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IS LIFE REALLY GETTING WORSE? CHANGE OF AVERAGE HAPPINESS IN NATIONS 1946-2021

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ABSTRACT

Question: Is life getting worse as all the bad news in public media suggest?

Approach: We assessed changes in average happiness in nations over the last decade. Happiness was conceptualized as the subjective enjoyment of one's life-as-a-whole, which can be measured using self-reports.

Method: We took stock of responses to questions on happiness in representative surveys of the general population in nations, drawing on findings gathered in the World Database of Happiness. We limited to time series that cover at least 20 years and 10 data-points, which yields 200 time series in 50 nations over the years 1946-2021. For only 1 nation (the USA) we have data on this entire period, most of the time series start in the 1990s or 2000. We focused on change up to and including 2019, that is before the onset of the COVID 19 pandemic in the year 2000.

Results: Average happiness rose significantly in 26 nations and declined in 11 nations: so twice more rise than decline. The average size of rise and decline was similar. No significant change in average happiness took place in 35 nations.

Discussion: These findings go against the widely held belief that life is getting worse contemporary societies. Firsthand knowledge about one's own happiness differs from hearsay about decline of quality of life in the country.

Keywords: Happiness, Social progress, Trend analysis, World Database of Happiness

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1 INTRODUCTION

1.1 The issue

The quality of our life depends to a considerable degree on the living conditions in the nation where we live. Since we typically aim to improve our quality of life, we are willing to know how well our nation is doing in this respect and whether the quality of life in the country is getting better or worse. This is not only worth knowing but involves various consequences. To name a few: the belief that life is getting worse will feed political protest and support restorative policies that bring us out of the frying the frying pan into the fire. In developing nations, the belief will also add to the existing massive out-migration.

Different views

There is difference of opinion on whether life is getting better or worse in contemporary nations. The optimist view on societal development holds that we can build on past achievements in economic development and knowledge as heralded in 'It's getting better all the time' by Moore and Simon (2000). This outlook on societal development roots in Enlightened thought.

The view that life is getting worse is typically fueled by concern about contemporary social problems, such as inequality, drug use and rising divorce rates. The idea that life is getting worse fits a long tradition of social criticism and apocalyptic prophecies.

The negative view prevails in the contemporary public discourse in developed nations. In the public media there is typically more bad news about life in the nation than good news; e.g., rising unemployment is given more attention than steady full employment. In the social sciences there is also more attention to social problems than on what goes well, e.g., more attention to forms of criminality than to the general decline of criminality in advanced societies. This tendency has increased over time, as appears in the four-fold rise of negative terms in sociological abstracts between 1970 and 2000 (Elchardus 2004).

Consequently, there is wide support for the idea that life was better in the 'good old days'. In the USA the majority agrees with the statement "In spite of what some people say, the lot of the average man is getting worse, not better". Support for this idea is growing, the percent affirmative answers rose from about 55% in the 1970s to 70% in the early 1990s. (Hagerty 2003). Likewise, in a recent study in the Netherlands more than half of the population agrees to the statement "For most people, life is getting worse rather than better" VanSteenvoorden (2016, table 3.1).

Confusing facts

There is a longstanding tradition of 'social statistics' in which the development of various aspects of quality of life in nations is followed over the years. Common aspects are income, education, employment, health, and suicide. There is a plethora of quality-of-life indexes, which all present a different mix of qualities of life deemed 'good'. The most commonly used index of quality of life in nations today is the Human Development Index, which sums income, education and life-expectancy (UNDP).

The answer to the question of whether life is getting better or worse, depends

on the measure of quality of life used. In that context, Veenhoven argued that there is little sense putting different qualities of life in one basket. In his view, there is no sense in adding up life-chances such as income and education, without acknowledging their weights and interactions. Likewise, Veenhoven warns against adding *chances* for a good life such as income, to *outcomes* such as life-expectancy. It is the interaction of these qualities that matter, not their sum (Veenhoven 2000, section 4). Still another problem is that quality of life indexes reflects the political agenda of the moment, e.g., sustainability issues were not yet on the list in the 1960s. This impairs the over-time comparability of many quality-of-life indexes.

1.2 Focus on average happiness

For these reasons, we focus on average happiness in nations. where happiness is defined as the overall appreciation of one's life as-a-whole, which conceptualization is delineated in more detail in section 2.1.

Changes to the good and the bad happen in nations, e.g., increase of crime and decrease of smoking. Changes in average happiness reflect the *balance of all changes* that took place in a nation and also captures the changes that did not reach social statistics, some of which we are not aware anyway.

1.3 Research questions

In this paper we follow that line and address the following questions:

1. Has average happiness in nations changed over time?
If so,
2. Was there more decline than rise?
3. What was the size of these changes/

1.4 Structure of this paper

Below we will first delineate the concept of happiness in more detail and identify valid measures of that concept in section 2. We describe the source of the on happiness in nations we use; the World Database of Happiness, in section 3. We next explain how we select and present the observed time-series on happiness in nations in section 4. On that basis, we answer our research questions one by one in section 5. We discuss these results in section 6 and conclude in section 7.

2 HAPPINESS:

2.1 Concept

We define happiness as the *subjective enjoyment of one's life-as-a-whole*, in other words, how much one likes the life one leads. A synonym is *life-satisfaction*. This notion is explained in more detail in [Veenhoven \(2022a\)](#).

Components of happiness

Within this notion of overall happiness we distinguish two components of happiness, the *affective component*, how well one feels most of the time, and a cognitive component, to what extent one perceives to acquire from life what one wants. Research has shown that the affective component dominates in the overall evaluation of life (Kainulainen et al 2018).

2.2 Measurement

Since happiness is defined as something on our mind, it can be measured using questioning. A great variety of questions has been used, direct and indirect questions, single and multiple questions and question on happiness in the past, present and future. In this chapter we limit to *single direct questions on current happiness*.

Selection of valid questions on happiness

Not all questions ever used fit the above definition of happiness equally well. The questions used in this study have passed a check for face validity, which involved close reading of the text. Detail about this selection is found in [Veenhoven 2022b](#)

Some valid survey questions on happiness

Two examples of questions on overall happiness are:

- *Taking all things together, how satisfied or dissatisfied are you with your life as-a-whole these days? Please indicate in a number between 1 and 10, where 1 means very satisfied and 10 for very satisfied*
- *How happy would you say you are, very happy, pretty happy or not too happy?*

An example of a question on the affective component of happiness is:

- With which of the following statements can you identify best?
 - I have not been cheerful for a long time,
 - I am rarely cheerful
 - I am cheerful sometimes
 - I am cheerful not every day, but frequently
 - I am cheerful almost every day

A much-used question on the cognitive component of happiness reads¹:

- *Here is a picture of a ladder with steps numbered from 0 at the bottom to 10 at the top. Suppose that we say that the top of the ladder represents the best possible life for you and the bottom represents the worst possible life for you. On which step of the ladder would you personally feel to stand at the present time?*

Classification of equivalent questions on happiness

As illustrated in the above examples, questions differ several ways, next to variation in conceptual focus, there is technical difference such as in lead phrase, time frame, number and wording of response options.

Ideally, comparison restricts to *identical* questions, which involves severe restriction to the number of cases. Therefore, we do with near-identical *equivalent* questions. Single survey questions are sorted by a combination of lead item, kind of response scale (verbal or numerical) and number of response options. Sorting and the resulting classification are reported in [Veenhoven 2022c](#).

Transformation of responses to a common 0-10 numerical scale

Comparison across equivalent questions further required that the observed degree of happiness is quantified on the same scale. This is done using techniques described in

¹ This question is known as the ‘Cantril ladder’ and is seen to measure ‘life-evaluation’ while the above first example of a question on overall happiness is seen to tap ‘life-satisfaction’.

[Kalmijn \(2015\)](#).

3 DATA SOURCE

For this paper we draw on the [World Database of Happiness](#) (Veenhoven 2022). This is an online finding archive that consists of some 30.000 ‘electronic ‘findings pages on which empirical research findings are described in standard format and terminology. Each page has a unique internet address. The structure of this finding archive is presented visual in [Figure 1](#) and an example of a finding page is given on [Figure 2](#). The technique is described in more detail in [Veenhoven et al. 2022](#).

In this finding archive one can search for distributional findings on happiness in a nation in a year using a particular question. For this chapter we can draw on pre-selections of distributional findings in the general population of nations, brought together in ‘reports’. We use the Report on Average Happiness in Nations, which sorts all such findings first by type of happiness question used and further by nation and within nation by year ([Veenhoven 2022d](#)) To date that report covers 13.126 findings, taken from various surveys such as the Eurobarometer, the European Social survey, the Latino Barometro and the World Values Survey. Links in that lengthy list bring the user to full detail on electronic finding pages.

Analysis of these data is facilitated by entering them in a spreadsheet, the file ‘TrendsInNations’. The latest version of that data-set is available in Excel and can be downloaded from https://worlddatabaseofhappiness.eur.nl/wp-content/uploads/TrendsInNations_2022a.xlsx ([Veenhoven 2022e](#)) The file can be uploaded in statistical programs such as R and SPSS.

4 DATA USED

Using the datafile [Trends In Nations](#) version 2022, we restricted to time series that cover at least 20 years and involve at least 10 data-points. This is to keep the eye on long-term change to the better or worse and reduce the influence of incidental ups and downs. Time-series of the Gallup World Poll were not included since these narrowly failed to meet the 20-year criterion. This left us with 80 timeseries in 50 nations over ranges of 71 to 20 years in the period 1945-2021.

4.1 Sorting by decade

The longer the time series, the less cases we have; only one nation in the longest series since 1945 (USA) and 44 nations for the shortest time series since 2000. To allow for analysis of change in happiness over longer and shorter periods, we sorted the findings by decade; since the 1950s, since the 1960s ... until since 2000. With a few exceptions, these series go up to and including the year 2019.

4.2 Separate presentation of 2020-2021 COVID years

For a limited number of nations, we also have findings on average happiness in the years 2020-2021 in which the COVID pandemic developed. This incidental disaster has lowered average happiness in all nations and with recovery data not yet available

it would distort the view on the general trend. Since 2020-2021 data are available only for a few nations, comparison across nations would also be marred if we took all the available years together.

4.3 Presentation using links to online finding archive

We apply a new technique that may strike the reader as unusual. Detail about the time-series is provided behind links to an online-finding archive, the World Database of Happiness. This allows us to summarize the abundant findings in two tables and allot the reader more opportunity to check the data than references in the usual review papers can do. This technical innovation is described in Veenhoven et.al 2022

5 ANALYSES

Trends can be analysed in various ways, applicability depending on the research questions at hand. For our research questions we did with two with two easily to interpretable methods.

5.1 First-last comparison

We started with a comparison between the first and last observation in each time series and assessed whether and to what extent the difference denoted a decline (-) or gain (+) in happiness. An evident limitation of this method is that it takes only a fraction of the information into account and misses possible changes of average happiness to the better or worse that happened in between. The method is also vulnerable outliers in the first and last year. We report this analysis in [Table 1](#).

5.2 Linear regression

Using all available data-points, we next estimated the best fitting regression line, applying ordinary least square analysis. This analysis is visualized on [Figure 3](#). The resulting unstandardized regression coefficient denotes the angle of deviation from the horizontal line of no change.

In this analysis we also considered the statistical significance of observed rise or decline in happiness, which will depend on both the number of observations and the size of deviations from the average trend. We do that using confidence intervals on which the reader can see whether or not the difference falls with an 95% interval above or below zero, but also how big that interval is. We report this analysis on [Table 2](#).

5 RESULTS

We can now answer the research questions raised in section 1.3

5.1 Has average happiness in nations changed over time?

On [Table 1](#) we report the presence of a difference between the first and last observed average and found a difference in all nations, be it mostly small differences. On [Table 2](#) we considered all the data points and report the coefficient of linear change trough these points. Like in table 1 we observed mostly small changes over time, but in this

case, we could assess statistical significance. Of the 200 trends up to 2019, 81 were significant at the 5% level, while 119 were not. So, there was less change than stability in happiness over the years and countries considered here. Still the 40% cases of change are not to be neglected. Inclusion of the years 2020-2021 raises the percent change to 47%.

5.2 Was there more rise than decline?

At the bottom of [Table 1](#) we see that there were 50 cases of rise and 30 cases of decline of average happiness in nations over the years. The average size of the rise was +.65 points and the average size of decline -.58. So clearly more rise than decline. At the bottom of [Table 2](#), we see that average happiness changed significantly only in 37 nations, of which 26 changed to greater happiness and 11 to less, the average size of the chances being similar. So again, more rise than decline.

5.3 What was the size of these changes?

At the bottom of [Table 1](#) we see that the average size of the rise was 0.65 points and the average size of decline 0,58 points on scale 0-10. So, a bit greater rise than decline. At the bottom of [Table 2](#) we see equal sizes of rise and decline (0.028). Again, no indication that life had got worse.

6 DISCUSSION

The data do not support the contention that life is getting worse in contemporary society. That was at least not the case during the last decade. Though average happiness declined significantly in 11 nations, it rose significantly in 26 nations, while average happiness did not change in 119 nations. This begs the question of why there is still so much adherence to the belief that life is getting worse. The easy answer to that question is that few people know about empirical happiness research and are unaware of the fact that declines of average happiness in nations were exceptions rather than the rule. A less easy answerable question is why nobody told them, which leads us to the further question of why bad news prevails in the public discourse.

6.1 Why bad news prevails

It is widely acknowledged that good news is typically no news, especially where political issues are concerned, e.g., by O'Connell & Mills (2003) and Soroka (2006). Veenhoven (2021) mentioned the following reasons for this phenomenon.

Psychological mechanisms

We tend to give more attention to bad news, probably as a result of evolution. Media follow that demand. Another psychological mechanism is that we worry more about the unknown future than about the past, of which we know that we survived it. Particular to the happiest nations, greater happiness is hardly possible for most citizens, which feeds a fear for falling happiness wise. Expectation about future happiness tend to be more optimistic in the least happy countries, since it can hardly get worse.

Sociological forces

There are many parties that have an interest in bringing social problems to the political agenda, such as interest groups, politicians and even social scientists. These parties typically employ professional communication managers who continuously pump messages into the public discourse about things that go wrong in society. Few parties have an interest in saying that we are doing well. This creates a negative information bias, which is strengthened by competition for attention.

Good or bad?

Veenhoven notes that this over-attention to the bad has beneficial consequences; many problems reach the political agenda and are addressed, which typically leads to improvement of living conditions and subsequently to a raise of happiness. This creates the paradoxical situation of happy citizens thinking that the societal ground of their happiness is in decay.

Yet there are also adverse effects of this unrealistic belief. It fosters conservative pressures for restoration of traditional structures, which will bring people from the frying pan into the fire, since life is typically less satisfying in non-modern societies (Veenhoven & Berg 2013). In developing nations, the belief adds to the ongoing mass migration to more developed nations, where the influx of migrants fuels the idea that life is getting worse.

6.2 How people deal with the misinformation

We have first-hand information of our own happiness but only second-hand information about the happiness of the average compatriot. If we know that we are happy while the media make us believe that life is typically bad, we must logically conclude that we are an exception. That is what happens; most people think that they are doing well personally but that society is in decline (Schnabel 2018). A similar pattern of personal optimism together with social pessimism was observed in the EU by Roser & Nagdy (2014). Another consequence is that most people tend to think they are happier than the average citizen in the country (Headey & Wearing 1988).

7 CONCLUSIONS

The widely held belief that life is getting worse is wrong. Average happiness declined only in 11 nations, while it increased in 26 nations over the last decade. Average happiness remained fairly stable in 35.

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Figure 1
Structure of the World database of happiness

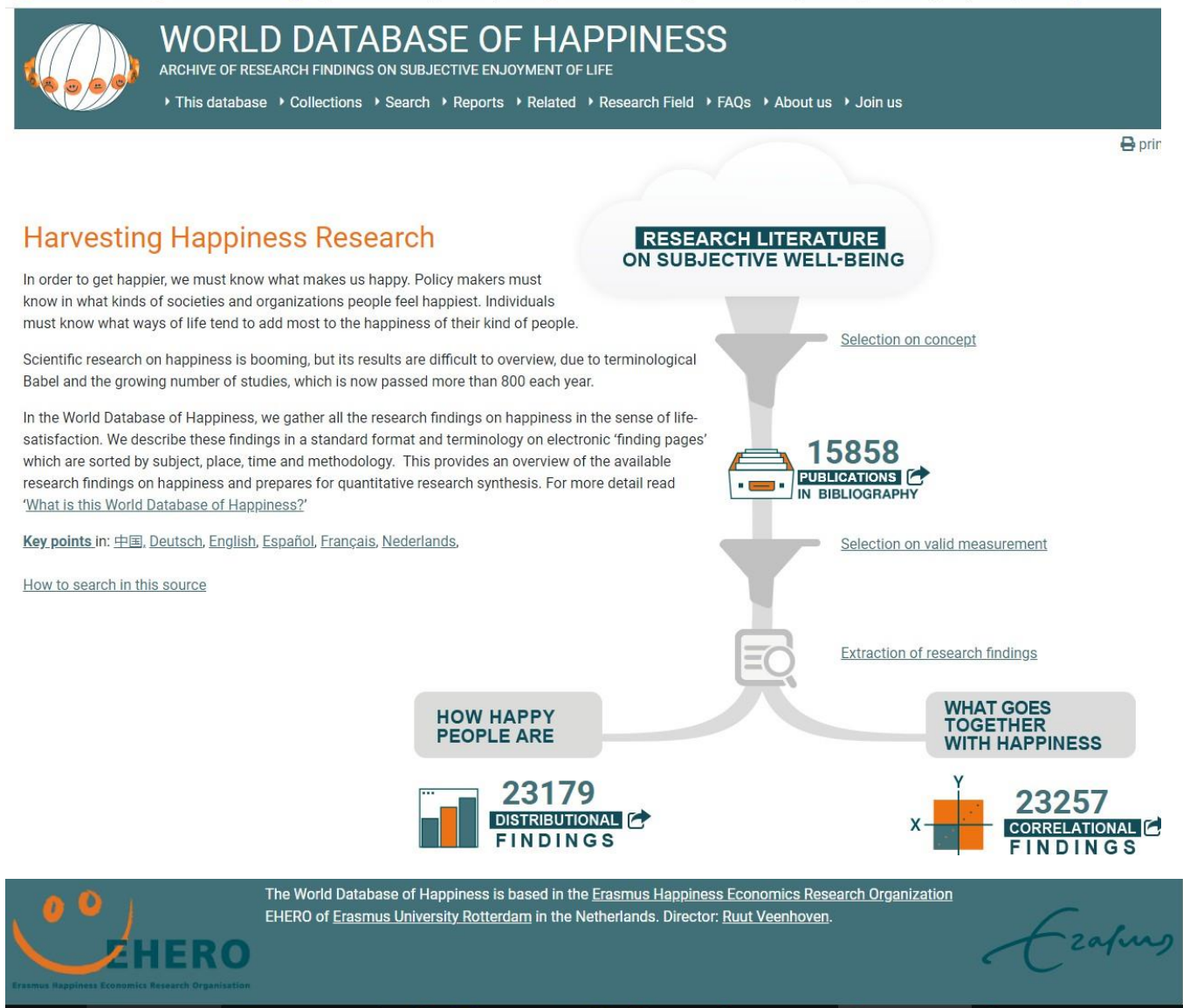


Figure 2

Example of a finding page in the World Database of Happiness



WORLD DATABASE OF HAPPINESS

ARCHIVE OF RESEARCH FINDINGS ON SUBJECTIVE ENJOYMENT OF LIFE

[This database](#) ▶ [Collections](#) ▶ [Search](#) ▶ [Reports](#) ▶ [Related](#) ▶ [Research Field](#) ▶ [FAQs](#) ▶ [About us](#) ▶ [Join us](#)

Study [ABS - Australian Bureau of Statistics \(2021\): study AU 2020](#)  print

Public:	15+ Aged, Australia, 2020	
Survey name:	AU-GSS 2020	
Sample:	Probability multi-stage random	
Respondents:	N = 5303	
Non Response:	39,5%	
Assessment:	Multiple assesment methods CATI or CAPI. No face-to-face because of COVID restrictions	

Happiness measure(s)

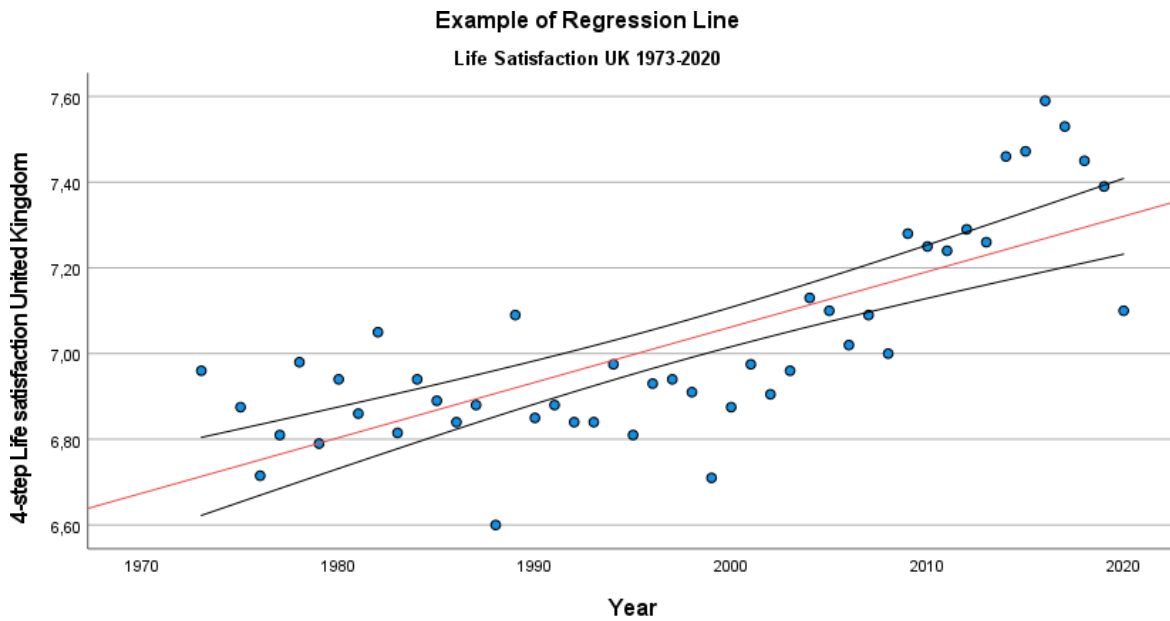
Full text:	Self report on single question	
	How satisfied are you with your life as a whole?	
	10 completely satisfied	
	9	
	8	
	7	
	6	
	5	
	4	
	3	
	2	
	1	
	0 not at all satisfied	
Classification:	Q-SLW-u-sq-n-11-k	
Author's label:	life-satisfaction	
Observed distribution		
Summary Statistics	On original range 0 - 10	On range 0-10
Mean:	7.20	7.20
SD:	0,60	0,60



The World Database of Happiness is based in the [Erasmus Happiness Economics Research Organization](#) EHERO of [Erasmus University Rotterdam](#) in the Netherlands. Director: [Ruut Veenhoven](#).



Figure 3
Example of a trend analysis using ordinary least squares regression



The red line (middle) shows the regression of life satisfaction in the UK from 1973-2020 (transformed in 10-step) while the black colored lines denote the confidence interval of 95%. The slope of the regression line is positive indicating an increase of life satisfaction (y- axis) per year (x- axis).

Table 1
Change average happiness expressed in points on scale 0-10.
 Difference between first and last assessment

<i>Rise</i>				<i>Decline</i>			
Nation	Measure	Period	Change	Nation	Measure	Period	Change
Argentina	ls4	1997-2018	+0,10	Belgium	ls4	1973-2019	-0,59
Austria	ls4	1995-2019	+0,05		ls11	1975-2018	-0,28
Brazil	ls11	1960-2019	+1,89	Bolivia	ls4	1997-2018	-0,18
Canada	bw11	1975-2019	+0,11	Canada	ls10	1982-2020	-0,98
China	bw11	1999-2019	+1,03	Chile	ls4	1997-2018	-1,08
Colombia	ls4	1997-2018	+0,36	Costa Rica	ls4	1990-2018	-1,34
Croatia	ls10+11	1995-2018	+0,54	El Salvador	ls4	1991-2018	-1,55
Denmark	ls4	1973-2019	+0,70	Egypt	bw11	1960-2019	-1,20
	ls11	1975-2018	+0,24	Greece	ls4	1981-2019	-0,42
Ecuador	ls4	1997-2018	+0,33	Ireland	ls4	1973-2019	-0,40
Finland	ls4	1990-2019	+0,59		ls11	1975-2018	-0,07
France	ls4	1973-2019	+0,30	Luxembourg	hl3	1975-2008	-0,07
	hl3	1946-1986	+2,05		ls10+11	1975-2018	-0,07
	ls11	1975-2018	+0,65	Mexico	ls4	1997-2018	-0,20
Germany	ls11	1990-2018	+0,35	Nicaragua	ls4	1991-2018	-0,94
	ls4	1990-2019	+0,46	Nigeria	bw11	1963-2019	-0,43
Honduras	ls4	1997-2018	+0,62	Netherlands	ls5	1974-2012	-1,02
Hungary	ls11	1992-2018	+0,37	Paraguay	ls4	1996-2018	-2,02
India	bw11	1962-2019	+0,48	South Africa	ls5	1983-2015	-0,02
Italy	ls4	1973-2019	+0,20		ls10+11	1981-2013	-0,13
	hl3	1965-1986	+0,24	Sweden	ls11	1999-2018	-0,01
	bw11	1975-2019	+0,86		ls10	1982-2017	-0,41
	ls11	1975-2018	+0,77	United	hl3	1965-1986	-1,1

Japan	ls10+11	1958-2013	+0,35	Kingdom	ls11	1971-2018	-0,49
	ls4	1958-2013	+0,41	USA	hl3	1946-2010	-0,24
	ls5	1978-2005	+0,80		hl4	1946-2017	-0,07
	bw11	1962-2019	+0,71		ls10+11	1959-2017	-0,68
Korea (South)	bw11	1981-2019	+1,64		bw11	1955-2019	-0,12
Luxembourg	ls4	1973-2019	+0,09	Uruguay	ls4	1997-2018	-0,47
Mexico	bw11	1975-2019	+0,22	Venezuela	ls4	1997-2018	-0,89
Netherlands	ls4	1973-2019	+0,60				
	ls10	1981-2019	+0,27				
	ls11	1974-2018	+0,26				
Norway	ls10+11	1981-2018	+0,19				
	hl4	1981-2018	+0,32				
Panama	ls4	1997-2018	+0,56				
	bw11	1962-2019	+1,27				
Peru	ls4	1997-2018	+1,15				
Philippines	bw11	1959-2019	+1,37				
Poland	bw11	1962-2019	+1,81				
Portugal	ls4	1985-2019	+0,79				
Romania	ls4	1998-2019	+0,97				
	ls10+11	1990-2018	+1,81				
Russia	ls10+11	1990-2017	+1,13				
South Africa	hl5	1983-2015	+0,16				
Spain	ls4	1985-2019	+0,62				
	ls10+11	1981-2018	+1,08				
Sweden	ls4	1995-2019	+0,21				
Switzerland	ls11	1976-2018	+0,03				
United Kingdom	ls4	1973-2019	+0,46				
Number rise			50	Number decline			30
Average rise			+0,652	Average decline			-0,582

Technical details

1. The years 2020 and 2021 are left out in this comparison because of the COVID-19 pandemic, which lowered average happiness substantially in most nations (up to one point). Since score for these years are not available for all countries, comparison would flaw
2. Measure codes refer to a equivalent of survey questions on happiness:
 - [Best-Worst possible life](#)
 - Bw11 question on how one rated one's current life on a numerical scale ranging from best possible to worst possible
 - [Happiness](#)
 - hl4 question on happiness answer rated on 4-step verbal response scale
 - hl5 question on happiness answer rated on 5-step verbal response scale
 - hl3 question on happiness answer rated on 3-step verbal response scale
 - [Life-satisfaction](#)
 - ls4 question on life-satisfaction answer rated on 4-step verbal response scale
 - ls5 question on life-satisfaction answer rated on 5-step verbal response scale
 - ls10 question on life-satisfaction answer rated on 10-step numeral response scale
 - ls11 question on life-satisfaction answer rated on 11-step numeral response scale
 - ls10+11 question on life-satisfaction answer rated on 10 and 11-step numeral response scale
3. Scores on questions using verbal response options on range 5 or less were transformed to numerical scales on range 0-10 using linear transformation. This procedure is explained in [chapter 6](#) of the introductory text to the collection of happiness measures section 6.1.1.
4. Within series of responses to *equivalent* questions not all questions are fully *identical*, variations in wording being indicated with a, b, c ... at the end of the measure code. See [chapter 5](#) of the introductory text to the collection of happiness measures, scheme 5. When assessing the difference between the first and last score of questions using verbal response scales, we limited to identical questions, since differences in wording can bias the trend. In the case of responses to 10 and 11-step numerical rating scales we accepted equivalent questions, assuming that respondents will have focused on scale numbers, rather than on the verbal labels of scale extremes.
5. Data were rounded up to three decimal places.

Table 2

Change average happiness expressed in average annual increase/decline 1946-2021
Change expressed in linear regression coefficients

Nation	Measure	Years	Trend average happiness			
			Up to 2019		Including COVID years 2020-2021	
			<i>Trend over time</i>	<i>95% confidence interval</i>	<i>Trend over time</i>	<i>95% confidence interval</i>
Since 1940s						
France	hl3	1946-1986	+0,046	+0,028 - +0,065		
USA	hl3	1946-2010	+0,002	-0,002 - +0,006		
USA	hl4	1946-2017	+0,001	-0,004 - +0,006		
<i>N rise</i>			<i>1</i>			
<i>N decline</i>			<i>0</i>			
<i>N no change</i>			<i>2</i>			
Since 1950s						
Japan	ls4	1958-2013	+0,004	0,000 - +0,008		
Philippines	bw11	1959-2020	+0,014	-0,004 - +0,031	+0,013	-0,004 - +0,029
USA	hl3	1952-2010	+0,001	-0,003 - +0,006		
USA	hl4	1952-2017	-0,001	0,008 - +0,006		
USA	ls10+11	1959-2017	-0,011	-0,021 - -0,001		
USA	bw11	1955-2021	+0,013	+0,009 - +0,017	+0,012	+0,009 - +0,016
<i>N rise</i>			<i>1</i>		<i>1</i>	
<i>N decline</i>			<i>1</i>		<i>0</i>	
<i>N no change</i>			<i>4</i>		<i>1</i>	
Since 1960s						
Brazil	bw11	1960-2020	+0,028	+0,014 - +0,042	+0,026	+0,011 - +0,04
Egypt	bw11	1960-2020	-0,029	-0,055 - -0,004	-0,029	-0,053 - - 0,005

India	bw11	1962-2020	+0,009	-0,015 - +0,033	+0,008	-0,015 - +0,030
Italy	hl3	1965-1986	+0,020	-0,003 - +0,042		
Japan	bw11	1962-2020	+0,010	+0,002 - +0,018	+0,010	+0,002 - +0,018
Japan	ls4	1961-2013	+0,001	-0,002 - +0,003		
Nigeria	bw11	1963-2020	+0,002	-0,015 - +0,019	+0,004	-0,012 - +0,02
Panama	bw11	1962-2019	+0,029	+0,008 - +0,051		
Poland	bw11	1962-2020	+0,033	+0,025 - +0,041	+0,033	+0,025 - +0,041
UK	hl3	1965-1986	-0,031	-0,071 - +0,009		
USA	hl3	1963-2010	+0,005	0,000 - +0,010		
	bw11	1964-2021	+0,015	+0,011 - +0,019	+0,014	+0,010 - +0,019
<i>N rise</i>			5		4	
<i>N decline</i>			1		1	
<i>N no change</i>			6		2	
Since 1970						
Belgium	ls4	1973-2021	-0,003	-0,010 - +0,004	-0,003	-0,009 - +0,004
	ls11	1975-2018	-0,004	-0,014 - +0,006		
Brazil	bw11	1975-2020	+0,009	-0,009 - +0,027	+0,006	-0,013 - +0,024
Canada	bw11	1975-2020	+0,006	-0,004 - +0,017	+0,004	-0,006 - +0,015
Denmark	ls4	1973-2021	+0,013	+0,010 - +0,016	+0,013	+0,010 - +0,016
	ls11	1975-2018	+0,011	-0,002 - +0,025		
Finland	ls11	1976-2018	+0,011	+0,007 - +0,015		
France	ls4	1973-2021	+0,017	+0,013 - +0,020	+0,017	+0,013 - +0,020
	ls11	1975-2018	+0,014	-0,005 - +0,034		
	bw11	1975-2020	+0,015	+0,002 - +0,029	+0,015	+0,002 - +0,028

India	bw11	1975-2020	-0,001	-0,037 - +0,036	-0,037	-0,037 - +0,032
Ireland	ls4	1973-2021	+0,007	+0,001 - +0,014	+0,006	0,0 - +0,012
	ls11	1975-2018	-0,012	-0,036 - +0,012		
Italy	ls11	1975-2018	+0,013	+0,001 - +0,025		
	ls4	1973-2021	+0,003	-0,004 - +0,010	+0,002	-0,004 - +0,009
	bw11	1975-2020	+0,008	-0,011 - +0,027	+0,009	-0,009 - +0,027
Japan	bw11	1975-2020	+0,001	-0,010 - +0,012	+0,002	-0,008 - +0,012
	ls4	1970-2013	+0,012	0,000 - +0,024		
	ls5	1978-2005	-0,002	-0,013 - +0,026		
	ls10+11	1975-2019	+0,012	0,000 - +0,024		
Luxembourg	ls4	1973-2021	+0,007	+0,003 - +0,01	+0,004	0,000 - +0,008
	hl3	1975-2008	-0,001	-0,018 - +0,016		
	ls10+11	1975-2018	+0,003	-0,006 - +0,011		
Mexico	bw11	1975-2020	+0,008	-0,011 - +0,027	-0,002	-0,031 - +0,026
Netherlands	ls4	1973-2021	+0,010	+0,007 - +0,014	+0,010	+0,007 - +0,013
	ls5	1974-2012	0,0	-0,010 - +0,010		
	ls11	1974-2018	+0,004	-0,004 - +0,012		
	hl5	1977-2019	-0,010	-0,015 - -0,004		
Switzerland	ls11	1976-2018	+0,001	-0,006 - +0,007		
UK	ls11	1971-2018	-0,006	-0,012 - 0,000		
	ls4	1973-2020	+0,014	+0,01 - +0,017	+0,013	+0,01 - +0,016
USA	hl3	1970-2010	+0,007	+0,001 - +0,013		
	hl4	1974-2017	+0,003	-0,010 - +0,016		
	ls10+11	1974-2017	-0,013	-0,025 - 0,000		
	bw11	1971-2021	+0,017	+0,013 - +0,021	+0,016	+0,013 - +0,020
<i>N significant rise</i>			<i>11</i>		<i>6</i>	

<i>N significant decline</i>			<i>1</i>		<i>0</i>	
<i>N significant no change</i>			<i>23</i>		<i>10</i>	
Since 1980s						
Belgium	ls4	1980-2021	+0,008	+0,001 - +0,015	+0,007	0,0 - +0,014
	ls11	1981-2018	-0,001	-0,013 - +0,012		
Denmark	ls4	1980-2021	+0,014	+0,011 - +0,017	+0,011	+0,008 - +0,015
	ls11	1983-2018	+0,022	+0,004 - +0,040		
France	ls4	1980-2021	+0,019	+0,015 - +0,024	+0,019	+0,015 - +0,023
	ls11	1983-2018	+0,033	+0,013 - +0,052		
Canada	ls10	1982-2020	+0,003	-0,018 +0,023	-0,015	-0,041 - +0,012
Greece	ls4	1981-2021	-0,032	-0,044 - -0,020	-0,026	-0,038 - -0,014
Ireland	ls4	1980-2021	+0,015	+0,008 - +0,022	+0,012	+0,006 - +0,019
	ls11	1980-2018	+0,003	-0,030 - +0,036		
Italy	ls11	1983-2018	+0,009	-0,013 - +0,030		
	ls4	1980-2021	-0,006	-0,014 - +0,001	-0,006	-0,013 - 0,0
Japan	ls4	1980-2013	-0,003	-0,008 - +0,003		
	ls5	1981-2005	-0,006	-0,046 - +0,034		
	ls10+11	1981-2019	+0,029	-0,005 - +0,028		
Korea (South)	bw11	1981-2020	+0,046	+0,015 - +0,076	-0,015	-0,41 - +0,012
Luxembourg	ls4	1980-2021	+0,003	-0,001 - +0,007	0,0	-0,005 - +0,004
	hl3	1982-2008	-0,013	-0,035 +0,009		
	ls10+11	1983-2018	+0,008	-0,004 - +0,019		
Netherlands	ls10	1981-2019	+0,002	-0,006 - +0,011	+0,043	+0,014 - +0,072
	ls4	1980-2021	+0,011	+0,007 - +0,016	+0,011	+0,007 - +0,014

	ls5	1980-2012	-0,005	-0,018 +0,008		
	ls11	1983-2018	+0,004	-0,010 - +0,017		
	hl5	1980-2019	-0,005	-0,018 +0,008		
Norway	ls10+11	1981-2018	+0,008	-0,003 - +0,019	+0,002	-0,006 - +0,011
	hl4	1981-2018	0,0	-0,020 - +0,021		
Portugal	ls4	1985-2021	-0,016	-0,030 - -0,001	-0,015	-0,029 - -0,001
South Africa	hl5	1983-2015	-0,006	-0,039 - +0,026		
	ls5	1983-2015	-0,015	-0,048 - +0,018		
	ls10+11	1981-2013	+0,009	-0,026 - +0,043		
Spain	ls4	1985-2021	+0,002	-0,008 - +0,012	+0,005	-0,004 - +0,014
	ls10+11	1981-2018	+0,024	+0,007 - +0,041		
Sweden	ls10	1982-2017	+0,001	-0,010 - +0,012		
UK	ls11	1983-2018	+0,010	+0,003 - +0,016		
	ls4	1980-2020	+0,016	+0,012 - +0,021	+0,015	+0,011 - +0,019
USA	ls10+11	1981-2017	-0,018	-0,037 - +0,001		
	bw11	1980-2021	+0,018	+0,011 - +0,025	+0,016	+0,010 - +0,023
	hl3	1980-2010	+0,007	-0,003 - +0,018		
	hl4	1981-2017	-0,004	-0,019 - +0,011		
<i>N significant rise</i>			<i>12</i>		<i>7</i>	
<i>N significant decline</i>			<i>2</i>		<i>2</i>	
<i>N no significant change</i>			<i>25</i>		<i>7</i>	
Since 1990s						
Argentina	ls4	1997-2020	+0,018	0.0 - +0,037	+0,012	-0,006 - +0,030
Austria	ls4	1995-2021	+0,005	-0,010 - +0,021	+0,005	-0,008 - +0,019
Belgium	ls4	1990-2021	+0,008	-0,002 - +0,018	+0,007	-0,003 - +0,017

	ls11	1990-2018	-0,013	-0,028 - +0,001		
Bolivia	ls4	1997-2020	-0,014	-0,055 - +0,028	-0,010	-0,046 +0,027
Brazil	ls4	1997-2020	-0,047	-0,116 - +0,023	-0,043	-0,104 - +0,018
Canada	ls10	1990-2020	+0,004	-0,032 - +0,039	-0,026	-0,064 - +0,012
Chile	ls4	1997-2020	-0,031	-0,059 - -0,003	-0,031	-0,056 - -0,006
China	bw11	1999-2020	+0,034	+0,002 - +0,066	+0,040	+0,010 - +0,070
Colombia	ls4	1997-2020	+0,024	-0,004 - +0,051	+0,022	-0,002 - +0,046
Costa Rica	ls4	1990-2020	-0,020	-0,051 - +0,011	-0,018	-0,046 +0,010
Croatia	ls10+11	1995-2018	+0,027	-0,009 - +0,063		
Denmark	ls4	1990-2021	+0,011	+0,008 - +0,014	+0,007	+0,002 - +0,013
Ecuador	ls4	1997-2020	+0,018	-0,023 - +0,06	+0,022	-0,002 - +0,046
El Salvador	ls4	1991-2020	-0,042	-0,073 - -0,011	-0,030	-0,061 - +0,001
Finland	ls4	1990-2021	+0,016	+0,009 - +0,023	+0,021	-0,015 - +0,057
France	ls4	1990-2021	+0,024	+0,018 - +0,030	+0,023	+0,017 - +0,028
Germany	ls4	1990-2021	+0,027	+0,016 - +0,039	+0,011	+0,003 - +0,019
	ls11	1990-2018	+0,006	-0,014 - +0,026	+0,029	+0,019 - +0,039
Greece	ls4	1990-2021	-0,038	-0,057 - -0,019	-0,028	-0,047 - -0,009
Honduras	ls4	1997-2020	-0,005	-0,045 - +0,036	-0,002	-0,037 - +0,034
Hungary	ls11	1992-2018	+0,012	-0,005 - +0,028	-0,002	-0,037 - +0,034
Ireland	ls4	1990-2021	+0,009	-0,001 - +0,019	+0,005	-0,004 - +0,015
	ls11	1990-2018	+0,001	-0,067 +0,070		
Italy	ls11	1991-2018	-0,012	-0,032 - +0,008		

	ls4	1990-2021	-0,026	-0,035 - -0,018	-0,024	-0,032 - -0,016
Japan	ls10+11	1990-2019	+0,014	-0,012 - +0,039		
	ls4	1990-2013	-0,011	-0,025 - +0,003		
Luxembourg	ls4	1990-2021	-0,001	-0,008 - +0,005	-0,006	-0,013 - +0,001
Mexico	ls4	1997-2020	-0,003	-0,032 - +0,025	0,000	-0,025 - +0,026
Netherlands	ls4	1990-2021	+0,013	+0,007 - +0,020	+0,012	+0,006 - +0,017
	ls5	1990-2012	-0,023	-0,043 - -0,003		
	ls11	1991-2018	-0,008	-0,024 - +0,008		
	hl5	1990-2019	-0,016	-0,023 - -0,008		
	ls10	1990-2019	+0,001	-0,011 - +0,014		
Nicaragua	ls4	1991-2020	-0,011	-0,038 - +0,016	-0,005	-0,030 - +0,020
Norway	ls10+11	1990-2018	+0,008	-0,008 - +0,024		
	hl4	1990-2018	+0,021	-0,010 - +0,052		
Panama	ls4	1997-2020	+0,046	+0,007 - +0,086	+0,040	+0,004 - +0,075
Paraguay	ls4	1996-2020	-0,056	-0,093 - -0,019	-0,049	-0,083 - -0,015
Peru	ls4	1997-2020	+0,056	+0,024 - +0,088	+0,040	+0,004 - +0,075
Poland	hl4	1990-2017	+0,032	-0,004 - +0,068		
	bw11	1991-2020	+0,041	+0,028 - +0,053	+0,040	+0,029 - +0,052
	ls10+11	1990-2018	+0,055	+0,033 - +0,077		
Portugal	ls4	1990-2021	-0,020	-0,038 - -0,001	-0,018	-0,036 - +0,001
Romania	hl4	1990-2018	+0,042	-0,004 - +0,089		
	ls4	1998-2021	+0,065	+0,04 - +0,089	+0,059	+0,031 - +0,087
	ls10+11	1990-2018	+0,096	+0,045 - +0,148		
Russia	ls10+11	1990-2017	+0,050	+0,013 - +0,086		
South	hl5	1994-2015	0,0	-0,049 - +0,050		

Africa	ls5	1994-2015	-0,012	-0,064 - +0,041		
	ls10+11	1990-2013	+0,023	-0,028 - +0,074		
Spain	ls4	1990-2021	+0,002	-0,011 - +0,015		
	ls10+11	1990-2018	+0,021	-0,003 - +0,045		
Sweden	ls11	1999-2018	+0,001	-0,010 - +0,012		
	ls4	1995-2021	+0,017	+0,011 - +0,024	+0,012	+0,004 - +0,019
UK	ls4	1990-2020	+0,025	+0,021 - +0,030	+0,023	+0,018 - +0,028
	ls4	1990-2020	+0,025	+0,021 - +0,030	+0,023	+0,018 - +0,028
USA	hl3	1990-2010	-0,007	-0,016 - +0,030		
	hl4	1990-2017	-0,007	-0,026 - +0,013		
	ls10+11	1990-2017	-0,016	-0,049 - +0,018		
	bw11	1998-2021	+0,003	-0,012 - +0,018	+0,002	-0,011 - +0,014
Uruguay	ls4	1997-2020	+0,001	-0,031 - +0,034	+0,008	-0,021 - +0,038
Venezuela	ls4	1997-2020	-0,075	-0,120 - -0,029	-0,074	-0,113 - -0,034
<i>N significant rise</i>			<i>17</i>		<i>13</i>	
<i>N significant decline</i>			<i>10</i>		<i>5</i>	
<i>N no significant change</i>			<i>37</i>		<i>20</i>	
Since 2000s						
Argentina	ls4	2000-2020	+0,023	+0,002 - +0,044	+0,015	-0,006 - +0,035
Austria	ls4	2000-2021	+0,022	+0,001 - +0,042	+0,019	+0,002 - +0,036
Belgium	ls4	2000-2021	+0,018	0,0 - +0,036	+0,014	-0,002 - +0,031
Bolivia	ls4	2000-2020	-0,001	-0,051 - +0,049	+0,003	-0,041 - +0,046
Brazil	ls4	2000-2020	-0,039	-0,120 - +0,042	-0,036	-0,106 - +0,034
Canada	bw11	2000-2020	-0,002	-0,024 - +0,019	-0,008	-0,027 - +0,012

Chile	ls4	2000-2020	-0,025	-0,057 - +0,007	-0,026	-0,054 +0,002
China	bw11	2000-2020	+0,020	-0,015 - +0,055	+0,029	-0,004 - +0,062
Colombia	ls4	2000-2020	+0,024	-0,008 - +0,056	+0,022	-0,005 - +0,050
Costa Rica	ls4	2000-2020	-0,009	-0,023 - +0,005	-0,008	-0,020 - +0,004
Croatia	ls4	2004-2021	+0,004	-0,008 - +0,016	+0,018	+0,003 - +0,032
Denmark	ls4	2000-2021	+0,021	+0,017 - +0,025	+0,011	0,0 - +0,023
Ecuador	ls4	2000-2020	+0,019	-0,029 - +0,066	+0,021	-0,020 - +0,063
El Salvador	ls4	2000-2020	-0,013	-0,060 - +0,034	+0,003	-0,042 - +0,048
Estonia	ls4	2001-2021	+0,064	+0,045 +0,083	+0,055	+0,038 - +0,072
Finland	ls4	2000-2021	+0,029	+0,016 - +0,042	+0,013	-0,004 - +0,030
France	ls4	2000-2021	+0,018	+0,007 - +0,028	+0,016	+0,007 - +0,025
Germany	ls4	2000-2021	+0,056	+0,047 - +0,065	+0,053	+0,045 - +0,061
Greece	ls4	2000-2021	-0,078	-0,113 - -0,042	-0,049	-0,086 - -0,011
Honduras	ls4	2000-2020	-0,011	-0,058 - +0,036	-0,007	-0,048 - +0,034
Hungary	ls4	2000-2021	+0,035	0,000 - +0,069	+0,050	+0,019 - +0,081
Ireland	ls4	2000-2021	+0,016	-0,007 - +0,038	+0,007	-0,013 - +0,027
Italy	ls4	2000-2021	-0,039	-0,056 - -0,020	-0,031	-0,046 - -0,015
Japan	bw11	2000-2020	-0,018	-0,039 - +0,003	-0,013	-0,033 - +0,006
Latvia	ls4	2001-2021	+0,058	+0,043 - +0,072	+0,055	+0,038 - +0,072
Luxembourg	ls4	2000-2021	+0,003	-0,009 - +0,015	-0,009	-0,023 - +0,005
Mexico	ls4	2000-2020	+0,006	-0,025 - +0,038	+0,009	-0,018 - +0,037

Netherlands	ls4	2000-2021	+0,028	+0,018 - +0,038	+0,022	+0,012 - +0,032
Nicaragua	ls4	2000-2020	+0,023	-0,017 - +0,062	+0,027	-0,006 - +0,061
Panama	ls4	2000-2020	+0,050	+0,004 - +0,097	+0,042	+0,001 - +0,083
Paraguay	ls4	2000-2020	-0,024	-0,060 - +0,013	-0,018	-0,051 - +0,014
Peru	ls4	2000-2020	+0,064	+0,027 - +0,100	+0,066	+0,035 - +0,098
Poland	ls4	2001-2021	+0,052	+0,041 - +0,063	+0,051	+0,042 - +0,060
Portugal	ls4	2000-2021	+0,003	-0,038 - +0,045	+0,003	-0,035 - +0,041
Romania	ls4	2000-2021	+0,061	+0,035 - +0,087	+0,008	-0,002 - +0,018
Spain	ls4	2000-2021	-0,015	-0,041 - +0,011	-0,003	-0,027 - +0,020
Sweden	ls4	2000-2021	+0,016	+0,007 - +0,025	+0,008	-0,002 - +0,018
UK	ls4	2000-2020	+0,034	+0,027 - +0,041	+0,028	+0,019 - +0,038
Uruguay	ls4	2000-2020	+0,014	-0,021 - +0,048	+0,020	-0,011 - +0,051
USA	bw11	2001-2021	+0,005	-0,012 - +0,022	+0,003	-0,011 - +0,017
Venezuela	ls4	2000-2020	-0,044	-0,146 - -0,061	-0,098	-0,135 - -0,061
<i>N significant rise</i>			<i>15</i>		<i>14</i>	
<i>N significant decline</i>			<i>4</i>		<i>3</i>	
<i>N no significant change</i>			<i>22</i>		<i>24</i>	
Changes over all years together						
<i>Significant rise</i>						
• <i>Number of trends</i>			62		45	
• <i>Number of nations</i>			26		22	
• <i>Average rise</i>			+0,028		+0,025	
<i>Significant decline</i>						
• <i>Number of trends</i>			19		11	

• <i>Number of nations</i>	11		7	
• <i>Average decline</i>	-0.028		-0,038	
<i>No significant change</i>				
• <i>Number of trends</i>	119		64	
• <i>Number of nations</i>	35		33	

Technical details:

1. Happiness assessed by means of surveys in general public samples. This list is based on standard surveys that used the same question over the years.
2. The trend lines in this report are based on slightly different questions. Measure codes refer to an equivalent of survey questions on happiness.

[Best-Worst possible life](#)

Bw11 question on how one rated one's current life on a numerical scale ranging from best possible to worst possible

[Happiness](#)

hl4 question on happiness answer rated on 4-step verbal response scale

hl5 question on happiness answer rated on 5-step verbal response scale

hl3 question on happiness answer rated on 3-step verbal response scale

[Life-satisfaction](#)

ls4 question on life-satisfaction answer rated on 4-step verbal response scale

ls5 question on life-satisfaction answer rated on 5-step verbal response scale

ls10 question on life-satisfaction answer rated on 10-step numeral response scale

ls11 question on life-satisfaction answer rated on 11-step numeral response scale

ls10+11 question on life-satisfaction answer rated on 10 and 11-step numeral response scale

3. The original scores on these questions were transformed to a comparable 0-10 scale. See section /3.3.3 of the introductory text to this collection of distributional findings on happiness in nations, [chapter 7](#) how the data were homogenized.
4. Mean scores were taken from the country tables in this collection of [distributional findings on happiness in nations](#). In the nation reports look into: 'Methodological notes', 'All distributional findings on happiness by measure and year in ...' (Right bottom of the screen).
5. When happiness was assessed more than once in a year in a country, the average of the mean scores is used.
6. The variables used here are also described in the codebook of the data file 'Trend in nations', [variable trend average happiness in nations](#)
7. The average annual change is expressed in a regression coefficient that stands for the size of the slope of the linear regression line through the dots (averages) in the time charts. A positive coefficient denotes an average increase in average happiness, and a negative coefficient a decline. A regression coefficient of +.01 means 0.01-point increase on this 0-10 happiness scale per year, which implies that a one-point rise of happiness would take one hundred years at this pace of change.
8. The observed regression coefficient is based on a sample of assessments of happiness during this era and the coefficient in this sample may differ from the 'true' coefficient. The confidence interval gives an estimated range in which this true coefficient is likely to be included with 95% probability.
9. This report restricts to time series of at least 20 years involving 10 or more comparable data points.

10. Coefficients were rounded up to three decimal points.
11. More than one measure of happiness has been used in some nations and in some of these cases the trends are not identical, such as in the USA, where life-satisfaction declined but responses to the question on best-worst possible life rose.