Democracy and Happiness: What Causes What?

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Abstract

During the years before the surge of democratization in 1987-1993, reported happiness levels showed strong nation-level correlations with measures of democracy such as the Freedom House political rights and civil liberties scores: the correlations were in the .7 to .8 range. This could be interpreted as meaning that: (1) living under democratic institutions makes people happy; or (2) high levels of subjective well-being are conducive to democratic institutions; or (3) the correlation could be spurious, reflecting the fact that both subjective well-being and democracy are strongly correlated with some other variable such as high levels of economic development. Which is it? The answer is important: If democracy makes people happy, this is a powerful argument for democracy, even apart from other considerations such as the Democratic Peace thesis; on the other hand, if high levels of happiness are conducive to democracy, this has important implications concerning how democracy emerges and flourishes.

Using data on happiness levels of 39 publics from 1981 to 2006 from the World Values Survey, and the Freedom House measures of democracy levels from 1972 to 2005, this paper analyzes the relationships between happiness and democracy in order to determine what is causing what.

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Democracy and Happiness: What Causes What?

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Throughout the two decades before the explosion of democracy that occurred around 1990, reported happiness levels showed strong linkages with all of the widely-accepted measures of democracy. The national-level correlations between happiness and the Freedom House political rights and civil liberties scores were in the .7 to .8 range—a remarkably strong linkage that could be interpreted to mean that over half of the total variation in a society's level of happiness could be attributed to its level of democracy; or conversely, it could mean that a society's level of democracy largely reflected its happiness level.

Correlation is not causation, and this linkage could reflect any of the following things: (1) living under democratic institutions makes people much happier than living under authoritarian institutions; or (2) high levels of subjective well-being are conducive to democratic institutions; or (3) the correlation could be spurious, due to the fact that both subjective well-being and democracy are strongly correlated with some other variable such as high levels of economic development.

Solving this puzzle has far-reaching implications. If the linkage is not spurious and democracy makes people happy, this provides a strong additional argument on behalf of democracy; while if high levels of happiness are conducive to democracy, this can lead to a better understanding of how democracy emerges and flourishes. Using World Values Survey data on happiness levels from 1981 to 2006, and the Freedom House measures of democracy levels from 1972 to 2005, this paper analyzes the relationships between happiness and democracy in order to determine what is causing what.

Though the political culture literature has long argued that interpersonal trust and tolerance play an important role in the emergence and flourishing of democratic institutions, it has largely neglected the role of human happiness. But it is logical to expect that high levels of happiness would be linked with democracy. Political economy

research demonstrates that if the economic cycle has been going well, support for the incumbents increases. Support for a democratic regime reflects a much deeper long-term processes. If, in the long run, people feel that their life as a whole has been good under a given regime, it produces legitimacy and diffuse support for that regime. High levels of subjective well-being can also help stabilize authoritarian regimes, of course. Thus, China has experienced high levels of economic growth throughout the past two decades, and her public shows much higher levels of subjective well-being than the ex-communist regimes of Eastern Europe. This almost certainly helps legitimate China's one-party communist regime—in the short run. But in the long run, economic growth tends to bring cultural changes through which the public gradually places increasing importance on autonomy and self-expression—which eventually gives rise to demands for a more liberal political order (Inglehart and Welzel, 2005). Legitimacy is helpful to any regime, but authoritarian systems can survive through coercion; democratic regimes must have mass support or they can be voted out of existence like the Weimar republic. Thus, societies with happy publics are far more likely to survive as democracies, than those with unhappy publics. Moreover, high levels of subjective well-being are linked with trust, tolerance and emphasis on self-expression that is conducive to the emergence and survival of democracy.

(Figure 1 about here)

Accordingly, a remarkably strong relationship existed between democracy and the self-reported happiness levels of given publics, throughout the period before the explosion of democracy that occurred around 1990. Figure 1 shows this relationship among the 39 countries for which we have long-term survey data. As this figure demonstrates, happiness and democracy were strongly linked in the 1980s: the correlation between the two is r = .81, and although we do not have survey data from the 1970s, the happiness levels of given societies tend to be relatively stable, and the levels shown here show almost equally strong relationships with the same countries' Freedom House scores

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¹ In order to carry out time series analysis, these analyses are based only on those countries for which we have data covering at least 15 years. We use the earliest available measure of happiness levels for the countries shown in Figure 1; for 22 countries, the data are from the 1981 World Values Survey, and for 17 countries the data are from the 1990 World Values Survey.

throughout the period from 1972 to 1987. This confirms previous findings that happiness is closely correlated with democracy (Inglehart, 1990; Frey and Stutzer. 2000, 2002).

Both democracy and human happiness vary a great deal from one society to another. The societies examined here range from long-established liberal democracies such as Britain, Sweden, Denmark, the United States and Canada, to countries that were extremely authoritarian in 1981-1986, such as China, Russia, and Bulgaria. Happiness levels also vary greatly. The happiness levels used here could theoretically range from 0.00 (if everyone in the society said they were "extremely unhappy") to 3.00 (if everyone said they were "very happy). To provide some concrete illustrations: in Ireland (with a mean score of 2.36) fully 41 percent of the public described themselves as "very happy;" while in Belarus (with a mean score of 1.46), only 5 percent described themselves as "very happy."

One way to explain the strong linkage shown here between happiness and democracy, would be to assume that democracy makes people happy. This interpretation is appealing and suggests that we have a quick fix for most of the world's problems: adopt a democratic constitution and live happily ever after.

Unfortunately, the experience of most of the Soviet successor states does not support this interpretation. Since their dramatic move toward democracy in 1991, their people have not become happier: for the most part, they moved in exactly the *opposite* direction with the sharp decline of their economy and society, as we will see.

Nevertheless, we believe that in the long run, a climate of free choice is conducive to happiness. Given individuals may not be conscious of the linkage between free choice and happiness, but those who feel they have relatively high levels of control and choice over how their lives turn out, consistently report higher levels of life satisfaction than those who don't. Free choice tends to make people happier. This is a driving force in the process of human development: rising emphasis on free choice favors democracy-- the

² The vertical axis is based on the sum of each country's Freedom House scores for 1981 to 1986, which run from 2 to 14, with high scores reflecting *low* levels of democracy. In order to reverse this polarity, each country's score was subtracted from 14, producing scores ranging from 0 to 12 for any given year, and a maximum score of 72 for the six-year period. The original happiness scores ranged from 1 to 4, with high scores indicating low levels of happiness; their polarity was also reversed, by subtracting each country's mean score from 4, to produce scores ranging from 0 to a theoretical maximum of 3, which would be obtained if everyone described themselves as "very happy." Accordingly, on Figure 1, high scores indicate high levels of happiness and democracy.

institutions that maximize human freedom. But democratic institutions are by no means the only factor shaping human happiness. Protracted periods of economic growth seem to be conducive to rising levels of happiness, and severe economic decline can have the opposite effect. Similarly, the breakdown of the social and political order that accompanied the collapse of communism in many societies was linked with declining levels of happiness, despite the sharp, sudden increase in political rights and civil liberties that occurred at the same time. We suspect that democratic institutions *do* contribute to human happiness to an appreciable extent, but the causal linkage seems to work much more strongly in the opposite direction, with democratic institutions being much more likely to flourish in a social climate characterized by high levels of subjective well-being—which are linked with high levels of trust, tolerance and emphasis on self-expression, constituting a syndrome of "Self-expression values" (Inglehart and Welzel, 2005).

Thus Inglehart and Welzel (2005: chapter 8) examine why economic development goes with democracy, hypothesizing that cultural changes provide the link between development and democratization. They first test the impact of self-expression values at Time 1, on subsequent levels of democracy at Time 2. They find that a society's mean score on the Survival/Self-expression dimension is by far the most powerful influence on its subsequent level of democracy. Although economic development is at the root of this causal sequence, it is important mainly in so far as it contributes to the emergence of Self-expression values.

They then test the reverse causal model: that democratic institutions cause a shift from Survival values to Self-expression values. Since these values show a .83 correlation with democracy, if one used democracy alone as a predictor of these values, it would "explain" most of the variance. But when economic development is also included in the regression, democratic institutions explain only an additional 2 percent of the variance in Self-expression values, beyond what was explained by economic development and religious heritage. Culture seems to shape democracy far more than democracy shapes culture.

(Figure 2 about here)

Despite the strong correlation between happiness and democracy, democratization does not automatically bring higher levels of democracy. As Figure 2 demonstrates, in 1981 the Russian public already showed relatively low levels of happiness by international standards.³ A low level of happiness preceded the collapse of communism—and, we suspect, contributed to it. Happiness level fell in to an even lower level in Russia in 1990, and continued to fall in 1995 and 2000, despite the dramatic shift toward democracy that took place from 1981 to 1995. The severe economic decline that took place during this era (with real income declining to about 40 percent of its 1980 level), together with the collapse of the Soviet Union in 1991 and the accompanying collapse of the social order and the communist belief system, brought severe malaise to the Russian people: by 1995, a majority of them described themselves as unhappy and dissatisfied with their lives as a whole. Despite the marked increase in personal and political freedom that took place during this era, human happiness declined. Conversely, although political rights and civil liberties declined sharply from 1995 to 2006, happiness levels rose in 2006 as a partial economic recovery occurred, stimulated by rising gas and oil prices. Rising levels of democracy do not necessarily go with higher levels of happiness—the two can even move in opposite directions. Despite this evidence, we believe that democracy is conducive to human happiness—but clearly, it is only part of the story.

The democracy and happiness scores have been transformed to have the same scale (ranging from 0 to 12) on Figure 2, to make the amplitude of their changes comparable. As this figure demonstrates, happiness levels are relatively stable, even in the face of dramatic societal changes. While a country's scores on the Freedom House political rights and civil liberties scales can change dramatically from one year to the next—with Russia jumping by fully seven points out of a possible 12 from 1981 to 1995—the Russian public's happiness levels varied by less than one point on the scale

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³ It was not possible to carry out a survey of the entire Russian republic in 1981, but we did survey Tambov oblast, which our Russian colleagues selected as a region that was representative of Russia as a whole. The assumption that it is, gains support from the fact that in 1995, when we surveyed both Tambov oblast and Russia as a whole, they did show similar levels of happiness and other variables.

during the same time period. As earlier analyses already indicated, relatively high or low levels of happiness and overall life satisfaction are relatively stable characteristics of given societies (Inglehart, 1990:25-28) – and they are strongly correlated with both per capita GNP and with democracy (Inglehart, 1990: 31-44). They can and do change over time-- economic, social and political developments seem to have an impact—but they tend to change rather slowly. A public's assessment that their lives as a whole are going well or badly, seems to be a deep-rooted orientation.

(Figures 3-5 about here)

Figures 3 to 5 show how levels of happiness and democracy evolved in three more ex-communist societies for which we have survey data covering at least fifteen years. Hungary was the only other communist country in which we were able to carry out a survey in 1981. It showed a happiness level then that was well below that of any stable democracy (and in the bottom quartile for the world as a whole) but significantly higher than that of Russia. This already low level declined further in 1990 when communism collapsed, and then made a modest recovery, perhaps linked with the fact that Hungary made a relatively smooth transition to democracy and a market economy.

We do not have 1981 data for Romania or Slovenia, but – like all of the excommunist countries without exception—they showed relatively low levels of subjective well-being in the first available survey, in 1990. Fully 28 of the 30 lowest levels of happiness registered in the more than 200 surveys carried out by the World Values Survey, are found in ex-communist countries (the two remaining cases occur in the surveys carried out in Iraq in 2004 and 2006). Pervasive malaise characterized the European communist societies and, we believe, contributed to their collapse. Democratization occurred later in Romania than in Hungary, with Romania moving into Freedom House's "free" category only by 2000. Happiness declined from 1990 to 2000 and rose slightly in 2006 but remained below her earliest level. As of 2006, a huge increase in Romania's level of democracy – rising nine points on a scale having a maximum of twelve—has not brought a significant increase in happiness.

Slovenia shows a more positive picture. A dramatic increase in her level of democracy (rising eight points on the 12-point maximum) has been accompanied by a modest but steady rise in happiness levels. But it seems unlikely that this increase is due

to democratization alone, for Slovenia had impressive economic growth during this period, and is now the only ex-communist country that has risen into the World Bank's "high income" category; moreover, Slovenia's political situation has become substantially more stable than that of many other ex-communist countries, with her entry into both the European Union and NATO.

(Figures 6 and 7 about here)

In another part of the world, both Mexico and Argentina made transitions to democracy in recent years, and we have relatively extensive time series data on their happiness levels. Mexico displays a pattern in which happiness and democracy levels move in tandem, with both variables showing a significant increase in 2000, the year in which one-party rule by the PRI finally ended through free elections. Although the evidence in Figure 6 does not control for other factors, it is certainly consistent with the belief that democratization contributes to rising levels of human happiness. Argentina's transition to democracy took place earlier than the one in Mexico, but the evidence shown in Figure 7 is also consistent with the idea that democratization contributes to happiness: a dramatic shift toward democracy occurred between 1981 and 1990, accompanied by a modest rise in happiness.

(Figures 8 and 9 about here)

We have long-term evidence from two other societies that experienced a transition to democracy since 1981: South Africa and Argentina. In both cases, happiness levels experienced a modest rise after the transition, although the change on the happiness scale was much smaller than the change on the democracy scale, as Figures 8 and 9 demonstrate: while democracy scores rose by eight points in both countries, the happiness levels rose by less than one point on a scale having the same range as the democracy scale.

Data are also available from a number of societies that did not experience recent transitions to democracy but they reveal little about the relationship between happiness and democracy because neither variable shows much movement. With Sweden and the U.S., for example, the pattern shows two almost parallel lines, with democracy remaining

constant at point 12 (the top of the scale) and happiness fluctuating at a level slightly above point 9.

(Table 1 about here)

The evidence we have reviewed up to this point suggests that democracy may be conducive to human happiness, but its immediate impact seems to be rather modest-- and transitions to democracy can even be linked with *declining* levels of happiness. Additional factors seem to be involved. In order to test the relative impact of democracy and other likely factors, we carried out multiple regression analysis. Table 1 shows the results of an analysis in which the dependent variable is a society's level of happiness in 2000—a decade after the explosion of democracy around 1990. These predictors were selected after an initial screening of additional variables that theoretically might be involved. Among the independent variables, we used the society's level of democracy as measured by the sum of its Freedom House scores in 1991-1996. This provides a measure of democracy at a time before that of the dependent variable (in keeping with the fact that causes precede effects), but after the explosion of democracy. Additional predictors include two economic indicators: (1) the society's level of economic development, as indicated by its per capita GNP in 1995; and (2) the society's annual growth rate during the decade preceding the time at which happiness is measured. Finally, we also use the society's level of Postmaterialist values, as an indicator of the extent to which the society emphasizes self-expression and free choice, in keeping with the Human Development thesis which holds that free choice is conducive to human happiness (Inglehart and Welzel, 2005). We have already noted that happiness and free choice are closely linked in the syndrome of Self-expression values—but for present purposes, we want to examine the impact that emphasis on free choice has on happiness, controlling for other factors.

In Model 1 of this analysis, these five independent variables explain more than 55 percent of the cross-national variance in happiness. Although per capita GNP has a fairly strong and significant zero-order correlation with happiness (r = .52), its impact disappears when we include the other variables in this analysis. But a country's economic growth rate during the decade preceding the time when happiness was

measured, does show an impact on its happiness level that is significant at the .001 level. In keeping with the aspiration-adjustment model (Campbell, Converse and Rodgers, 1976; Inglehart, 1990), improving or deteriorating economic conditions seem to have more impact on a society's happiness level than does its absolute level of wealth. When we drop per capita GNP from the regression equation (Model 2), the remaining variables explain fully as much of the variance in happiness as did Model 1. And despite the remarkably strong correlation that existed between democracy and happiness before the explosion of democracy around 1990 (see Figure 1), a society's level of democracy in 1991-1996 had only a modest impact on its subsequent level of happiness. As Model 3 demonstrates, when we drop the Freedom House measures of democracy from our analysis, the amount of explained variance falls only slightly, from 55.8 percent to 54.7 percent. If a society's level of happiness were mainly determined by its level of democracy, then the explosion of democracy around 1990 would have been followed by sharp increases in the happiness levels of the societies that democratized. This did not happen, as Figures 2-9 suggest. As a result, the previously strong correlation between happiness and democracy suddenly became much weaker, falling from the .8 level around 1980, to less than .3 in 1995. Apparently, democracy does have some impact on a society's happiness level, but it seems to be a relatively modest one.

On the other hand, both economic growth and Postmaterialist values seem to have strong impacts on a society's relative happiness level. Together, they explain almost 55 percent of the variation. As Model 4 indicates, when we drop Materialist/Postmaterialist values from the equation, the explained variance falls from about 55 percent to about 32 percent; and when we drop economic growth from the equation but retain Materialist/Postmaterialist values (see Model 5), the explained variance falls from 55 percent to 40 percent. Living in an environment of economic and psychological security seems to have a powerful impact on a society's happiness level. The fact that both of these attributes tend to go with high levels of economic development largely explains the strong zero-order correlation between GNP per capita and happiness.

(Table 2 about here)

It is relatively difficult to explain recent *shifts* in a society's happiness level, but let us attempt to do so. Table 2 analyzes the amount of *change* in a society's happiness

level from 1981 (or our earliest available measure), to its level in 2000. As independent variables, we use growth in per capita GNP from 1990 to 2000, and the sum of the Freedom House scores from 1991 to 1995, plus two indicators of relative change in levels of social tolerance—the change in support for gender equality from 1981 to 2000, and the change in tolerance of homosexuality from 1981 to 2000. Both of the latter variables showed dramatic shifts toward greater tolerance in many societies during this period, and they provide stronger predictors of changing happiness levels than do

Materialist/Postmaterialist values, though all three of these variables are closely linked.

Thus we are again using indicators of economic and psychological security, together with an indicator of a society's relative level of democracy, as predictors of happiness—but this time, we are trying to explain recent *changes* in happiness levels.

These analyses explain a much smaller percentage of the variance than our earlier analyses: the four independent variables included in Model 1 explain only 14 percent of the change in happiness levels from 1981 to 2000. And although recent economic growth had a substantial impact on the happiness levels analyzed in Table 1, it does not show a significant impact on the *changes* in happiness levels analyzed here. When we drop economic growth from the equation (Model 2) the percentage of variance that is explained, remains unchanged. Each of the three remaining independent variables does seem to have a fairly sizeable impact on the change in happiness levels experienced from 1981 to 2000, and when we drop one of them from the regression, the explained variance drops appreciably. Interestingly, a society's level of democracy in 1991-1996 seems to have more impact on *changes* in happiness than it did on *levels* of happiness; when dropped from the analysis in Table 2, the explained variance falls by three percentage points (compare Models 3 and 5), although it accounted for only slightly more than one percent of the variance explained in Table 1. Rising levels of support for gender equality and tolerance of homosexuality go with rising levels of happiness, regardless of whether a society experienced economic growth. But surprisingly, a society's level of democracy as measured here, has a stronger impact on shifts in happiness than does its change in levels of democracy. And we have not been able to explain *changes* in happiness from 1981 to 2000 nearly as effectively as we were able to explain a society's level of happiness in 2000.

(Figure 10 about here)

Figure 10 shows the correlation between a society's level of happiness and its level of democracy at each time point for which we have data on both happiness and democracy. The pattern is striking. Around 1981, the two went together to a remarkably strong degree, correlating at the .8 level;⁴ in 1990, just after the start of the Third Wave of democratization, the correlation had dropped slightly to the .7 level. By 1995, a large number of countries had suddenly made dramatic increases on the Freedom House scales, but their happiness levels had only increased slightly, if at all; consequently, the correlation between happiness and democracy had plummeted to the .25 level. In 2000 and 2005 the level recovered slightly, but remained much lower than it had been before the explosion of democracy. The curve hints at the possibility that in the long run, as (1) the publics of the new democracies experience protracted periods of economic and psychological security—and (2) as democracy fails in those societies in which this does *not* occur—the correlation between happiness and democracy may gradually move back toward its former level. But it is clear that democratization does not necessarily bring happiness.

⁴ The 1981 figure reflects the same data base as does Figure 1. Thus there is some overlap with the data for 1990.

REFERENCES

- Burkhart, Ross E. and Michael S. Lewis-Beck. 1994. "Comparative Democracy: The Economic Development Thesis." *American Political Science Review* 88 (December):903-10.
- Campbell, Angus, Philip E. Converse and Willard L. Rodgers. 1976. *The Quality of Life*. New York: Sage.
- Frey, Bruno S. and Alois Stutzer. 2000. "Happiness, Economy and Institutions." *The Economic Journal* (October), 110,466:918-938.
- Frey, Bruno S. and Alois Stutzer. 2002. Happiness and Economics: How the Economy and Institutions Affect Human Well-being. Princeton: Princeton University Press.
- Inglehart, Ronald. 1990. *Culture Shift in Advanced Industrial Society*.. Princeton: Princeton University Press.
- Inglehart, Ronald. 1997. *Modernization and Postmodernization: Cultural, Economic and Political Change in 43 Societies*. Princeton: Princeton University Press.
- Inglehart, Ronald and Christian Welzel. 2005. *Modernization, Cultural Change and Democracy*. New York and Cambridge: Cambridge University Press, 2005.
- Putnam, Robert. 1993. Making Democracy Work. Princeton: Princeton University Press

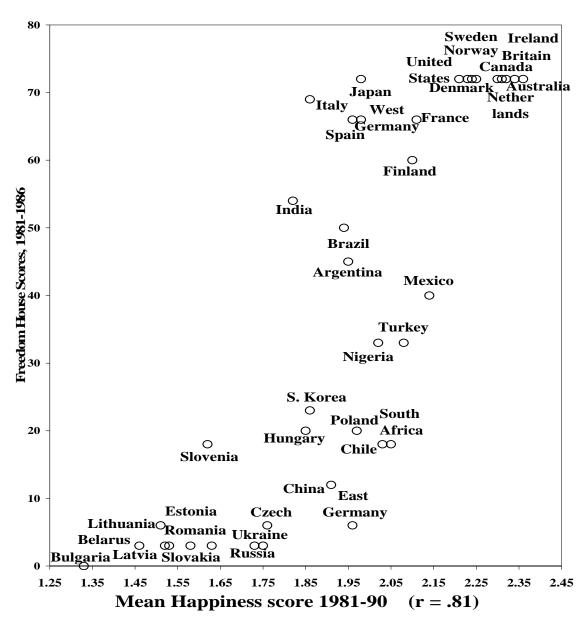


Figure 1. The linkage between Happiness and Democracy before the Third Wave of Democratization.

Source: Values Surveys, 1981-1990 and Freedom House scores, 1981-1986.

Happiness and Democracy in Russia, 1981-2006

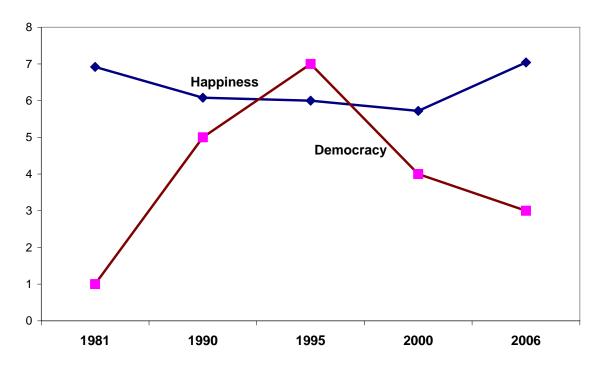


Figure 2. Happiness and Democracy in Russia, 1981-2006.

Note: Democracy is measured by the two Freedom House scales, which range from 1 to 7; their sum ranges from 2 to 14 but since high scores indicate low democracy, their polarity is reversed by subtracting them from 14, producing a scale that ranges from 0 to 12. Happiness is measured on a scale that ranges from 1 to 4, but since high scores indicate low happiness, polarity is reversed by subtracting from 4, producing a scale that ranges from 0 to 3. This score is then multiplied by 4 to produce a scale that ranges from 0 to 12-giving both happiness and democracy the same 0-12 range.

The 1981 happiness score is from a survey in Tambov oblast, which parallels the Russian republic rather closely.

Happiness and Democracy in Hungary, 1981-2006

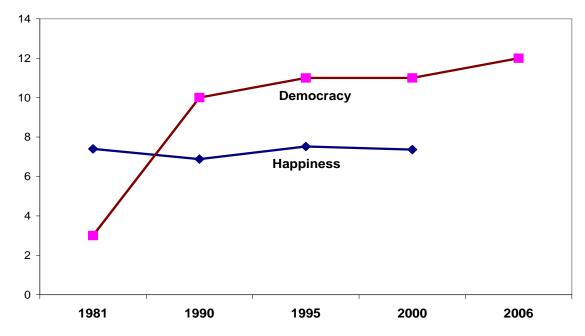


Figure 3. Happiness and Democracy in Hungary, 1981-2006.

Happiness and Democracy in Romania, 1981-2006

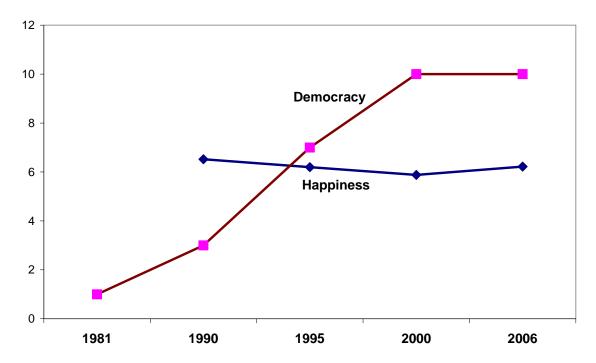


Figure 4. Happiness and Democracy in Romania, 1981-2006.

Happiness and Democracy in Slovenia 1981-2006

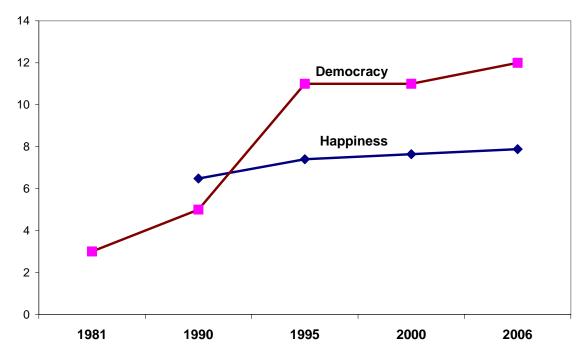


Figure 5. Happiness and Democracy in Slovenia, 1981-2006.

Happiness and Democracy in Mexico, 1981-2006

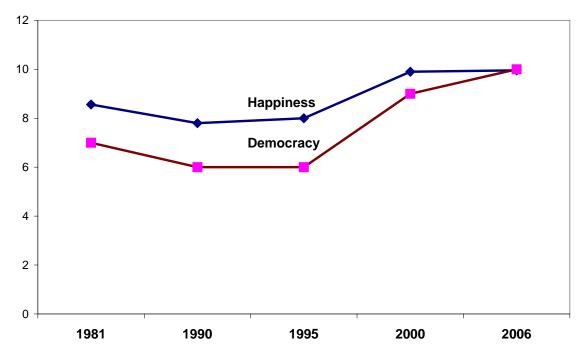


Figure 6. Happiness and Democracy in Mexico, 1981-2006.

Happiness and Democracy in Argentina, 1981-2006

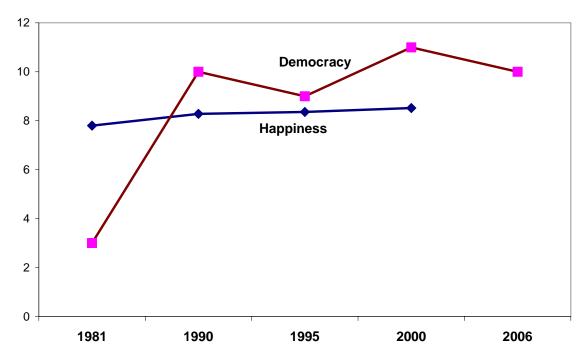


Figure 7. Happiness and Democracy in Argentina, 1981-2006.

Happiness and Democracy in South Africa, 1981-2006

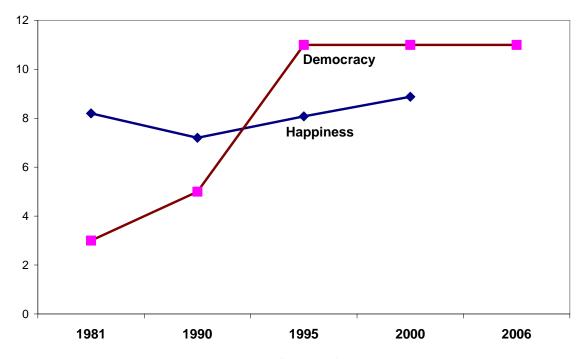


Figure 8. Happiness and Democracy in South Africa, 1981-2006.

Happiness and Democracy in South Korea, 1981-2006

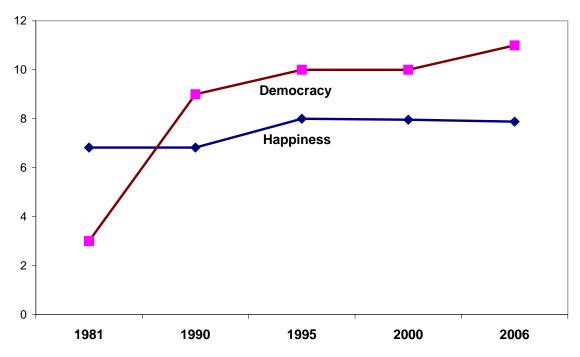


Figure 9. Happiness and Democracy in South Korea, 1981-2006.

Correlation between Happiness and Democracy, 1981 - 2006

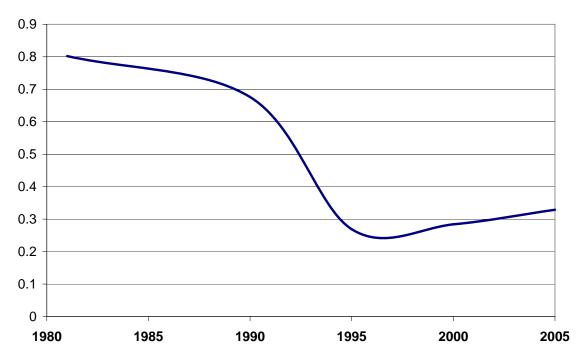


Figure 10. The correlation between Happiness and Democracy in 43 countries, 1981-2006.

Table 1. Predicting Levels of Happiness in 2000.

	Dependent Variable: Happiness Level, 2000					
Independent Variables:	Model 1	Model 2	Model 3	Model 4	Model 5	
Real GDP per capita, 1995 (in \$1000 U.S.)	.006 (.008)					
Sum of Freedom House Scores, 1991-1996	.004 (.003)	.003 (.002)				
Mean score on Materialist/Postmaterialist Values, 1995	.673*** (.207)	.767*** (.168)	.612***		.753*** (.138)	
Average annual growth rate, 1990-2000	.032*** (.009)	.032*** (.009)				
Adjusted R-Squared	.554	.558	.547	.318	.395	
Number of Countries	43	43	43	43	44	

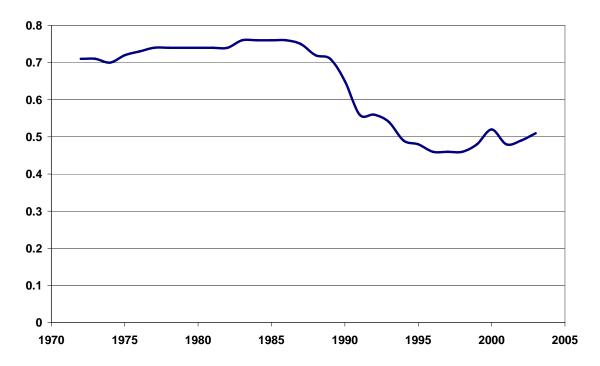
Note: the table above shows standardized regression coefficients, with the unstandardized coefficients in parentheses. Significance-levels: * $p \le .05$; ** $p \le .01$; ***p < .001. Source: Values Surveys.

Table 2. Predicting Shifts in Happiness Levels, 1981 - 2000

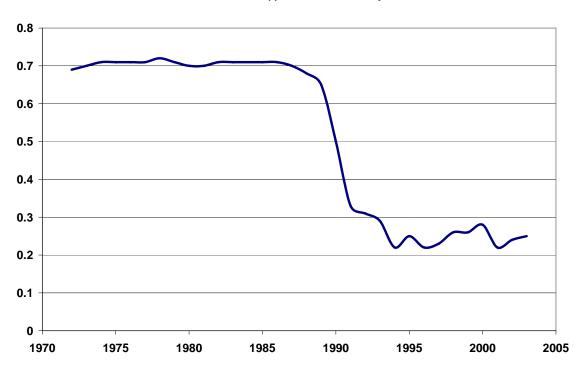
					-			
Dependent Variable: Shifts in Happiness Levels, 1981-20								
Independent Variables:	Model 1	Model 2	Model 3	Model 4	Model 5			
Average annual growth in GNP, 1990-2000	.009 (800.)							
Change in support for gender equality in jobs, 1981-2000	.211* (.104)	.178 (.098)		.113 (.096)				
Sum, Freedom House scores, 1991-1996	.004* (.002)	.004* (.002)	.003 (.002)					
Change in tolerance of homosexuality, 1981-2000	.070* (.028)	.073* (.027)	.060* (.027)	.049 (.026)	.045 (.026)			
Adjusted R-Squared	.140	.140	.084	.061	.052			
Number of Countries	38	38	38	38	38			

Note: the table above shows standardized regression coefficients, with the unstandardized coefficients in parentheses. Significance-levels: * $p \le .05$; ** $p \le .01$. Source: 1999-2001 Values Surveys.

correlation between life satisfaction and democracy over time



Correlation between Happiness and democracy over time



correlation between Health and Democracy over time

