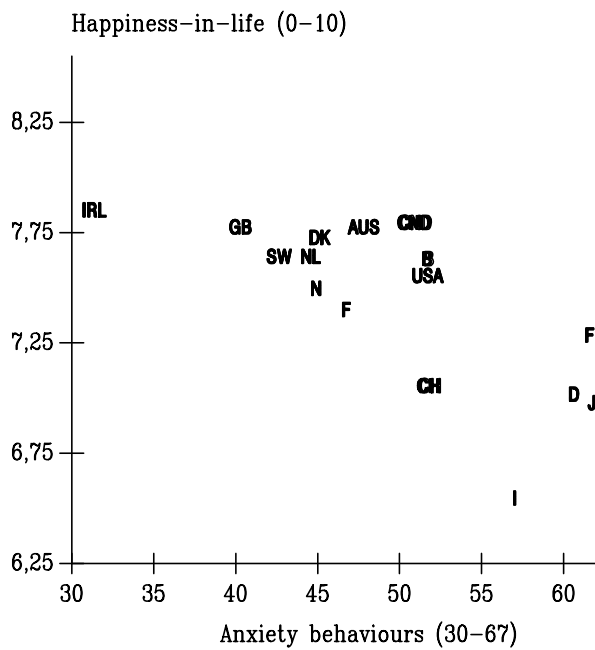
#### *Result:*

The prediction is confirmed. A clear negative relation emerges. The less symptoms of anxiety in the country, the happier its citizens avow themselves. The correlation is  $-.76$  ( $p < .01$ ).

#### *5/1.1.2 Less suicide in happier nations?*

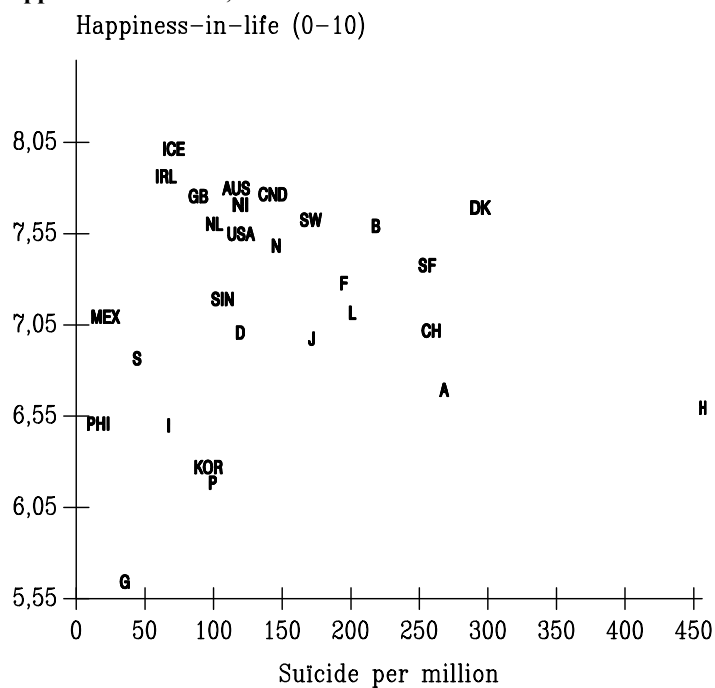
If average happiness is a good indicator of the livability of countries, we can also expect a negative correlation with suicide rates, provided that suicide is a good indicator of livability itself.

**Exhibit 5/1.1.1**  
**Happiness and mental distress ,17 nations 1970 - 1980**



Data: Happiness: table 1.1.1a, data 1980. Distress: Lynn (1982:239, data 1970).  $r = -.76$

**Exhibit 5/1.1.2**  
**Happiness and suicide, 27 nations circa 1980**



Data: Happiness: table 1.1.1a. Suicide: UN 1985.  $r = +.03$  (ns)

*Data:*

Suicide rates for countries in the 1980's were found in the World Health Organization Statistics (WHO 1987). The combined data on happiness and suicide are presented in the scattergram in [exhibit 5/1.1.2](#).

*Result:*

The prediction is not confirmed. There is no relationship between national levels of happiness and incidence of suicide in nations:  $r = +.03$  (ns).

This result is of course not an argument for the validity of happiness as an indicator of livability of a society, but it is no decisive argument against either. As already noted in section 3/2.2, there are serious doubts about the validity of suicide rates for that purpose. Suicide can be high in well livable societies, for instance when it is an accepted way out for incurable illness. A higher suicide rate can also result from greater freedom and individualism, which are beneficial to the great majority of the population, but may push a fraction of problematic citizens over the edge. In this context it is worth noting that suicide is typically high in the rich individualistic nations and low in collectivistic and mostly poor nations.

**5/1.1.3 Longer life-expectancy in happier nations?**

If happiness is a relevant indicator of livability of society, we can expect that in the happiest countries people live longest; in other words that there is a positive correlation between average happiness in the country and life-expectancy.

*Data:*

Data on life expectancy in countries were found in the UN (1982) National Account Statistics. These data are crossed with happiness in the a scattergram in [exhibit 5/1.1.3](#).

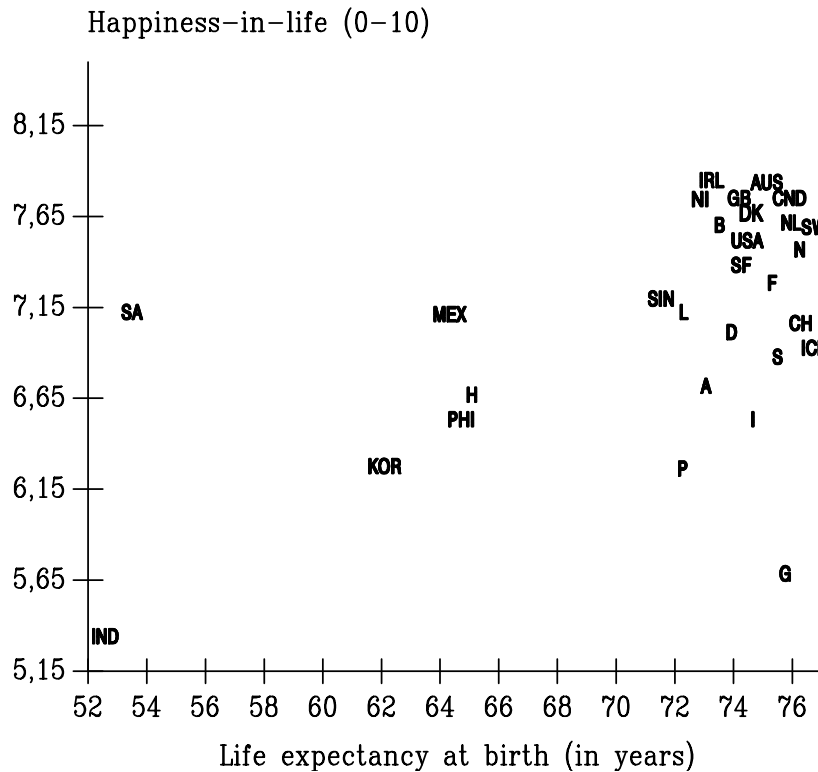
*Results:*

The predicted positive correlation emerges:  $r = +.53$  ( $p < .05$ ). The correlation is clearly produced by the poor countries. In the rich world there is little correspondence between happiness and longevity. This underscores the earlier observation in paragraph 3/2.1, that the relevance of longevity as an indicator of the livability of society is limited to gratification of basic material needs.

***In summary***

There is a clear correspondence between average happiness in nations and performance on two other output indicators of livability: life-expectancy and mental distress. Together these factors explain 37% of the variance in happiness. However, happiness is unrelated to prevalence of suicide. These results do not expose happiness as an invalid measure for livability of nations.

**Exhibit 5/1.1.3**  
**Happiness and life-expectancy at birth, 31 nations circa 1980**



Data: Happiness: table 1.1.1a+b+c. Life-expectancy: UN 1982.  $r = +.53$  ( $p < .05$ )

### 5/1.2 Concurrent validity test: *Better living conditions in happier nations?*

Concurrent validity testing is assessing correspondence with indicators of an other kind. In this case such other indicators are the 'input indicators' of livability discussed in section 3/1. If average happiness is a good (output) indicator of livability, it must be higher in countries that score high on input indicators than in countries that score low on these. There is of course something contradictory in such a test. We have criticized current input indicators and propose the output indicator of happiness as an alternative. Now we are about to validate our favored indicator by the rejected one. Still, it is worth knowing whether these indicators correspond or not. Though current input indicators of livability are certainly not ideal, they are not without any sense. So there must at least be some correspondence. If we don't find any relationship, there is clearly something wrong with one or both indicators. If however we find a strong statistical relationship, we can be fairly sure that both indicators do reflect livability.

Our validity test will concern the following field of societal input: 1) The *material comfort* the economy provides, assuming for the moment that one cannot have too much of this. 2) The *social equality* in the country, assuming that inequality is mostly detrimental to the general human needs for self-respect. 3) The *freedom* society provides, assuming that freedom facilitates the choice of lifestyles that fit with needs and capacities

4) Access to *knowledge*, assuming that humans have an unsatiable need for understanding.

*Prediction:*

The better a country provides its citizens with material comfort, social equality, freedom and access to knowledge, the happier its citizens are on average.

*Data:*

The most basic indicator of *material comfort* is the degree to which 'nutrition' suffices in a country. For that purpose we used daily calorie supply per capita as a percentage of requirement. Data were drawn from the World Development Report (1984:264/5). A broader indicator of the material comfort the country provides is the 'real income' per head. 'Real' income means that non-marked good and services are taken into account as well and that monetary differences are eliminated. Data were drawn from Summer and Heston (1988:125).

*Social equality* was measured by two indices: First 'income inequality' in countries was measured by Gini-coefficients. Data about income inequality around 1980 are available from UN Compendium of Income Distribution Statistics (UN 1985, summary table) and the World Development Report 1990 (UN 1990, table 30). Due to variation in definition and sampling, these data are not quite comparable however. When applied in this analysis they did not differentiate. (Though unrelated to *level* of happiness income-inequality appears to be related to *dispersion* in happiness: see section 8/5). Therefore, two other indicators of social inequality were used: 'social security' and 'women's emancipation'. Social security is the degree to which the state guarantees its citizens a minimum level of living. By lack of comparable measures of that level as such, we took the proportion of government expenditures (minus defense) as a proxy. Data were drawn from IMF statistics (IMF, 1987) and Japanese Government statistics (Ministry of Finance, Japan, 1986). Next we considered the more newly recognized 'inequality between sexes'. Emancipation of women was measured by Estes' (1984:171;184/5) Index of Women Status, which involves educational participation of women and women's suffrage.

*Freedom* was measured by 'freedom of the press'. Data on that matter were found in Kurian (1979:362). These data concern the early 1970's. Because press-freedom is a fairly stable phenomenon, the country differences were assumed to be largely identical in 1980. We also considered the 'political democracy' in the country. For that purpose we took Estes' Index of Political Participation (Estes 1984:175-187). This index involves independence of the country, presence and functioning of a parliamentary system and limitation of the influence of the military.

*Access to knowledge* was measured by 'scope of education' in the country and 'attendance to mass media'. As an indicator of educational performance we took Estes' Education Index (Estes 1984:169;183/4). This index involves school-enrolment, expenses on education and literacy. As an indicator of access to information from mass media we took the summed scores of daily newspaper circulation and the number of radio's as found in Kurian (1979:347-359).

All these indicators of country performance were correlated with average happiness. The results of that analysis are presented in [exhibit 5/1.2a](#). The relation can also be made visible by comparing the happiness of countries that provide similar living conditions

For that purpose [exhibit 5/1.2b](#) presents the same data in a dendogram.

*Results:*

Correlations in [exhibit 5/1.2a](#) clearly confirm the prediction: the better the living conditions the country provides, the happier its citizens are on average. Economic prosperity is one of the strongest predictors of happiness. Because freedom, equality and knowledge depend to some extent on economic prosperity, the correlations with these latter indicators can be spurious. The partial correlations in the middle column in [exhibit 5/1.2a](#) show this is only partly so. The correlation of happiness with women's emancipation and education is largely independent of national income.

Together these national characteristics explain no less than 77% of the variance in happiness! This remarkably high value, could be produced by the exceptional case of India, which combines extremely poor living conditions with very low happiness. Therefore we repeated the analysis without India (N=21). The relation remains quite strong however:  $R^2 = .63$ .

This analysis was repeated with happiness data based on responses to questions about satisfaction-with-life (tables 1.2.2a + b + c). The results of that analysis are quite similar.  $R^2 = .63$ . All the correlations are slightly lower. (Data not shown).

**Exhibit 5/1.2a**

**Happiness and living conditions: correlational analysis, 23 countries circa 1980**

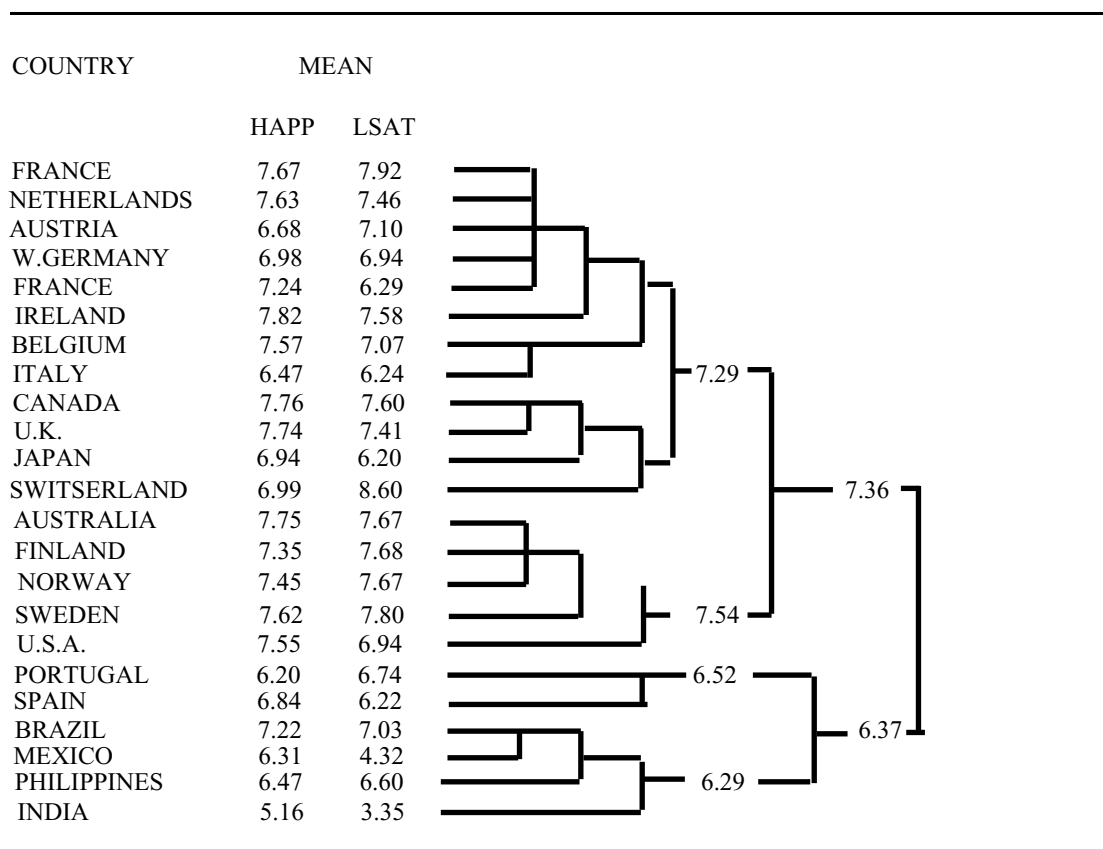
<i>national characteristics</i>	<i>correlation with happiness</i>			
	listwise (N=22)		pair-wise	
	<i>zero-order correlation</i>	<i>economic prosperity controlled</i>		
<i>Material comfort</i>				
- Real national income	+.69*	-	+.70*	(N=28)
- Nutrition	+.50*	-.19	+.28*	(N=28)
<i>Social equality</i>				
- Women's emancipation	+.75*	+.64*	+.61*	(N=27)
- Social security	+.57*	+.20	+.51*	(N=26)
<i>Freedom</i>				
- Freedom of press	+.55*	+.27	+.54*	(N=28)
- Political democracy	+.54*	-.02	+.58*	(N=24)
<i>Access to knowledge</i>				
- Education	+.82*	+.60*	+.69*	(N=28)
- Media attendance	+.54*	+.07	+.54*	(N=27)
<hr/>				
$R^2$	+.77*			

Data: Happiness: table 1.1.1a + b + c. Living conditions: see text. \* p<.01



The dendrogram on exhibit 5/1.2b presents the result of a cluster analysis. Similarity with respect to living conditions is represented by tree-like configurations. The closer to the left of the picture, the more alike the countries (leaves) on the same branch are, with respect to material affluence, social equality, political freedom and access to knowledge. The dendrogram shows two main clusters of nations, which can be identified as what is commonly referred to as 'developed' versus 'underdeveloped' nations. Average happiness differs markedly between these clusters: happiness-in-life is respectively 7.4 and 6.4; and satisfaction-with-life 7.3 and 5.7. Within these two clusters there are further differentiations in living conditions, that can less well be identified. These finer differences do not correspond with variation in happiness.

**Exhibit 5/1.2b**  
**Happiness and living conditions: cluster analysis**  
**23 countries circa 1980**



Data: Happiness: table 1.1.1a + b + c and table 1.2.2a + b + c. Living conditions: See text.

***In summary***

There is a clear correspondence between average happiness in nations and the degree to which these nations provide material comfort, social equality, freedom and access to knowledge. In other words: happiness in nations corresponds with their level of 'development' or 'modernity'. Together these nation characteristics explain 77% of the variance in happiness. Thus, this 'output' indicator (happiness) yields similar estimates of livability as current 'input' indicators (wealth + equality + freedom + knowledge).

## 5/2 SOME SPECIFIC VALIDITY-TESTS

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### 5/2.1 Tests for cultural bias in measurement of happiness

- *Differences a matter of language?*
- *Differences a matter of desirability bias?*
- *Differences due to response style?*
- *Differences a matter of familiarity with the concept?*

### 5/2.2 Tests for cultural influence in appraisal of life

- *Unhappy countries characterized by cynicism?*
  - *Migrants happiness more similar to country-of-origin than to country-of-settlement?*
  - *East Germans equally happy as West Germans?*
  - *Cultural patterns in happiness that cannot be explained by quality of living conditions*
- 

The global validity tests in section 5/1 did not falsify the hypothesis that the livability of nations can be measured by average happiness of its citizens. In fact that disproves the various specific objections raised against the use of happiness for that purpose. Still, we can achieve more certainty if we also check these specific objections separately. Firstly, specific validity tests provide a check on the global tests. We cannot rule out the possibility that these tests are flawed in some way; for instance, that the high correlations with input indicators of livability are the spurious result of some racial or cultural factor. If happiness stands specific tests as well, such error is unlikely to be involved. Secondly, specific validity tests can inform us about possible sources of unexplained variance.

This section considers two main objections against the use of happiness as an indicator of livability of nations.

The first objection is that happiness ratings cannot be compared across borders, because measures work out differently from one country to another. This is the issue of *cultural bias in the measurement of happiness*. That matter will be considered in section 5/2.1.

The second objection holds that average happiness in nations says more about the outlook-on-life in a country, than about the actual quality-of-life it provides. It is claimed that a culture of pessimism can make people consider themselves unhappy, even though society is in fact quite livable. This is the issue of *cultural influence on the appraisal of life*. That objection will be investigated in section 5/2.2.

Two limitations of this approach to specific validity testing must be mentioned in advance. The first limitation is that the tests involve attempts to verify the hypothesis that the differences in average happiness between nations are *largely* caused by the specific objection under review. The tests performed are not suited to demonstrate minor effects of that kind. The second limitation is that eliminating objections against a claim does not prove it true. In fact, one can never prove empirically that there are no white crows. So,

even if all these specific objections against assessing livability by happiness are falsified, it is still possible that some objections we did not consider does apply.

### 5/2.1 Tests for cultural bias in measurement of happiness

The objection has been raised that the observed differences in average happiness between nations are the result of cultural bias in measurement. This objection implies that there are no real differences in happiness between nations, or other differences than the ones that appear in responses to survey questions. Several suggestions have been made about possible sources of measurement distortion. The first is that *translation* plays us false, since words like 'happiness' and 'satisfaction' have subtly different connotations in the various languages. Similar questions would therefore measure different matters. A second suggestion is that responses are systematically distorted by *desirability bias*. In countries where happiness ranks high as a value, people would be more inclined to overstate their appreciation of life. A third claim is that *response styles* distort the picture. It is suggested that in collectivist societies people tend to present themselves as 'average', which leads to lower happiness scores. Finally, a common suggestion is that happiness is a typical Western concept. *Unfamiliarity* with the concept in non-western cultures is seen to result in low ratings.

Below we will inspect these claims one by one. If one of them appears to be true, this means that the happiness indicators used here do not measure true happiness in nations validly. If so, they are also disqualified as an output indicator of livability.

#### 5/2.1.1 Differences a matter of language?

The first claim is that the differences in reported happiness between countries result largely from variations in the meaning of key terms used in questions in different languages. Translations would be imprecise. Consequently seemingly identical questions would tap in fact different things.

##### *Predictions:*

If this claim is true we can expect the following:

- a) The pattern of difference must vary with the keyword used. Countries that score high on a question that uses the word 'happiness' can rank low on questions that refer to 'satisfaction' with life, or score middle on a rating between 'best/worst' possible life.
- b) In bi-lingual countries, ratings of happiness must differ between linguistic categories. Ratings must in fact be more close to same-language populations abroad, than to different-language compatriots.
- c) Average happiness must be highly similar in nations where the same language is spoken, even if these nations differ considerably in other respects.

##### *Data and method.*

The first prediction (a) can be checked by comparing the happiness rank orders of countries on different happiness questions. For this purpose the Gallup/Kettering world survey was used. This cross-national study involves three questions on happiness, that were posed in 11 mono-lingual nations. Questions and data are presented in [exhibit 5/2.1.1a](#).

The second prediction (b) can be tested on two cases: Belgium and Canada. In Belgium two languages are spoken, French and Dutch. These linguistic categories can be

identified in the data of the Eurobarometer surveys, which allow a specification of regions within the country. The scores can be compared with those of France and the Netherlands, which are also involved in the Eurobarometer survey. In Canada, French and English are spoken. Data on level of happiness in these categories are available from Blishen and Atkinson (1980). These scores can be compared with those of France and Britain from the Gallup/Kettering world survey (Gallup 1976). Results are presented in [exhibit 5/2.1.1b](#).

The third prediction (c) can be checked by comparing English language nations (Britain, Australia, Canada, USA), French language regions (France, Wallonia, Quebec), Portuguese language nations (Portugal, Brazil), Spanish language nations (Spain, Mexico) and German language nations (former East Germany and West Germany). The latter three cases are most interesting, because the socio-economic differences between these countries are great. If people are nevertheless about equally happy in these nations, language is likely to color their responses. Unfortunately, the available data on the Latin-language pairs are not very well comparable, due to differences in wording of questions and time of investigation. The best available testcase is East- and West-Germany right after the reunification. The language in these nations is the same, but the living conditions quite different. Well comparable data are available from the Socio-Economic Panel Study (SOEP) and the German periodical Wohlfahrtssurvey. The data are not shown here. See table 1.2.2b in Part II.

#### *Results:*

The first prediction is not supported by the data, and neither is the third. The second prediction meets at best partial support.

- a) [Exhibit 5/2.1.1a](#) shows that the rank order of happiness is largely the same for all three questions. Though there are some minor differences, high positive rank order correlations emerge. Rank order correlations may over-emphasize slight differences between countries at the same level of happiness. Therefore, we also computed product moment correlations ( $r$ ). These are respectively +.88 (Best/Worst by Happy), +.89 (Happy by Satisfied) and +.99 (Best/Worst by Satisfied). One could interpret these data as showing that the word 'happy' is less easily used in Germanic languages. Germany ranks relatively low on the happiness item. However, this is no general pattern in languages of German origin. The difference does not appear in the results of the World Value Studies in 1980 and 1990. In particular not when the Netherlands and Iceland are considered. (Data not shown here, see table 1.1.1b and 1.2.2a). The data do not support the common idea that English language involves an easier use of the term 'happy'.
- b) [Exhibit 5/2.1.1b](#) shows slight support for the prediction in the case of Belgium. French speaking Belgians report somewhat less happiness than their Dutch speaking compatriots. This difference is in the same direction as the (much greater) difference in average happiness between France and the Netherlands. The case of Canada is contrary to the prediction however. French Canadians report themselves slightly happier than English speaking Canadians, while average happiness in France is markedly lower than that of the English speaking nations. Inglehart (1977) reports similar results in the case of Switzerland. The Swiss of all tongues report relatively high levels of satisfaction with life. The scores rank far above the Germans, French and Italians, with whom the Swiss share their languages.

**Exhibit 5/2.1.1a**  
**Happiness rank order of nations on three survey questions**  
**11 nations circa 1975**

<i>Country</i>	<i>Happiness question</i> <i>happiness-in-life</i>	<i>satisfaction-with-life</i>	<i>best/worst</i>
<i>possible life</i>			
Canada	1	2	1/2
Australia	2/3/4	1	1/2
Britain	2/3/4	4	3
USA	2/3/4	3	4
Brazil	5	6	7
France	6	7	8
W. Germany	7	5	5
Mexico	8	8	6
Japan	9	10	9
Italy	10	9	10
India	11	11	11
<i>rank order</i>	----- +.94 -----	----- +.94 -----	
<i>correlation (r<sub>s</sub>)</i>	----- +.91 -----	----- +.91 -----	

Data: table 1.1.1a, 1.1.2b and 1.3.1.

**Exhibit 5/2.1.1b**  
**Happiness in bi-lingual nations compared**

<i>Average happiness in</i> <i>language categories in</i> <i>bi-lingual countries</i>	<i>Average happiness in</i> <i>neighboring countries</i> <i>with the same language</i>
<i>Question: "On the whole, are you very satisfied (4), fairly satisfied (3), not very satisfied (2), or not at all satisfied (1) with the life you lead?"</i>	
Belgium	
- French speaking 3.23	France 2.88
- Dutch speaking 3.47	Holland 3.34
<i>Question: "All things considered, how satisfied or dissatisfied are you with your life as a whole? Which number comes closest to how you feel?" The respondent was asked to choose a number from a card containing an 11-point scale ranging from 1 to 11.</i>	
Canada	
- French speaking 8.89	France 7.60
- English speaking 8.62	UK 8.50
	USA 8.60

Data: Nation averages: table 1.2.1b and 1.2.2.b.

Linguistic categories: Belgium: Inglehart 1977:160/2, Canada: Blisshen et. al. 1980:33

analysis of these data Halman (1987) has distilled several value dimensions and

- c) Comparison of happiness in Portugal and Brazil shows greater happiness in the latter nation. Likewise happiness seems to be higher in Mexico than in same tongued Spain (table 1.1.1a). The case of East and West Germany shows similar sizable differences in average happiness in nations of the same language. In 1991 East Germans score 6.0 on an 11 step satisfaction-with-life scale, and West Germans 7.3 (table 1.2.2a). It is worth also taking a look on [exhibit 5/2.2.4](#), which presents the deviations in actual happiness in nations from the level explained by quality of living conditions. There is no consistent language effect in these deviations either.

### ***5/2.1.2 Differences a matter of desirability bias?***

The second claim to be tested is that part of the difference in self-reported happiness between countries results from differences in moral appreciation of happiness. In countries where happiness is regarded as morally desirable, people would be apt to over-report their satisfaction with life, both for reasons of ego-defense and social presentation. This claim is often raised to discount the high level of happiness in the USA (e.g. by Ostroot & Snyder 1985).

#### *Predictions:*

If this claim is true, we can expect the following:

- a) In countries that rank hedonic values high in their value hierarchy, reported happiness must be higher than in countries that rank pleasure and satisfaction low. If this is not the case, there is probably no desirability distortion in the measurement of happiness. A positive result does not mark the distortion hypothesis true however. Pleasure acceptant countries can make inhabitants more happy.
- b) The distortion will manifest more pronouncedly in responses to questions about 'general happiness' than about 'feelings in the past few weeks'. Reports on last weeks' feelings are probably less vulnerable for desirability distortion, because it is less embarrassing to say to have felt down lately, than to admit one's life-as-a-whole is unsatisfactory. Past weeks' feelings are also more difficult to deny; defense-mechanisms have a better chance in the less palpable evaluation of life-as-a-whole. As a result happiness-appreciating countries will be recognizable by a relatively high divergence between reported happiness and affect level as measured by the Bradburn Affect Balance Scale.
- c) For the same reason there will be divergence between happiness and affect on the individual level as well. Desirability pressures produce uniformly high reports of happiness, whereas reports of affect remain closer to reality and are more variable. This must manifest itself in small correlations between reports of these happiness variants; in particularly in countries that cherish happiness, such as the USA.

#### *Data and method:*

Test of the first prediction (a) requires that we measure 'hedonic value orientation' in countries. We constructed an indicator of that matter on the basis of survey data. The World Values Study involves many questions about value preferences. In an earlier

has computed average scores on these dimensions for ten countries involved in his study. Some of these value dimensions are indicative of moral appreciation of pleasure and satisfaction. One of the dimensions is the tendency to approve of lust and pleasure as a guiding principle in matters of family, marriage, and sexuality. Halman refers to this dimension as 'egoism'. The second dimension concerns enjoyment and comfort in the realm of work ethics. Halman refers to it as the 'comfort/materialistic' dimension. We added both these factor scores and regarded the sum as a proxy of general *value hedonism* in the country. This indicator of moral hedonism is crossed with the level of happiness in the country. Data are presented in [exhibit 5/2.1.2a](#).

Test of the second prediction (b) requires that we cross 'value-hedonism' with *over-report of happiness* as measured by the divergence between reports of 'general happiness' and 'past weeks affect'. For this purpose we can again use the data of World Value Study I. We computed divergences for the same ten countries by detracting the 0-10 Affect Balance Score (table 2.2a) from the 0-10 standardized happiness score. A positive divergence score means that general happiness was rated higher relatively. The data are presented in [exhibit 5/2.1.2b](#)

The third prediction (c) can be tested in a meta-analysis of studies in nation samples that involved correlations between responses to questions about happiness in general and scores on the Affect Balance Scale. The available data are presented in [exhibit 5/2.1.2c](#).

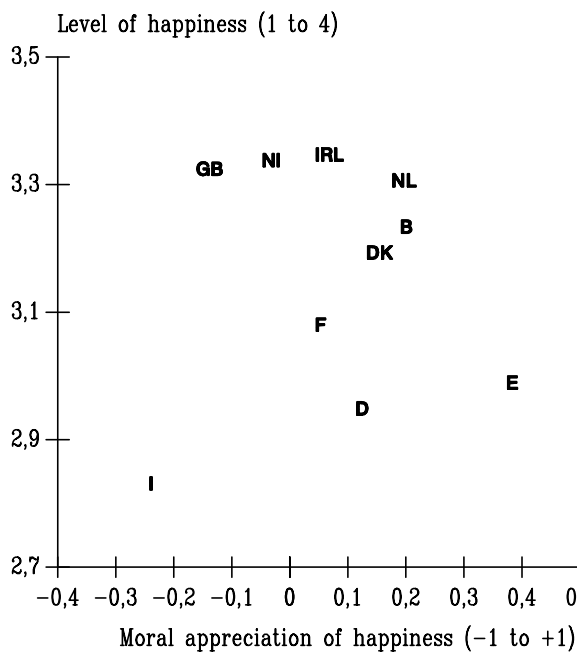
#### *Results:*

All three predictions are defied by the data:

- a) As can be seen in [exhibit 5/2.1.2a](#), happiness ratings are not higher in the countries where hedonic values are most endorsed:  $r = +.00$  (ns).
- b) [Exhibit 5/2.1.2b](#) shows that the divergence between average response to questions on 'general happiness' and 'past weeks affect' is unrelated to average moral appreciation of happiness:  $r = -.02$  (ns). Contrary to the prediction, the countries where happiness is cherished most, do not stand out by a pattern of high happiness and low affect.
- c) Responses to the general happiness question and the Affect Balance Score are highly correlated at the individual level. Contrary to the prediction the correlation is not smaller in the 'suspiciously happy' United States. See [exhibit 5/2.1.2c](#).

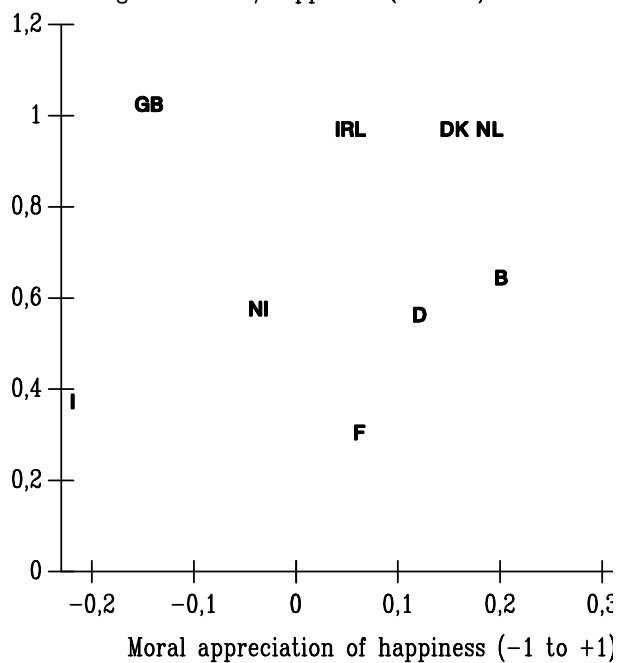
Clearly, there is no evidence for a cultural difference in desirability bias.

**Exhibit 5/2.1.2a**  
**Happiness level and moral appreciation of happiness, 10 EC countries 1980**



Data: Happiness: table 1.1.1b. Moral appreciation of happiness. Halman (1987: 159/178)  $r = +.00$  (ns)

**Exhibit 5/2.1.2b**  
**Divergence between reported 'happiness' and 'affect' by moral appreciation of happiness**  
**9 EC countries**  
 Divergence affect/happiness (LS-ABS)



Data: Happiness table 1.1.1b, Affect: table 2.2. Moral appreciation of happiness: Halman (1987:159/187)  $r = -.02$  (ns)



and family and the earlier used 'comfort' dimensions in work ethics. Scores on

**Exhibit 5.2.1.2c**  
**Correlation of 'general happiness' and last weeks 'affect' in some nation samples**

<i>country</i>	<i>measure of overall happiness (single questions)</i>	<i>correlation with past weeks affect (Affect Balance Scale)</i>	<i>source</i>
Britain	Happiness-in-life	r = +.41	Harding 1982:173
	Satisfaction-with-life	r = +.45	
EC	Happiness-in-life	r = +.41	Halman 1987:210
	Satisfaction-with-life	r = +.45	
Puerto Rico	Happiness-in-life	G = +.51	Matlin 1966:10/313
USA	Happiness-in-life	r = +.50	Andrews & Whitley 1976/85:292
	Satisfaction-with-life	r = +.43	
	Delighted-Terrible Life	r = +.45	
	Best-Worst possible Life	r = +.47	

Data: World Database of Happiness, Catalog of Correlates, variable category H1.2.1 (Veenhoven 1994).  
 G = gamma.

### 5/2.1.3 Differences due to response style?

The third claim holds that in collectivistic societies, such as Japan, people would tend to present themselves as 'average' citizens. Therefore, they would respond modestly and be apt to choose the midpoint of the response scale. This would lead to relatively low scores, because happiness is typically above neutral; the normal human condition being that one is more or less happy. By choosing the (neutral) midpoint of the scale, collectivistic people would in fact avow themselves less happy than they are (Iijima, 1982). In individualistic societies, people would rather define themselves in the difference with others, or orientate on internal cues.

#### *Predictions:*

If this claim is true, we can expect the following:

- a) Average happiness must be lower in collectivistic countries than in individualistic ones.
- b) The dispersion of happiness in a country, as apparent in standard deviation, must be smaller in collectivistic countries than in individualistic ones
- c) Happiness must be closer to the midpoint of the scale in collectivistic countries than in individualistic ones.

#### *Data and method:*

The first prediction (a) was again tested with data of World Values Study I. Collectivism/individualism of the country was once more measured by the pattern of responses to questions about value preferences. Acceptance of personal choice and rejection of tradition was taken as manifestation of *value-individualism*. Again we use value dimensions as identified and measured by Halman (1987). These are 'permissiveness' in moral and religious matters, 'permissiveness vs. traditional' orientation in marriage

these dimensions per country were totaled. This score of value-individualism per country was correlated with average happiness as assessed. The results are presented in scattergram in [exhibit 5/2.1.3a](#).

The second prediction (b) was tested by means of the same data on value-individualism. Now country scores on that matter were crossed with the standard deviations of happiness (rather than with the means). The data are presented in the scattergram in [exhibit 5/2.1.3b](#).

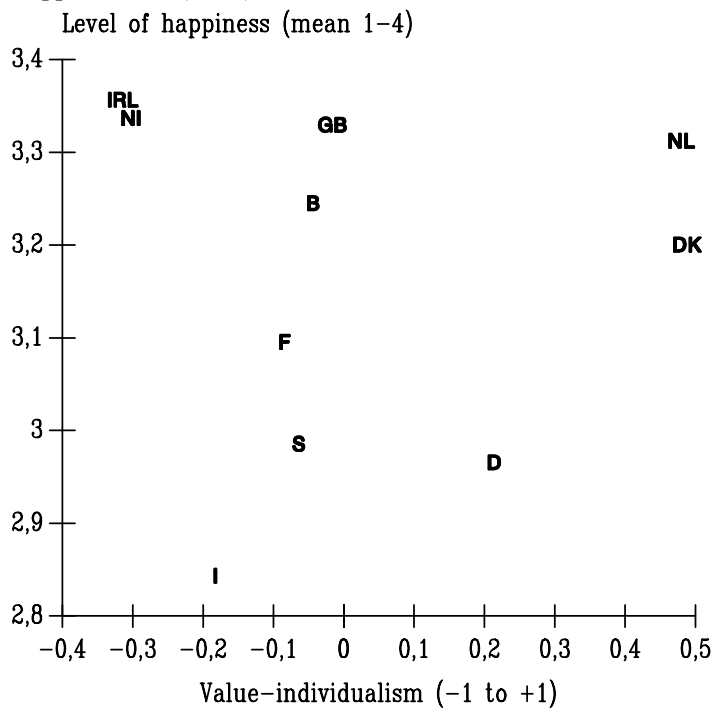
The last prediction (c) was tested with data of the Gallup/Kettering World Survey. The Best/Worst rating of present life used in this study has a clear midpoint. The percentage of scores in the middle categories in the various countries is presented in [exhibit 5/2.1.3c](#). Unfortunately we have no measures of collectivism/individualism of the countries in this data-set, so we can only inspect whether there are any clear differences or not.

#### *Results:*

Again the predictions are defied by the data:

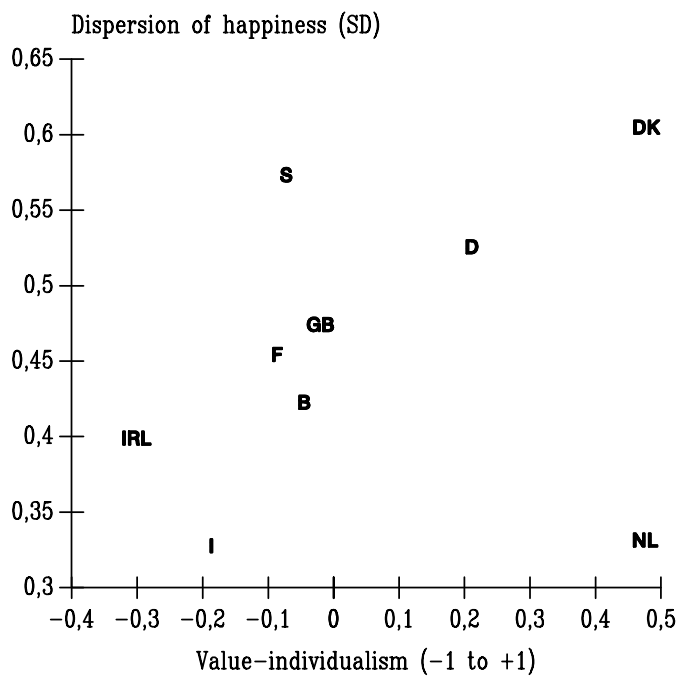
- a) Contrary to prediction, there is a negative correlation between value-individualism and happiness. As can be seen in [exhibit 5/2.1.3a](#) the correlation is  $-.27$  (ns). When happiness is measured by a question on satisfaction-with-life, the correlation is  $+.05$  (ns).
- b) Contrary to the prediction, we find no greater dispersion of happiness in individualistic countries. In fact there is a negative correlation. The correlation between value-individualism of the country and standard-deviation of happiness is  $-.46$  (ns). See [exhibit 5/2.1.3b](#). When dispersion of happiness is measured by standard-deviations on the 10 step life satisfaction item  $r = +.06$  (ns).
- c) [Exhibit 5/2.1.3c](#) shows that Iijima is right that the Japanese tend to choose the midpoint of the scale. Together 58% of the responses are in the categories 6, 5 and 4. Yet, that pattern does not seem to be a manifestation of particular Japanese collectivism. It also appears in Italy (52%), France (52%) and Mexico (51%). In fact, the middle categories are also frequently chosen in the Benelux (47%), Britain (44%) and Germany (41%).

**Exhibit 5/2.1.3a**  
**Happiness level (mean) and value-individualism ,10 EC countries in 1980**



Data: Happiness: table 1.1.1b. Value individualism Halman: (1987:28/159/178)  $r = -.27$  (ns)

**Exhibit 5/2.1.3b**  
**Happiness-dispersion (SD) by value-individualism, 9 EC countries in 1980**



Data: Happiness table 1.1.1b. Value individualism Halman: (1987:28/159/178)  $r = -.46$  (ns)

**Exhibit 5/2.1.3c****% responses on 11 categories of response scale on a question on happiness, 14 countries in 1975**

*"Here is a picture of a mountain, suppose the top of the mountain (10) represents the best possible life for you and the bottom (0) represents the worst possible life for you. Where on the mountain do you feel you personally stand at the present time?"*

	10	9	8	7	6	5	4	3	2	1	0	DK/NA
Australia	11	7	23	21	17	15	3	2	-	1	-	-
Africa (South Sahara)	1	1	6	9	18	18	19	12	8	5	3	-
Benelux	4	4	13	22	21	19	7	5	2	1	2	-
Brazil	9	5	14	14	19	21	8	5	2	1	2	-
Britain	9	8	20	16	21	15	9	1	1	-	-	-
Canada	10	8	22	23	17	13	4	2	1	-	-	-
France	5	3	13	15	17	22	13	8	1	1	2	4
Germany (W)	5	6	19	20	18	19	6	2	-	-	1	-
India	2	2	2	1	5	17	14	21	15	10	8	2
Italy	4	4	10	14	22	22	8	7	4	2	3	-
Japan	1	4	15	12	24	25	9	4	4	1	1	-
Mexico	5	4	19	14	23	22	6	2	2	3	-	-
Scandinavia	15	9	31	23	11	6	2	2	1	-	-	-
USA	13	6	17	20	13	18	6	3	1	1	1	1

Data: Gallup/Kettering (1975) Q6A. See table 1.3

#### 5/2.1.4 Differences a matter of familiarity with the concept?

The last claim to be checked is that happiness is a typical Western concept. Because people in non-western societies would be less familiar with the concept, they would be more apt to avoid extreme responses and tend to rate themselves safely in between. This would lead to a relatively low average score, which would not fully reflect the real level of happiness in these countries.

##### *Prediction:*

If unfamiliarity is indeed involved we can expect more 'don't know' and 'no answer' responses in non-western societies: particularly on questions which use the word 'happiness'.

##### *Data and method:*

This prediction can be checked with data of earlier mentioned Gallup/Kettering World Survey of 1975. This study involved representative samples in 5 parts of the world and therefore allows a good distinction between the 'Western' and 'Non-Western' world. It also involved three happiness questions: 1) happiness-in-life, 2) possible to 'worst possible' satisfaction-with-life, and 3) ranking of present life on an 11-step scale ranging from 'best' Each of these rating scales involved a DK/NA response category. Data are presented in [exhibit 5/2.1.4](#).

#### **Exhibit 5/2.1.4**

**% non-response (don't know, no answer) on three questions about overall happiness  
Six parts of the world in 1975**

<i>Part of the world</i>	<i>question about overall happiness</i>		
	<i>happiness- in-life</i>	<i>satisfaction- with-life</i>	<i>best-worst possible life</i>
Australia	0	1	0
South Sahara	1	0	0
North America	2	1	1
Latin America	2	1	0
Far East	2	1	1
- Japan	12	0	0
- India	1	2	2
Western Europe	2	0	1

Data: tables 1.1.1a, 1.2.2b and 1.3.

##### *Results:*

Again the prediction is refuted by the data. [Exhibit 5/2.1.4](#) shows that the non-response to questions about the appreciation of life is generally low, and not lower in Non-Western Non-Western nations than in Western ones.

##### *In summary*

This section considered the objection that happiness cannot be compared across borders, as a result of inevitable cultural bias in its measurement. Four commonly mentioned claims of cultural measurement distortion were checked empirically: 1) language, 2) desirability distortion, 3) response style, and 4) familiarity with the concept. None of these distortions appeared to be involved. This suggests that the survey data on average happiness used here provide a good estimate of true happiness in these countries.

## 5/2.2 Tests for cultural influence on appraisal of life

Even if the observed nation-differences in average appreciation of life are real, it is still possible that these differences have little to do with variation in livability. The differences may be due to cultural variation in outlook on life. Citizens in one country may be less positive than citizens in a neighboring country and for that reason may consider themselves less happy, whereas their country is otherwise equally livable. Culture is here a source of 'substantive influence' on happiness rather than of 'bias in its measurement'.

In this vein, the observed differences in happiness can be explained by dissimilarity in prevailing outlook on life, which on its turn may root in cultural variation in basic values and beliefs. One of the proponents of this view is Inglehart (1990). Inglehart looks for explanations of the sizable differences in happiness between Western nations. He is reluctant to believe that life is really so much worse in the Mediterranean countries than in North-West Europe. He suggests that "these differences reflect the distinctive historical experience of the respective nationalities. Long periods of disappointed expectations give rise to cynical attitudes. These orientations may be transmitted from generation to generation through pre-adult socialization" (Inglehart 1990:30).

Four testable predictions can be derived from this theory: The first is that differences in happiness must be paralleled by differences in attitudinal cynicism. In the least happy countries people must be more cynical about everything. A second prediction is that the happiness of migrants will be more close to the level of happiness in their country-of-origin than to average happiness in the country-of-settlement. A third prediction is that East Germany must be about equally happy as West-Germans, because they share the same German culture. Finally, a fourth prediction is that an optimistic outlook on life must manifest in a higher level of happiness than predicted by the quality of living conditions in the country. If so, there must be sizable deviations from the level predicted on that basis, and the pattern of deviation must be similar in nations that share a same cultural heritage.

The first three predictions check whether the differences in happiness can be 'largely' attributed to a shared outlook on life. The last considers whether outlook is likely to explain the differences that remain irrespective of real quality of life. Below, we will test these hypotheses one by one.

### 5/2.2.1 Unhappy countries characterized by attitudinal cynicism?

If individual responses to questions about satisfaction with life are largely geared by a shared tendency to see things either positively or negatively, we can expect sizable and consistent correlations between average happiness and characteristic attitudes in the country. In particular can we expect a sizable relation between average happiness and average 'trust' in man and society. If Inglehart is right, the unhappy Mediterranean countries -to which he attributes a cynical attitude- must appear the most distrusting. If not, he is apparently wrong.

Though absence of the predicted correlation implies falsification of the hypothesis, presence of it does not prove it true. Cynical attitudes may result from current shortcoming in society, rather than from disappointments in the past. Also, unhappiness can breed cynical attitudes, rather than the reverse.

*Data:*

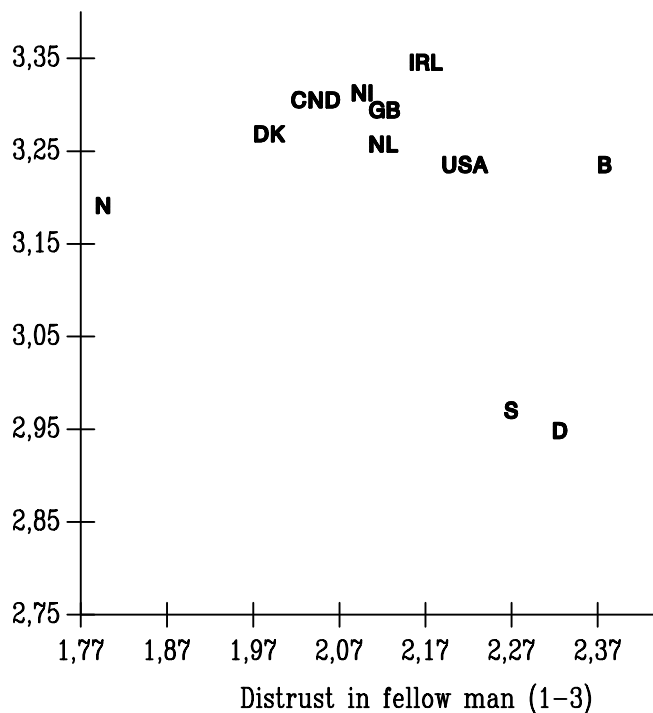
World Value Study I involved two measures of attitudinal cynicism. *Distrust in fellow-man* was measured by a single direct question 'In general, do you think that most people can be trusted?' *Distrust in society* was measured by trust in institutions. Respondents rated their trust in ten institutions: the church, the army, the schools, the law, the press, unions, the police, parliament, civil servants and big business. Responses were added in a sum-score. These data are available for 13 nations: 11 West European nations, Canada and the USA. Distrust-scores were crossed with average happiness in these countries. The scattergrams are presented on [exhibits 5/2.2.1a](#) and [5/2.2.1b](#).

*Results:*

The prediction were confirmed in that average happiness tends to be low in countries where distrust in one's fellow man is most common  $r = -.61$ . Mistrust is indeed the rule in the Mediterranean countries to which Inglehart attributes inherited cynicism.

However, things pan out differently in the case of distrust in society. The distrust-in-institutions sum-score is not related to happiness. In fact, distrust in institution is more common rather than less common in happy countries:  $r = +.36$ . Probably this is because these countries hold freedom and democracy more in respect.

**Exhibit 5/2.2.1a**  
**Happiness and distrust in fellow man, 13 Western nations in 1980**  
 Happiness (1-4)



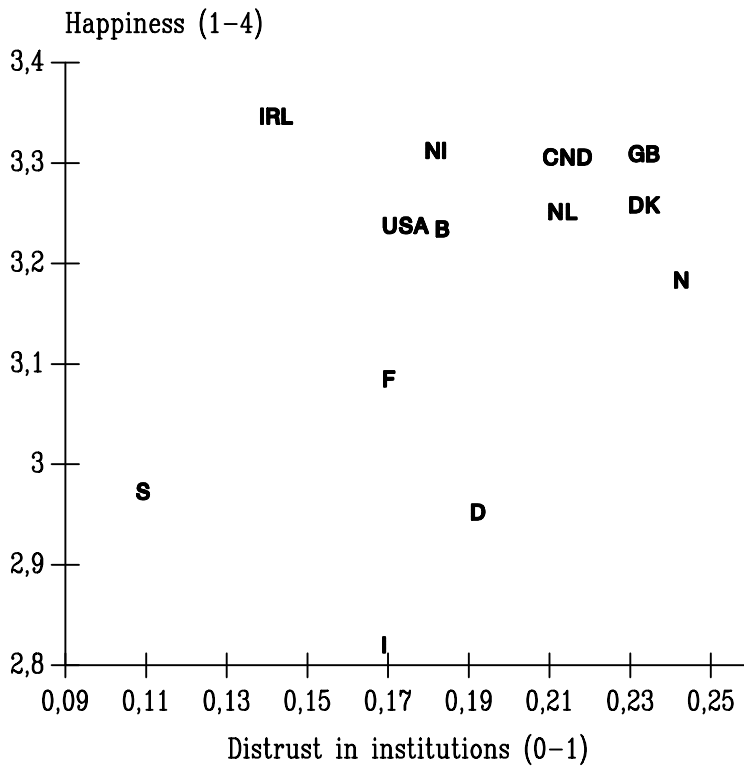
Data: Happiness: table 1.1.1b. Trust in fellow man: Halman 1991:317

$r = -.61$  ( $p < .05$ )

This latter result clearly contradicts Ingleharts theory. The theory presumes that cynical

attitudes result from earlier social disorganization and must therefore manifest in skepticism toward society in the first place. Moreover it claims that these disappointments have generalized towards a general negative outlook that colors the evaluation of private life as well. Such a general outlook must manifest itself in a *consistent* pattern of correlations, which is not the case. Hence, we can consider this hypothesis to be falsified.

**Exhibit 5/2.2.1b**  
**Happiness and trust in society, 13 Western nations in 1980**



Data: Happiness: table 1.1.1b. Trust in society: Halman 1991:317,  $r = +.36$  (ns)



### 5/2.2.2 Happiness of migrants more like average in country-of-origin than in country of settlement?

If the appraisal of life is largely determined by socialized outlook, we can expect that natives judge life differently than migrants. Though the former live in the society as society as the latter, they will evaluate it differently, because they look at life through differently cultured eyes. In this context, the following predictions can be made:

#### *Predictions:*

- a) Average happiness of migrants will be closer to the average level in their country-of-origin than to the average in the country-of-settlement.
- b) This is especially true for recent migrants. The difference is less pronounced the longer migrants are settled, and is therefore smaller in second generation than in the first.
- c) Among migrants of different origins in a country, the rank order of happiness is the same as the rank order of happiness among their respective countries-of-origin.

#### *Data:*

Happiness among migrants has been assessed in two countries: in Australia and in Western Germany. In both countries two studies have been performed in the 1980's. All four these studies assessed happiness by means of questions on life-satisfaction rated on a graphic scale. Most scales range from 0 to 10, but one from 1 to 7, and one from 1 to 9. Scores on these latter scales were transformed linearly to range 0-10. The extremes of most scales are labeled as (very) 'dissatisfied' and (very) 'satisfied'. In some cases the labels 'Terrible' and 'Delighted' were used.

Data on average life-satisfaction in the country of origin were drawn from table 1.2.2 in part II of this book. Of two countries of origin we have no general population average in the 1980's. These countries are Turkey and Yugoslavia. In these cases estimates were made. The estimate of Yugoslavia was based on a representative survey in 1962 which yielded a score of 5.0 (table 1.3) and a 1967 survey among subjects aged 15 - 40 in Slovenia (See table D). Possibly average happiness had improved somewhat in the early 1980's, but it is unlikely that this will have changed the rank order, the next happy country (Greece) scoring almost a full point higher. Estimating average happiness in Turkey is less well possible. Data about life-satisfaction as assessed in representative surveys are not available for this country. All we have is an average observed in a non-probability sample of students. As can be seen in table C1, Turkish students score lower than students in any other country under review here. If we assume that the population average is also below the lowest of these countries, average happiness must be below 5.0 in Turkey. The data and estimates are presented in [exhibit 5/2.2.2](#).

#### *Results:*

- a) The first prediction (a) is clearly defied by the data. The happiness of migrants is typically closer to the average in the country-of-settlement, than to the average in the country-of-origin. In the case of Greeks the distance to average citizens in the country-of-settlement is about -0.3, whereas the difference to happiness in the country-of-origin is +1.4. In the case of Italy the ratio is -0.1 to +0.8, in the case of Spain -0.1 to +1.4 and in the case of Yugoslavia as much as -0.4 to +2.5. The ratio of Turkey is in the same order. It is worth noting that migrants from Mediterranean countries are typically happier in

Australia and Germany than their relatives at home. All are first generation migrants, whose pre-adult socialization took place in the country of origin. Hence if they had been brought up with a gloomy outlook at all, they have apparently lost that cultural heritage quite quickly.

- b) The most evident explanation of this pattern is obviously that the livability of the country determines the happiness of its inhabitants, irrespective of their cultural backgrounds. The fact that migrants are slightly less happy in some cases can then be explained by their relatively disadvantaged social position in the new country and by problems of adaptation. In the case of Turks in Germany such effect are clearly involved. The second prediction (b) is a specification of the first one and is thus in fact largely disproved as well. Still we can look at the minor differences between happiness of migrants and the general public in the country of settlement. In Australia that difference is hardly greater among fresh migrants than among first-generation veterans. In Germany the prediction is confirmed; second-generation migrants are closer to the average German than their first-generation parents. Obviously this can also be the result of better adjustment to German society. (Data not shown).
- c) The third prediction is not supported either. In only half the cases do we see that the rank order of happiness among migrants more or less reflects the differences among mother-countries. None of the rank order correlations reaches significance in this small sample. See once more [exhibit 5/2.2.2](#).

## Life-satisfaction of migrants (scale 0 - 10)

## Exhibit 5/2.2.2

	<i>average life-satisfaction of migrants in country of settlement</i>				<i>average life-satisfaction in country of origin (total population)</i>	
	Australia		Germany		1981 - 1983	
	1981 <sup>1</sup> N=246	1984 <sup>2</sup> N=656	1982 <sup>3</sup> N=770	1984 <sup>4</sup> N=1569		
<i>average life-satisfaction in country of settlement (total population)</i>	7.6	7.9	7.7 <sup>5</sup>	7.4		
British migrants	8.0	8.0	-	-	7.6 <sup>6</sup>	Britain
Greek migrants	7.6	7.4	7.2	7.1	5.9 <sup>6</sup>	Greece
German migrants	-	7.7	-	-	7.5 <sup>6</sup>	Germany
Irish migrants	-	8.0	-	-	7.7 <sup>6</sup>	Ireland
Italian migrants	7.9	7.7	6.9	7.6	6.7 <sup>6</sup>	Italy
Dutch migrants	-	7.8	-	-	8.0 <sup>6</sup>	Netherlands
Spanish migrants	-	-	7.1	8.2	6.2 <sup>7</sup>	Spain
Turkish migrants	-	-	6.2	6.9	<5.0 <sup>8</sup>	Turkey
Yugoslavian migrants	-	7.7	7.1	7.8	±5.0 <sup>9</sup>	Yugoslavia
<i>rankorder correlation (r<sub>s</sub>) migrant life-satisfaction by satisfaction in country-of-origin</i>	+ .10 (ns)	+ .58 (ns)	+ .03 (ns)	+ .50 (ns)		

### 5/2.2.3 *East Germans equally happy as West Germans?*

If happiness is largely determined by "cognitive cultural norms" that root in "distinctive historical experiences" of nations and are "transmitted from generation to generation", we can expect that there is little difference in average happiness between East Germany (former DDR) and West Germany. Germans share the same cultural heritage and speak the same language. The political separation lasted only half a generation and did not cut off all cultural exchange.

#### *Data:*

Since the reunification in 1990, the periodical West German 'Wohlfahrts Surveys' are held in East Germany as well. Also, an East German version of the large scale Socio-Economic Panel study (SOEP) has been started. Both studies involve measures of happiness. The data are not shown here. See table 1.2.2b in part II of this book.

#### *Results:*

The data clearly falsify the prediction. East Germans are significantly less happy than West Germans: scores on 11 step satisfaction-with-life scale are respectively 6.0 and 7.3 in 1991. The difference can be explained by the poorer living conditions in former East Germany. In the following decade successful resurrection will probably erase the dissimilarity in happiness.

### 5/2.2.4 *Cultural pattern in happiness that cannot be explained by quality of living conditions?*

If the observed differences in happiness between nations are a matter of outlook-on-life rather than of quality-of-life, there must be nations that are happier than their quality-of-life would predict and others unhappier. In this context the following predictions can be made:

#### *Predictions:*

- a) The actual happiness in nations must differ markedly from the level predicted by the quality of living conditions it provides. Deviations are the rule.
- b) The pattern of deviations must be similar for nations that share a same cultural heritage.

#### *Data:*

Of 23 nations we have data on both happiness (happiness-in-life, satisfaction-with-life) and quality of living conditions (material wealth, social equality, political freedom and access to knowledge). Remember section 5/1.2. In the context of this question we will now consider the variance in happiness that cannot be explained by quality of living conditions: the so called 'residual variance'. To that end we first extracted a common factor in the scores on the 8 living conditions of the 28 nations of which we have comparable data on that matter. The first factor we found explains 66% of the total variance and has an Eigenvalue of 5.3. Next scores, on this factor were crossed with happiness of the 23 nations of which we have both data on average happiness-in-life and satisfaction-with-life. The results are presented in the [exhibits 5/2.2.4a](#) and [5/2.2.4b](#). In both plots the linear regression line is drawn, which represents the predicted degree of happiness at various levels of living. In other words: the regression line depicts how happy the average citizen should be given the living conditions in his country. The residual variances are the vertical distances between the actual happiness score and the regression line.

*Results:*

- a) Contrary to the first prediction, the deviations are typically small. Most cases are close to the regression line. The most deviant nations are India and Mexico, but even these cases cannot be characterized as outliers, because the distance is less than two times the standard deviation.

This is no big surprise, because we have seen earlier in section 5/1.2 that living conditions explain most of the variance in happiness. The first factor used here explains only slightly less of the variance.

Still, it is possible that the unexplained variance ( $\pm 40\%$ ) is due to the hypothesized cultural differences in outlook on life. Let's therefore consider whether there are cultural similarities in the pattern of deviations.

- b) In this data-set there are at least three clusters of countries which share a common cultural background: 'Latin' countries, 'Germanic' countries and 'Anglo-Saxon' countries.

'Latin' countries exist in Europe as well as in America. In Europe: Italy, France, Spain and Portugal, and in (Latin) America: Brazil and Mexico. A look at the charts in [exhibit 5/2.2.4](#) shows that there is no common happiness pattern among these nations. Some deviate consistently positively from the regression line (Brazil) and others deviate negatively (Italy). Spain is close to the regression line in both cases.

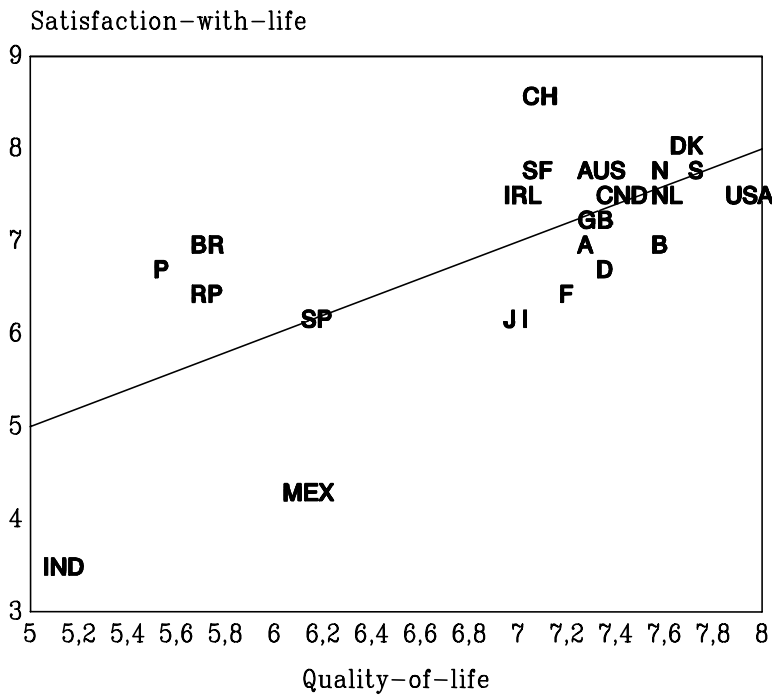
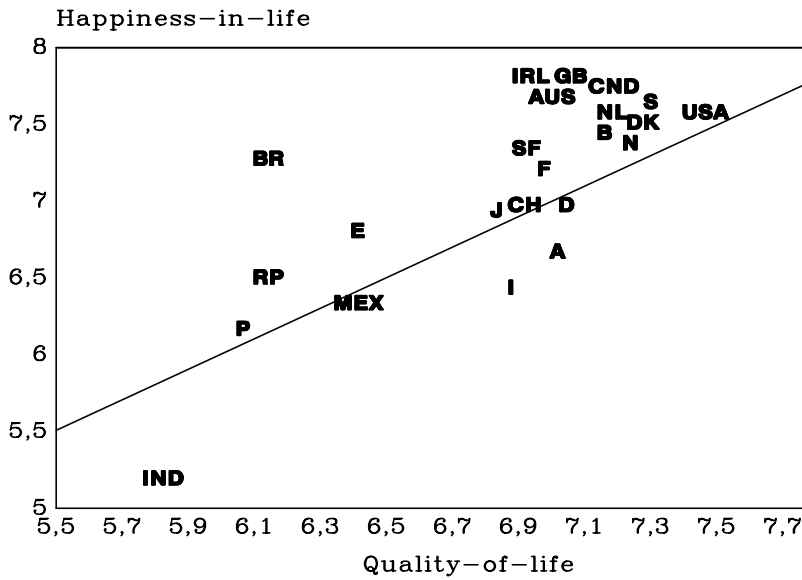
'Germanic' countries in this data-set are Austria, Germany, the Netherlands, Switzerland, and to some extent also the Scandinavian countries Denmark, Norway and Sweden. The scores of these countries are all close to the regression line, slightly above and slightly below. There is thus no indication of an extra cultural effect.

The same applies to the 'Anglo-Saxon' countries: Australia, Britain, Canada and the USA. Contrary to common belief about inflated happiness of Anglo-Americans, average happiness in the USA appears to be slightly lower than the quality of its living conditions would justify.

The most deviant case is India, which is in both scattergrams clearly below the line. That result is contrary to the idea that Eastern outlook on life would help to neglect earthy misery. Indians are in fact more unhappy than to be expected in their condition. This can be the result of a negative outlook. By lack of comparable countries we don't know yet. It is also possible that the assumption of linearity is misleading and that happiness drops in fact disproportionately at the lower levels of living. In that case India could neatly fit the regression line.

All in all, the second hypothesis (b) must be considered falsified for the time being.

**Exhibit 5/2.2.4**  
**Happiness and living conditions 23 nations around 1980**



Data: section 5/1.2

***In summary***

This section checked the theory that happiness in nations is not indicative of livability of nations, because happiness would be largely a matter of outlook that developed in earlier

conditions and is transmitted from generation to generation. Four tests were performed: Firstly, the hypothesis was tested that unhappiness in nations is the result of a general cynical outlook on life. Contrary to the hypothesis, happiness in nations appears not consistently related to attitudinal cynicism.

Secondly, the implication was checked, that a socialized outlook must manifest in the happiness of migrants. Subjective appreciation of life would therefore have little reference to actual quality of life in the country. Contrary to the hypothesis, the happiness of migrants appears to be closer to the average in the country-of-settlement than to the average in their country-of-origin.

Thirdly, we checked the inference that happiness must be similar in former East- and West Germany, because all Germans share the same cultural heritage. Contrary to the hypothesis, a sizable difference appeared.

Finally we considered the nation variance in happiness that is not explained by quality of living conditions, and that could thus be attributed to outlook. Contrary to the hypothesis these deviations are small and do not concur in recognizable cultural pattern.

Together these tests make it highly improbable that the observed differences in happiness result from cultural differences in outlook-on-life rather than from variation in actual quality-of-life.

In this context we must also remember section 5/1.2, which showed that the differences in happiness between nations can be largely explained by variation in living conditions. There is thus a good alternative to the cultural-outlook explanation.

**5/3 SUMMARY**

This chapter considered whether average happiness in nations is a valid indicator of the livability of these nations. Two kinds of validity tests were performed: First, *global tests* for concurrent and congruent validity. Second, several *specific checks* of some common objections against the use of happiness for this purpose.

The global tests for congruent validity showed that average happiness in nations correspond with healthiness, though not with incidence of suicide. These two alternative 'output' indicators of livability explain together 37% of the variance in happiness. The test for concurrent validity showed a strong relationship with quality of crucial living conditions in the country. Happiness is highest in the countries that provide most material comfort, social equality, political freedom and access to knowledge. Together these input indicators explain 77% of the variance in average happiness.

Various specific validity tests did not expose happiness either. The observed differences in average happiness between nations do not seem to result from cultural bias in its measurement. It is also unlikely that they result to a great extent from cultural variation in outlook on life.

All in all, it is fairly probable that the differences in happiness, as observed in survey studies, do reflect differences in livability of nations.



## NOTES

1. Victoria Immigrant Survey, 1981, Secondary analysis, 1-9 Terrible-Delighted scale, transformed linearly to 0-10.
2. Australian National Science Survey, 1984, Secondary analysis, 1-10 Dissatisfied-Satisfied scale, transformed linearly to 0-10.
3. German Survey among foreign workers (Ausländerumfrage), 1982. Data reported in Zapf & Brachtel 1984:294, 0-10 Utmost dissatisfied-Utmost satisfied scale.
4. German Socio-Economical Panel (Sozio Economisches Panel, SOEP), first wave, 1984, Secondary analysis, 0-10 Utmost dissatisfied - Utmost satisfied scale.
5. German Welfare Survey (Wohlfahrtssurvey), 1980. Data reported in Zapf & Brachtel, 1984:294.
6. Eurobarometer 19, 1983. Data reported in Inglehart 1985:12, 0-10 very dissatisfied - very satisfied scale.
7. European Value Study 1981, Secondary analysis, 1-10 dissatisfied - satisfied scale, transformed linearly to 0-10.
8. Estimate on the basis of a cross-national study among university students in which Turkish students scored very low (4.2 on a 1-7 Terrible-Delighted scale) and lower than students in Greece, Spain and Yugoslavia (Michalos 1991:83)
9. Estimate on the basis of:
  - a. National sample in 1962 which observed a score 5.0 on a 0-10 Worst-Best Possible Life scale(Cantril 1965:258),
  - b. Cross-national study among subjects aged 15-40 in 1967 in which Slovenia scored 5.06 on a 1-9 Worst-Best Possible Life scale (5.1 on 0-10 scale).

## REFERENCES

- Andrews, F.M. & Withey, S.B.  
*Social indicators of well-being*, New York  
U.S.A., 1976, Plenum Press.
- Blishen, B. & Atkinson, T.  
*Anglophone and Francophone differences in perceptions of the quality of life in Canada*  
in: Szalai A. & Andrews, F. (eds), "The quality of life", London, U.K., 1980, Sage, 25-39.
- Cantril, H.  
*The pattern of human concern*,  
New Brunswick, U.S.A, 1965, Rutgers University Press.
- Estes, R.,  
*The Social Progress of nations*,  
New York, U.S.A., 1984, Praeger Publishers.
- Eurobarometer  
*Trends 1974-1991*, Public Opinion in the European Community  
Commision of the European Communities, Directorate -general information, communication, culture, Brussels, 1992.
- Gallup, G.H.  
*Human Needs and Satisfactions: A Global Survey*  
Public Opinion Quarterly, Vol.40, 1976, 459-467.
- Gallup/Kettering  
*Human needs and satisfactions: A Global Survey. (Tablebooks)*  
U.S.A., 1976, Charles F. Kettering Foundations and Gallup International Research Institute.
- Harding, S.; Phillips, D. & Fogartie, M..  
*Contrasting Values in Europe*  
London, U.K., 1986, McMillan.
- Halman, L.,  
*Traditie, secularisatie en individualisering,*  
*(Tradition, secularization and individualization),*  
Tilburg, Netherlands, 1987, University Press Tilburg.
- Inglehart, R.,  
*Values, objective needs and subjective satisfaction among Western Publics*, Comparative Political Studies, Vol.9, 1977, 429-458.

- Inglehart, R.  
*Culture shift in advanced Industrial Society*  
Princeton, New Jersey, U.S.A., 1990, Princeton University Press.
- Kurian, G.T.  
*The book of world rankings*, London  
U.K., 1979, McMillan Reference Books.
- Lynn, R.  
*Personality and National Character*, London, U.K.  
1971, Pergamon Press.
- Lynn, R.  
*National differences in anxiety and extraversion*  
Progress in Experimental Personality Research, Vol.11, 1982, 213-258.
- Matlin, N.  
*The demography of happiness*,  
San Juan, Porto Rico, U.S.A., 1966, University of Puerto Rico, School of Medicine,  
Department of Public Health.
- Michalos, A.  
*Global Report on Students Well-being, Volume I: Life Satisfaction and Happiness*  
New York, U.S.A., 1991, Springer-Verlag.
- Ostroot, N.M. & Snyder, W,  
*Measuring cultural bias in a cross-national study*  
Social Indicators Research, 1985, vol 17 pp 419-429
- Summers, R. & Heston, A.  
*A new set of international comparisons of real product and prices: Estimates for 130 countries 1950-1985*,  
The Review of Income and Wealth, Vol.34, 1988, 1-25.
- U.N.  
*Demographic Yearbook*  
New York, U.S.A., 1987, United Nations.
- U.N.  
*National Account Statistics. Compendium of Income distribution Statistics*  
Washington, U.S.A., 1985, United Nations.
- UNDP  
*World Development Report 1990*  
Washington, U.S.A., 1990, United Nations.
- .

Veenhoven, R

*Conditions of Happiness*

Dordrecht, Netherlands, 1984, Reidel, (reprinted 1989 by Kluwer).

Veenhoven, R.

*Databook of Happiness*

Dordrecht, 1984, Reidel.

Veenhoven, R.

*Correlates of happiness, 7838 findings from 603 studies in 69 nations 1911-1994*

Erasmus University, RISBO, 1994, Rotterdam Netherlands

WHO

*World Health Statistics Annual, 1987,*

Geneva, Switzerland, World Health Organization.

Wohlfahrtssurveys 1978-1993 *Germany*, Files available at ZUMA, Mannheim, Germany

World Value Surveys 1980-1993 *Cumulative file, 1994, Available at ICPSR, ...*

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