Life satisfaction in Nations

Ruut Veenhoven

Erasmus University Rotterdam

October 2011

Online at http://mpra.ub.uni-muenchen.de/66021/
MPRA Paper No. 66021, posted 11. August 2015 15:34 UTC
1 NEED FOR A MEASURE OF QUALITY-OF-LIFE IN NATIONS

How to assess how well a nation is doing? One way is to look at the quality-of-life of the people who live there. This view is gaining prominence, both among policy makers and the general public. This begs the question what quality-of-life is precisely and how that can be measured comprehensively.

Assumed quality-of-life
Quality-of-life in nations is commonly measured by taking stock of conditions that are believed to make for a better life, such as economic affluence, full employment and education. Measures of such conditions are added in an index, like the Human Development Index (HDI) or the Index of Social Progress (ISP). Items in such indexes are typically things that are on the political agenda and as such these indexes inform about progress on the way chosen. Yet these indexes do not tell us whether we are on the right track, that is, whether these policy achievements really improved the lives of citizens. Still another problem is that such measures typically assume that more is better and do not inform us about an optimum, e.g. how many years of education is optimal for a good life.

Apparent quality of life
Another approach is to assess how well people thrive in a society. The focus is then on the outcomes of life, rather than on the preconditions. How well an organism thrives is typically reflected in its lifetime. In higher animals, thriving reflects also in affective experience. If in the right pond, an animal will feel good and will stay in that environment. If not, it will feel bad and seek a better place or pine away. We humans are moreover able to estimate how well they have felt over longer periods of time and reason also enables us to assess cognitively whether we could have done better. Together these appraisals reflect in ‘happiness’, that is, the subjective enjoyment of one’s life as a whole. Hence, when the inhabitants of a nation are happy\(^2\), that nation is apparently well livable, even if it falls short to assumed conditions for a good life.

1.1 Measure of happiness in nations
Happiness is how much one likes the life one lives. Since this is something people have in mind, it can be measured using questioning. Lengthy questionnaires are not required, a single direct question is mostly better. An example of a survey question on happiness is:

\[
\text{Taking all together, how satisfied or dissatisfied are you with your life as a whole these days?}
\]

\[
\begin{array}{cccccccccccc}
0 & 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 \\
\text{Dissatisfied} & & & & & & & & & & \text{Satisfied}
\end{array}
\]

The question can be phrased in other ways as well. A review of all questions ever used is available in the collection ‘Measures of Happiness’ of the World Database of Happiness (Veenhoven 2011a)
1.2 Differences in average happiness across nations
Such questions on happiness can be used in surveys of the general population of a country. The first survey of that kind was in the USA in 1946. To date, survey findings on happiness are available for almost all nations of the world. All these findings are gathered in the collection ‘Happiness in Nations’ (Veenhoven 2011b) of the World Database of Happiness. Some illustrative results are presented on scheme 1.

It may be no surprise to see four West European nations in the top 5, though one may not have expected average values as high as 8. The top position of Costa Rica may be more of a surprise, yet Mexico is also among the happiest countries. Average happiness is higher than one would expect in all Latin American nations, while happiness is lower than common expectation in industrialized Asian nations, e.g. only 6.3 in China and 6.5 in Japan.

1.3 Change in average happiness over time
Though it is commonly assumed that we do not get any happier (Easterlin 1974), the available data show that average happiness has increased in most modern nations over the last 40 years. See scheme 2. Note that Denmark is among the countries where happiness has increased. The Danes were already quite happy in the 1970’s and gained about half a point on the 0-10 scale since. This means that even greater gains are possible in other nations. The available data on Switzerland suggest that the high level of average happiness (8.0) has remained constant since first assessment in 1976.

2 LINK WITH THINGS THAT POLICY MAKERS CAN IMPROVE
Much of these differences in average happiness across nations can be explained by societal variation in economic affluence, freedom, equality, brotherhood and justice. Scheme 3 presents correlations with indicators of these matters. All variables in that table are things over which policy makers have some control. So the data leave no doubt that policy matters for final quality of life and also indicate what matters most.

Economic development
Wealth stands out as a mayor factor. Contrary to Easterlin’s (1974) well know paradox’, the average citizen is clearly much happier in rich countries than in poor countries. Comparison over time shows also that growth of the economy tends to be accompanied by a rise in happiness, both in the long run and over the last 10 years (Veenhoven & Vergunst).

Institutional quality
This appears to be equally important. People live happier under rule of law and good governance. Institutional quality is both a fruit of economic development and a facilitator of development. Hence control for income per head reduces the correlation with institutional quality very much. Likewise, the partial correlation of average happiness and wealth is only +.20 when institutional quality is controlled. Together, economic development and good governance enable the realization of the common goals of freedom, equality and security.

Freedom
Economic freedom is also an important condition for happiness, particularly in poor nations. One of the mechanisms is clearly that economic freedom stimulates economic development, which on its turn adds to happiness. When wealth is controlled, a negative correlation appears and that suggests that this mean has a price.
Political freedom is even more strongly linked with average happiness and its effect on happiness is partly independent of economic development. The effect is particularly strong among developed nations.

Personal freedom is also strongly related to average happiness, but its effects overlap almost completely with that of economic development. This is not to say that personal freedom has no independent effect on happiness; it rather seems to be one of the ways in which economic development adds to happiness.

Equality
Not everything deemed desirable appears to go with more happiness and this is the case with equality of incomes. The zero order correlation is small but positive (+.10), but after control for affluence a slight negative partial correlation appears (-.18), indicating that people tend to be less happy in countries where income differences are small. Elsewhere I have analyzed this pattern in more detail and concluded that the advantages and disadvantages of income inequality balance in most parts of the world (Berg & Veenhoven, 2010). This case illustrates the above difference between assumed quality of life.

The correlation between happiness and gender equality fits better with common sense. People live happier in countries where women enjoy equal rights than in countries where they are discriminated.

Security
Safety is commonly assumed to be a prime condition for happiness. That view is confirmed in a negative correlation with lethal accidents, which remains about equally strong when economic development is controlled. Death due to accidents is indicative of wider insecurity in society.

Yet in the case of murder a positive correlation appears, that gets even stronger when economic development is controlled. This positive correlation is due to the Latin American nations, where happiness is high in spite of a high murder rate. Within separate parts of the world slight negative correlations appear, that are still smaller than one would expect. Surprisingly, white-collar crime (corruption) detract more to the happiness of the average citizen than this kind of violent crime. The reason is probably that only a few citizens are really confronted with murder, while the effects of corruption are felt by many.

Still another surprise is the correlation with social security. As expected, the zero-order correlation is positive, but a slight negative correlation appears when economic development is controlled. Below I will discuss this matter in more detail.

3 SOCIAL SECURITY

The partial correlation of -.13 means that citizens are not happier in nations that provide much social security than in equally rich nations that provide less of it. I observed that same pattern in an earlier study using data on a smaller number of countries in an earlier period (Veenhoven 2000). Similar results were obtained when different measures of social security were used, e.g. welfare rights as measured with entitlements and seniority of the system as measured by the year the first welfare law was adopted.

This counter-intuitive finding has been contested by several colleagues who showed a positive correlation between degree of social security and average happiness, e.g. Pacek & Radcliff (2008). One of the problems with these studies is that they introduced control variables that are not independent of the welfare regime, such as unemployment, which tends to be higher in welfare states. Another problem is that smaller sets of nations were used, in which Scandinavian countries tilt the balance. Cultural differences may distort the view on the effect of the welfare regime, especially in small sets of countries. For instance, the high level
of happiness in Scandinavian countries may be in the egalitarian culture rather than in the welfare regime that resulted from that culture.

This limitation of cross-sectional analysis can be by-passed if we compare within the same nations over time. I did such a comparison in my 2000 paper and found no clear relation between change in welfare spending and change in happiness. The number of cases was limited at that time. Scheme 4 presents an analysis of 36 nations between 1990 and 2005. Many countries went through ‘welfare reform’ during that 15 year period.

Again a pattern of non-correlation appears: Average happiness did decline a bit in some countries that cut back on welfare expenditures (e.g. Finland), but not in all (e.g. Netherlands). Likewise, happiness declined a bit in some of the countries where welfare spending increased (e.g. Mexico), but increased in other cases (e.g. Portugal). Portugal stands out as a case where increase on social expenditures went together with increased life-satisfaction, Yet recently, happiness has dropped in Portugal, where the economy suffered from earlier overspending. Switzerland is in the center of scheme 4 together with several more countries where neither social expenditures nor average life-satisfaction changed much between 1990 and 2005.

Why don’t we see a clear positive effect of social security on happiness? If the data are correct, social security is apparently a mixed blessing. The term ‘social security’ suggests only benefits, yet when one calls the same phenomenon by the name ‘compulsory insurance’, possible negative effects catch the eye. Elsewhere I have discussed these positive and negative effects in detail (Veenhoven (2000, section 6.2), here it suffices to note that these effects tend to balance and that the balance of effects differs across situations. The question is therefore not whether social security adds to happiness, but when it does and how much is optimal in what conditions. Future research along that line should also consider the effect of different welfare mixes.
NOTES

1 Emeritus professor of social conditions for human happiness, Director World Database of Happiness, Erasmus University Rotterdam, Netherlands. E-mail: veenhoven@fsw.eur.nl

2 Apparent livability of nations can also be measured by how long and happy people live, using the index of ‘Happy Life Years’ (Veenhoven 2005). The cross-national differences and societal correlates are largely the same as those reported for average happiness in this paper.

3 An overview of the research literature on happiness in the welfare state is available in the ‘Bibliography of happiness’ (Veenhoven 2011g), section Fs01 ‘Social security.

4 Difference between score 7.97 in 1976 and average of 8.00 over the years 2000-2009 (Veenhoven 2011e)

5 Percent of the differences in average happiness across nations that is explained by these societal characteristics.
### Scheme 1
**Average happiness (0-10) in nations 2000-2009**

<table>
<thead>
<tr>
<th></th>
<th>Top</th>
<th>Middle range</th>
<th>Bottom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&gt;7,8</td>
<td>6-5</td>
<td>&lt;3,6</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>8,5</td>
<td>South Korea</td>
<td>6,0</td>
</tr>
<tr>
<td>Denmark</td>
<td>8,3</td>
<td>South Africa</td>
<td>5,8</td>
</tr>
<tr>
<td>Iceland</td>
<td>8,2</td>
<td>Russia</td>
<td>5,5</td>
</tr>
<tr>
<td>Switzerland</td>
<td>8,0</td>
<td>Ghana</td>
<td>5,2</td>
</tr>
<tr>
<td>Finland, Mexico, Norway</td>
<td>7,9</td>
<td>Pakistan</td>
<td>5,0</td>
</tr>
</tbody>
</table>

Source: Rank report ‘Average happiness in 149 nations 2000-2009’ (Veenhoven 2011c)
Scheme 2
Change in average happiness in nations 1970-2010

<table>
<thead>
<tr>
<th></th>
<th>Up significant increase</th>
<th>Stable no significant change</th>
<th>Down significant decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>+0.63</td>
<td>+0.29</td>
<td>-0.68</td>
</tr>
<tr>
<td>Denmark</td>
<td>+0.55</td>
<td>+0.20</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>+0.55</td>
<td>+0.19</td>
<td></td>
</tr>
<tr>
<td>Luxemburg</td>
<td>+0.41</td>
<td>+0.03</td>
<td></td>
</tr>
<tr>
<td>USA</td>
<td>+0.29</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td>+0.26</td>
<td>-0.30</td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>+0.26</td>
<td>-0.33</td>
<td></td>
</tr>
</tbody>
</table>

Source: Trend report ‘Trends average happiness in nations 1946-2010’ (Veenhoven 2011d)
### Scheme 3
Societal Qualities and average happiness in nations

<table>
<thead>
<tr>
<th>Condition in nation</th>
<th>Correlation with average happiness</th>
<th>Number of nations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Purchasing power p/c</td>
<td>+.65</td>
<td>140</td>
</tr>
<tr>
<td>Institutional quality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Rule of law</td>
<td>+.58</td>
<td>147</td>
</tr>
<tr>
<td>• Quality of government</td>
<td>+.62</td>
<td>146</td>
</tr>
<tr>
<td>• Corruption</td>
<td>-.57</td>
<td>83</td>
</tr>
<tr>
<td>Freedom</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Economic</td>
<td>+.40</td>
<td>143</td>
</tr>
<tr>
<td>• Political</td>
<td>+.50</td>
<td>146</td>
</tr>
<tr>
<td>• Personal</td>
<td>+.46</td>
<td>84</td>
</tr>
<tr>
<td>Equality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Equality of incomes</td>
<td>+10</td>
<td>121</td>
</tr>
<tr>
<td>• Male/female equality</td>
<td>+.55</td>
<td>86</td>
</tr>
<tr>
<td>Security</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Physical safety</td>
<td>-.36*</td>
<td>65</td>
</tr>
<tr>
<td>• Murder rate</td>
<td>+.15</td>
<td>105</td>
</tr>
<tr>
<td>• Social security</td>
<td>+.36</td>
<td>77</td>
</tr>
<tr>
<td>Explained variance</td>
<td>R²=.63</td>
<td></td>
</tr>
</tbody>
</table>

Source: ‘States of nations’ (Veenhoven 2011f)
Scheme 4
Change in social security expenditures by change in average happiness in nations

Source: Data file ‘States of nations’ (Veenhoven 2011f)
### Appendix

Variables in data file ‘States of Nations’ (Veenhoven 2011f), used in cross-national analysis.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measurement</th>
<th>SPSS code</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Happiness</td>
<td>Average response to question on life satisfaction in 10 year period 2000-2009</td>
<td>HappinessLS10.11_2000s</td>
<td>125</td>
</tr>
<tr>
<td>Economic development</td>
<td>Purchasing power per capita</td>
<td>RGDP_2005</td>
<td>166</td>
</tr>
<tr>
<td>Social security</td>
<td>Public expenditures in social security (including health) in % GDP: ILO definition</td>
<td>WelfareExpense1_2005</td>
<td>78</td>
</tr>
<tr>
<td>Change social security</td>
<td>Change in public expenditures on social security in % GDP</td>
<td>WelfareExpense1_Change1990.2005</td>
<td>35</td>
</tr>
<tr>
<td>Physical safety</td>
<td>Lethal accidents per 100,000. Medical registration</td>
<td>AccidentDeath_1994-98</td>
<td>68</td>
</tr>
<tr>
<td>Democracy</td>
<td>Voice and accountability</td>
<td>DemocracyIndex1_2006</td>
<td>175</td>
</tr>
<tr>
<td>Economic freedom:</td>
<td>Heritage Index</td>
<td>FreeEconIndex2_2010</td>
<td>173</td>
</tr>
<tr>
<td>Male/female equality:</td>
<td>Gender Development Index</td>
<td>GenderEqualIndex2_2005</td>
<td>92</td>
</tr>
<tr>
<td>Government effectiveness</td>
<td></td>
<td>GovEffectiveness_2010</td>
<td>175</td>
</tr>
<tr>
<td>Justice</td>
<td>Rule of law</td>
<td>Rule of Law_2006</td>
<td>175</td>
</tr>
<tr>
<td>Corruption</td>
<td></td>
<td>Corruption3_2006</td>
<td>175</td>
</tr>
<tr>
<td>Private freedom:</td>
<td>Index of freedom to 1) travel, 2) religion, 3) marriage, 4) divorce, 5) euthanasia, 6) suicide, 7) homosexuality, 8) prostitution</td>
<td>PrivateFreedom_1990s</td>
<td>86</td>
</tr>
<tr>
<td>Murder</td>
<td>Murder rate, various sources</td>
<td>MunderRate_2004.09</td>
<td>122</td>
</tr>
<tr>
<td>Income equality</td>
<td>Gini coefficient</td>
<td>IncomeInequality1_2005</td>
<td>126</td>
</tr>
</tbody>
</table>
REFERENCES

*Does Economic Growth Improve the Human Lot? Some Empirical Evidence*
in: David, P.A.; Melvin, W.R.; Eds.: "Nations and Households in Economic Growth",
Academic Press, 1974, New York, USA, 89 - 125

Berg, M & Veenhoven, R (2010)
*Income Inequality and Happiness in 119 Nations: In Search for an Optimum that Does not Appear to Exist*

*Assessing the Welfare State: The Politics of Happiness*
Perspectives on Politics, 6, 267 - 277

*Well-being in the welfare state: Level not higher, distribution not more equitable*
Journal of Comparative Policy Analysis: Research and Practice, 2, 91 - 125

*Apparent quality of life: How long and happy people live*
Social Indicators Research, 71: 61-86

Veenhoven, R. (2011)
*World Database of Happiness: Archive of research findings on subjective enjoyment of life*,
Erasmus University Rotterdam, The Netherlands
Available at: http://worlddatabaseofhappiness.eur.nl

Veenhoven, R. (2011a)
*Measures of Happiness*
World Database of happiness, Erasmus University Rotterdam

Veenhoven, R. (2011b)
*Happiness in Nations*
World Database of Happiness, Erasmus University Rotterdam

Veenhoven, R. (2011c)
*Average happiness in 149 nations 2000-2009*
World Database of Happiness, Erasmus University Rotterdam
Veenhoven, R. (2011d) 
*Trend Average Happiness in Nations 1946-2010: How much people like the life they live.*
World Database of Happiness, Erasmus University Rotterdam.
Assessed on 1-9-2011 at: 

Veenhoven, R. (2011e) 
*Happiness in Switzerland*  
World Database of happiness, Erasmus University Rotterdam  
Assessed on 1-9-2011 at: 

Veenhoven, R. (2011f) 
*States of nations: Dataset to be used for the comparative analysis of happiness in nations*  
World Database of Happiness, Erasmus University Rotterdam  

Veenhoven, R. (2011g)  
*Bibliography of Happiness*  
World Database of Happiness, Erasmus university Rotterdam  
Available at: http://worlddatabaseofhappiness.eur.nl/hap_bib/bib_fp.php

Veenhoven, R. & Prop, J. (in preparation)  
*Happiness and social security in nations*

Veenhoven, R. & Vergunst, F (in preparation)  
*Economic growth and happiness in nations: Last post for the Easterlin Paradox*