

Happiness

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- 1 introduction
 - why study life satisfaction ?
 - how do we measure it ?
 - two major theories
- 2 dissatisfaction with city life
- 3 my future research
- 4 appendix
 - more happiness literature
 - some uses of happiness data to evaluate policy

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why study life satisfaction ?

a number of fascinating research questions to answer
for instance:

can money buy happiness ?

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**“ Researchers say I’m not happier for being richer,
but do you know how much researchers make?”**

why study life satisfaction ?

- ◇ end in itself
- ◇ a measure of utility/well-being/quality of life/standard of living
- ◇ a better, more comprehensive and precise measure than individual or national income/consumption

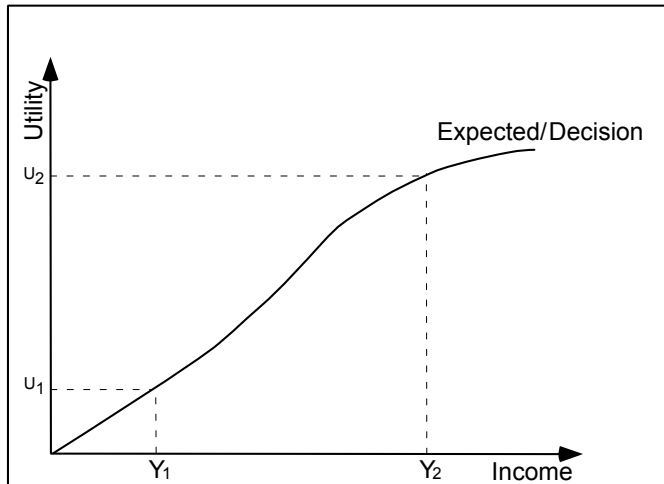
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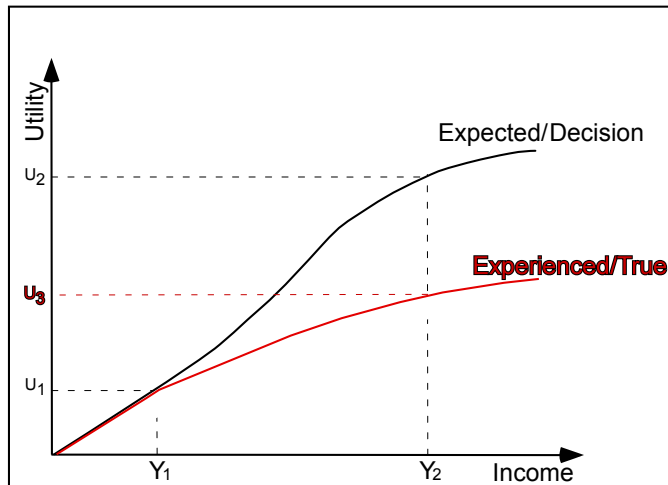
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an example: expected vs. experienced utility

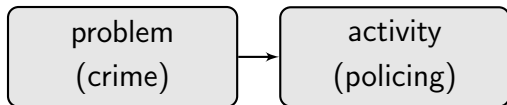


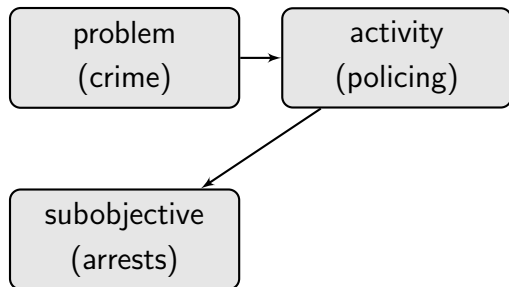
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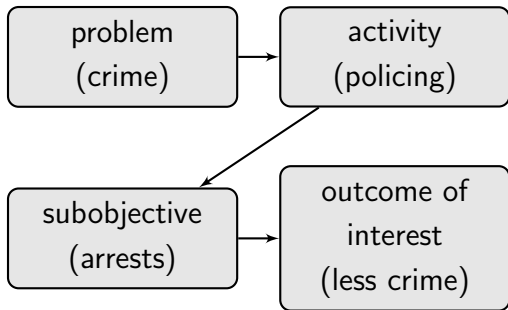


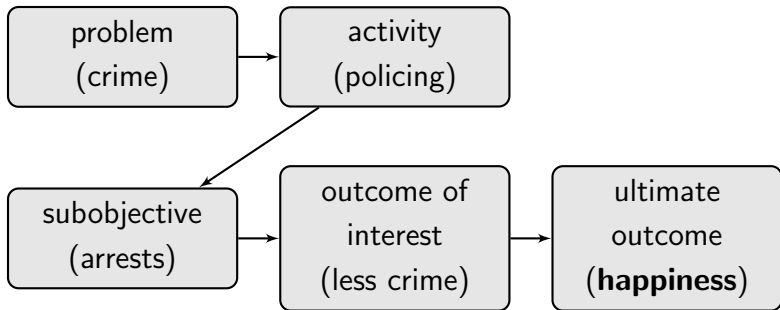
Arguably happiness research applies to public policy

problem
(crime)

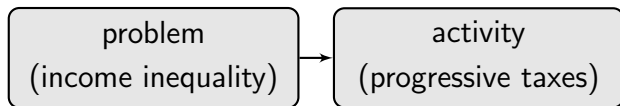


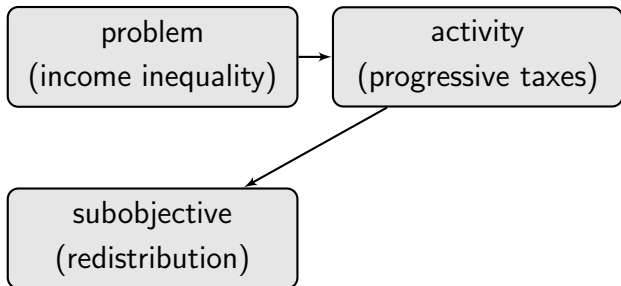


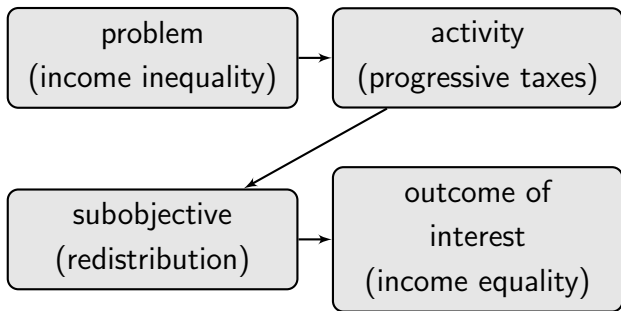


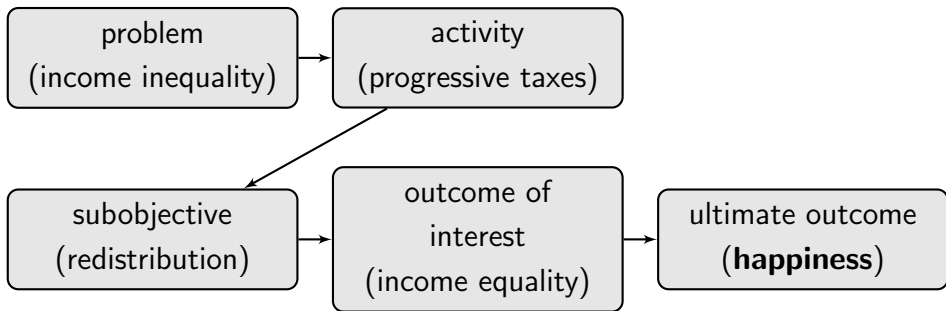


problem
(income inequality)









- ◇ wvs question: “all things considered, how satisfied are you with your life as a whole these days?” (1 to 10)
- ◇ gss question: “taken all together, how would you say things are these days - would you say that you are very happy, pretty happy, or not too happy?” (1-3)
- ◇ these measures were cross-validated using other measures: suicide, PET scans , other people ratings (Layard, 2005, Di Tella and MacCulloch, 2006)

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two major theories

◇ adaptation theory (Brickman et al., 1978)

- adjustment to external circumstances
- 'hedonic treadmill'
- *the more one has the more one wants, since satisfactions received only stimulate instead of filling needs* (Durkheim, 1950)

◇ multiple discrepancy theory (Michalos, 1985)

- social comparison
- comparison to various standards
- *it is better to be a big frog in a small pond than a small frog in a big pond* (Davis, 1956)

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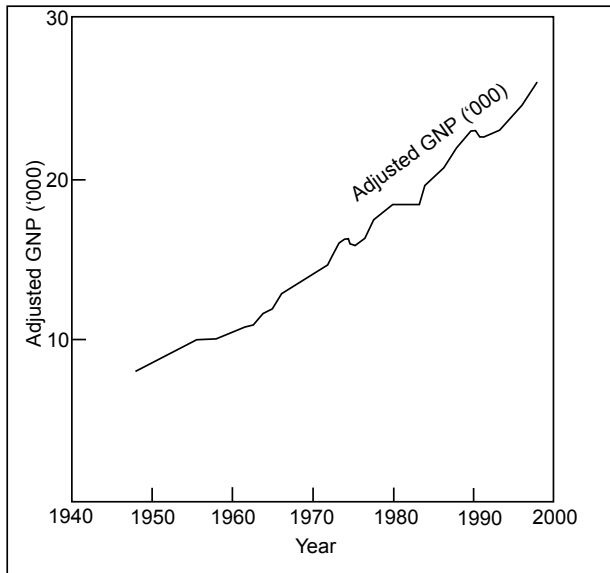
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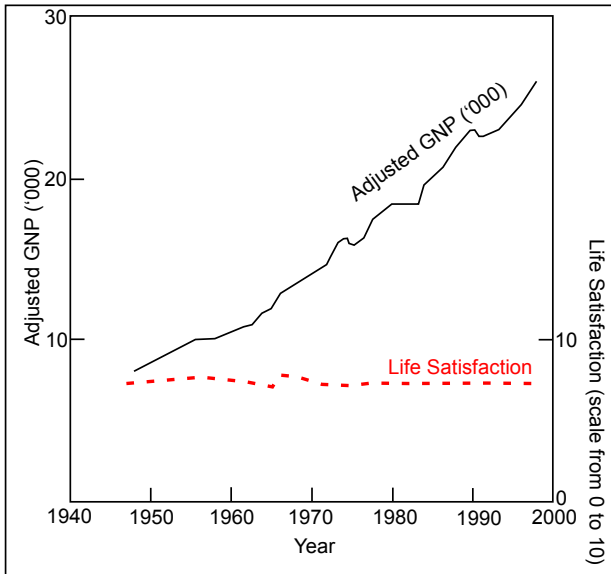
easterlin's paradox

income in the us, 1947-98 (Diener and Seligman, 2004)

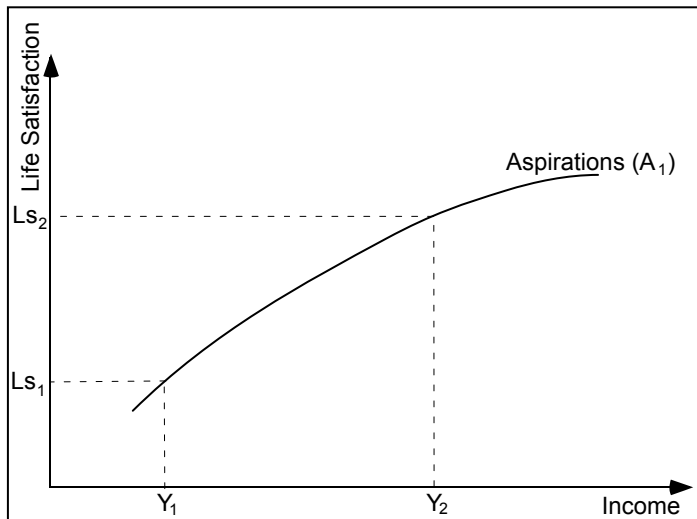


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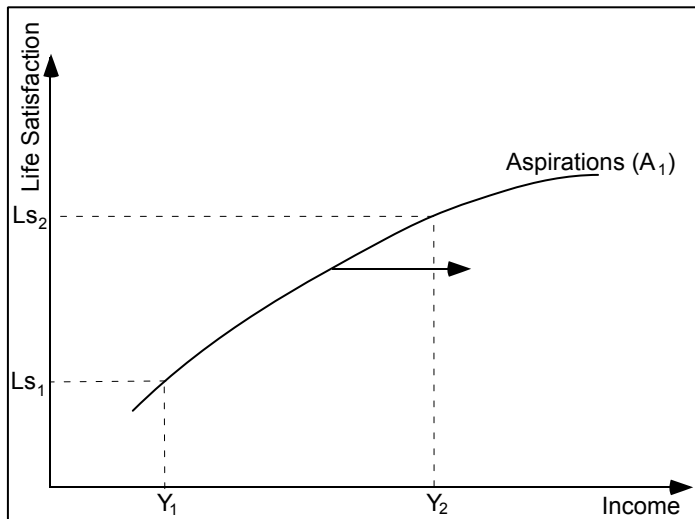
happiness in the us, 1947-98 (Diener and Seligman, 2004)



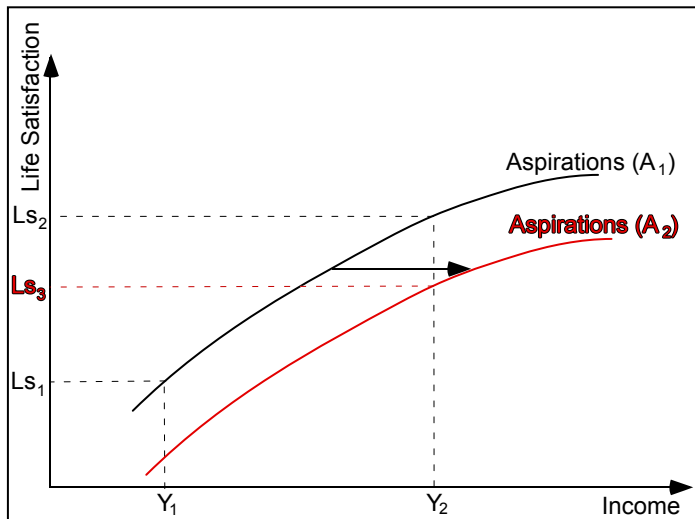
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income increases happiness, but...

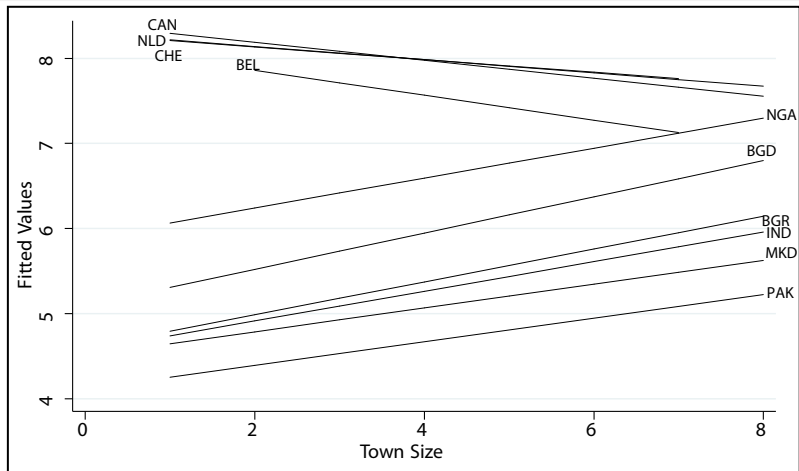


income increases aspirations, too

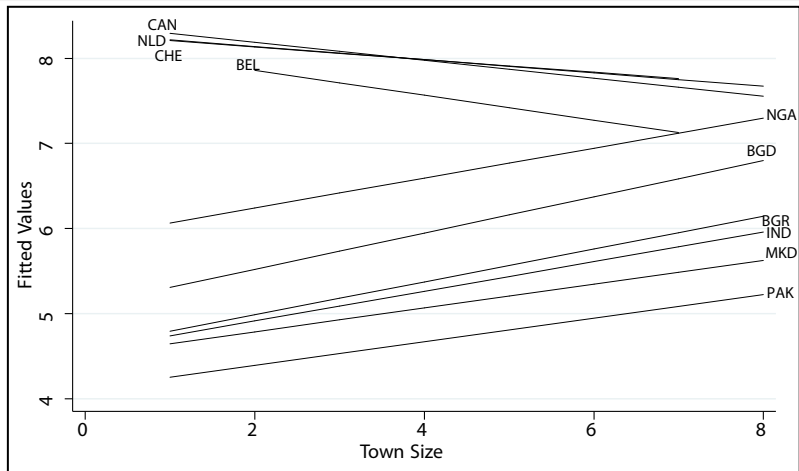


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a puzzle



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*a hamburger can kill you in NYC and
save your life in Addis Abeba (?)*

dissatisfaction with city life

life dissatisfaction in cities>500k – settlements<2k

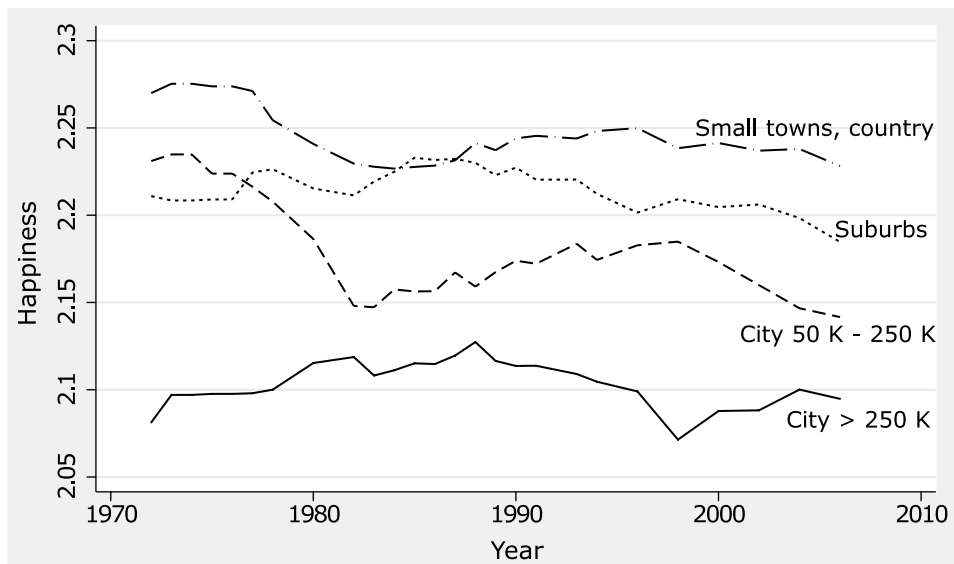
Dominican Republic	–2.05
India	–1.89
Vietnam	–1.73
Morocco	–1.73
Bulgaria	–1.23
Macedonia	–1.16
Bangladesh	–1.14
Belarus	–0.88
Nigeria	–0.88
Pakistan	–0.77

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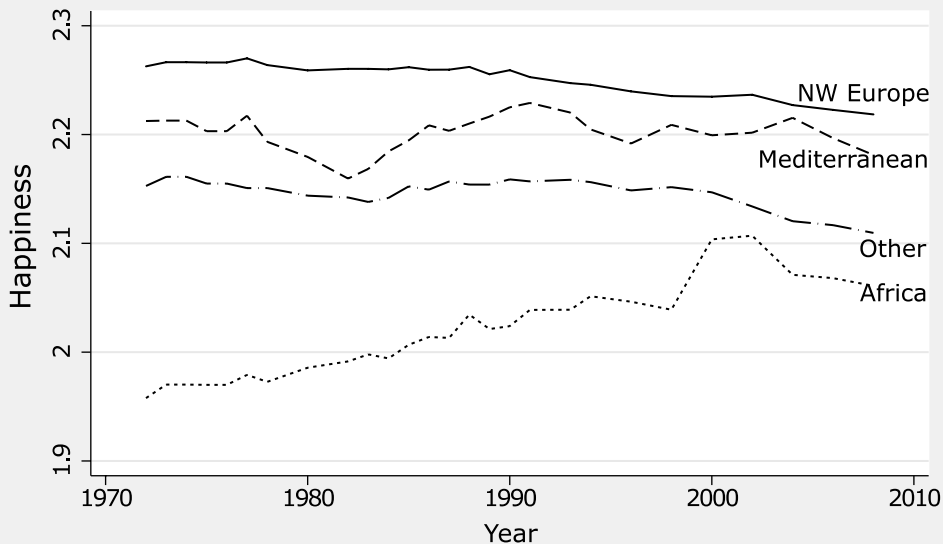
Netherlands	+1.18
United States	+0.97
Kyrgyzstan	+0.85
Canada	+0.78
Spain	+0.60
Australia	+0.45
Denmark	+0.44

Berry, B. J. L., **Okulicz-Kozaryn, A.** (2009)
“Dissatisfaction with City Life: A New Look at Some Old
Questions,” *Cities*, Vol. 26, Issue 3, 117-124

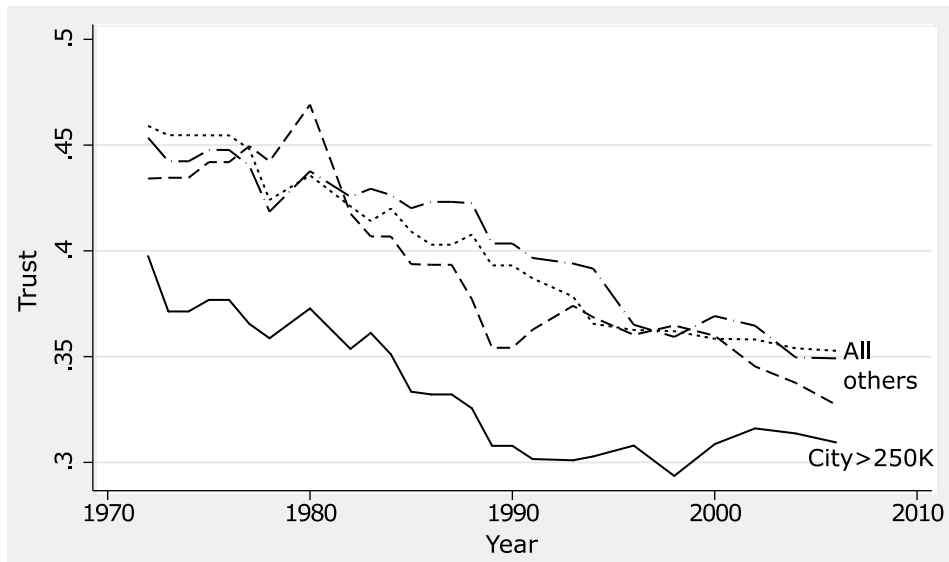
happiness and location in the U.S.



happiness and ethnic origin in the U.S.



level of trust by location in the U.S.



- ◇ a number of factors predict happiness
- ◇ personal characteristics: age, marital status, size of a household, employment status, income, whether a person was born in the U.S.
- ◇ geographical and time heterogeneity

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happiness odds ratios (1)

	initial model 1
city 50k-250k	1.15***
suburbs	1.18***
small towns, country	1.25***
NW Europe	
Mediterranean	
Africa	
black hh	
white hh	
time fe	yes
region fe	yes
ind. controls	yes
observations	32073
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$	

happiness odds ratios (1)

	initial model 1	initial model 2
city 50k-250k	1.15***	1.12**
suburbs	1.18***	1.12***
small towns, country	1.25***	1.15***
NW Europe		1.17***
Mediterranean		1.08
Africa		0.81***
black hh		
white hh		
time fe	yes	yes
region fe	yes	yes
ind. controls	yes	yes
observations	32073	25219

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

happiness odds ratios (1)

	initial model 1	initial model 2	with race
city 50k-250k	1.15***	1.12**	1.09*
suburbs	1.18***	1.12***	1.08*
small towns, country	1.25***	1.15***	1.10**
NW Europe		1.17***	1.11***
Mediterranean		1.08	1.02
Africa		0.81***	1.09
black hh			0.75***
white hh			1.1
time fe	yes	yes	yes
region fe	yes	yes	yes
ind. controls	yes	yes	yes
observations	32073	25219	24715

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

happiness odds ratios (2)

blacks	
city 50k-250k	0.86
suburbs	1.08
small towns, country	1.14
NW Europe	1.63*
Mediterranean	1.27
Africa	1.13
time fe	yes
region fe	yes
ind. controls	yes
observations	3047

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

happiness odds ratios (2)

	blacks	all others
city 50k-250k	0.86	1.17***
suburbs	1.08	1.11**
small towns, country	1.14	1.13***
NW Europe	1.63*	1.12***
Mediterranean	1.27	1.03
Africa	1.13	0.70*
time fe	yes	yes
region fe	yes	yes
ind. controls	yes	yes
observations	3047	22172
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$		

happiness odds ratios (2)

	blacks	all others	blacks in neighborhood
city 50k-250k	0.86	1.17***	1.07
suburbs	1.08	1.11**	1.04
small towns, country	1.14	1.13***	1.08
NW Europe	1.63*	1.12***	1.18***
Mediterranean	1.27	1.03	1.14**
Africa	1.13	0.70*	0.81***
time fe	yes	yes	yes
region fe	yes	yes	yes
ind. controls	yes	yes	yes
observations	3047	22172	14008

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happiness odds ratios (2)

	blacks	all others	blacks in neighborhood	no blacks in neighborhood
city 50k-250k	0.86	1.17***	1.07	1.23**
suburbs	1.08	1.11**	1.04	1.30***
small towns, country	1.14	1.13***	1.08	1.28***
NW Europe	1.63*	1.12***	1.18***	1.18***
Mediterranean	1.27	1.03	1.14**	1
Africa	1.13	0.70*	0.81***	0.87
time fe	yes	yes	yes	yes
region fe	yes	yes	yes	yes
ind. controls	yes	yes	yes	yes
observations	3047	22172	14008	9920

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- o what predicts well-being
- o how we can use happiness research to solve real problems
- o how culture affects economic development, institutional quality, business performance

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- ◇ income inequality and happiness
- ◇ how preferences for redistribution differ by culture, income, political affiliation, location ?
- ◇ effect of culture (e.g. individualism, subjugation) on fdi and business performance
- ◇ effect of trust on trade and institutional quality
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- ◇ statistical software
- ◇ data management
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- ◇ personal income (and personal income change) (Diener et al., 1999)
- ◇ goals vs. needs (Diener and Seligman, 2004)
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(iii) $u_{it} = f(u_{it-s}); s \neq t$ (Easterlin, 2005)

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u_{it} = utility/happiness; y_{it} = income; y_{it}^* = aspirations; x_{it} = other factors

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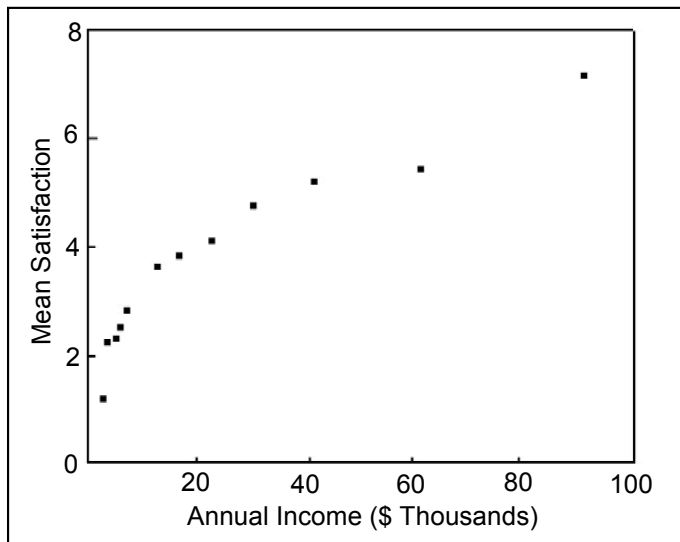
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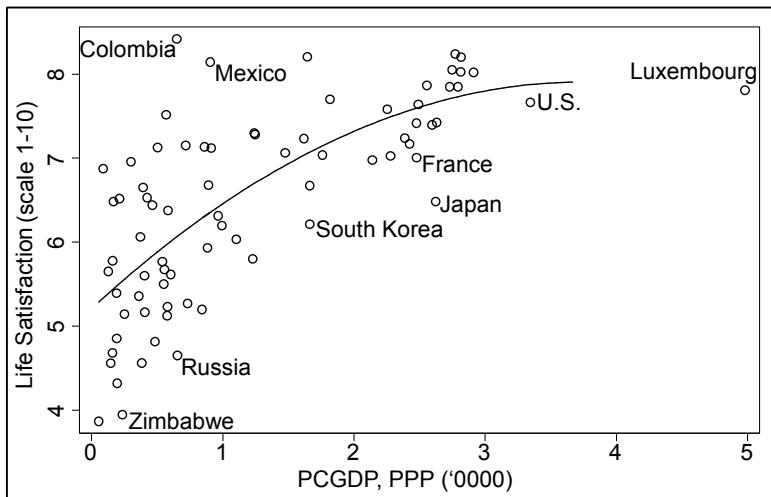
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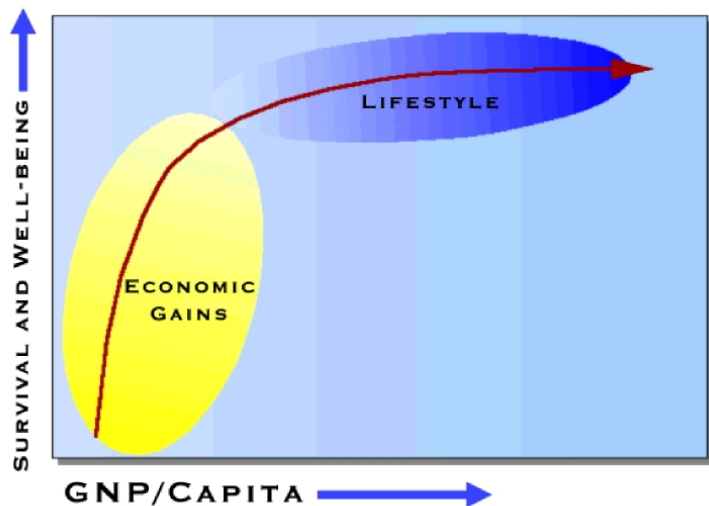
income vs. happiness in the us, 1981-4 (Diener et al., 1993)



income vs. happiness in the world, (wvs) 1996-2004

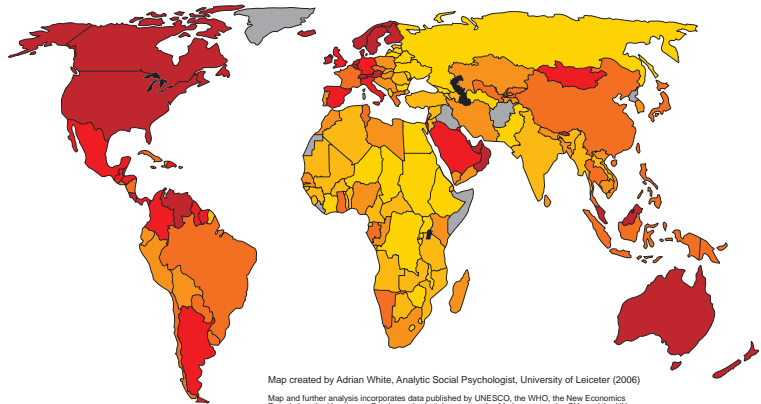


income vs. happiness across countries



Source: R. Inglehart, 1997

A Global Projection of Subjective Well-being: The First Published Map of World Happiness



Map created by Adrian White, Analytic Social Psychologist, University of Leicester (2006)

Map and further analysis incorporates data published by UNESCO, the WHO, the New Economics Foundation, the Veenhoven Database, the Latinobarometer, the Afrobarometer, the CIA, and the UN Human Development Report.



Cartographic Unit • University of Leicester

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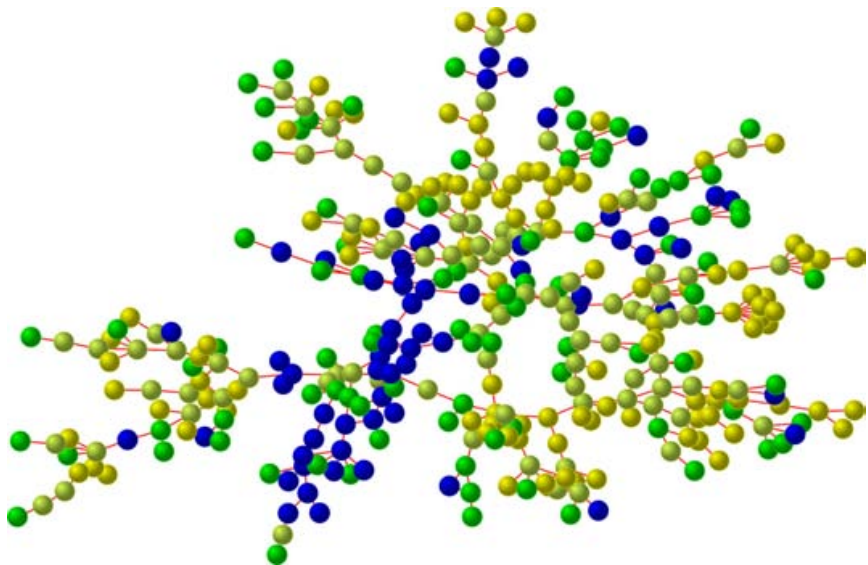
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happiness is contagious (Fowler and Christakis, 2008)



- ALESINA, A., R. DI TELLA, AND R. MACCULLOCH (2000): "Happiness and economic performance," Journal of Public Economics, 88, 2009–2043.
- (2004): "Inequality and Happiness: Are Europeans and Americans Different?" Journal of Public Economics, 88, 2009–2042.
- BECKER, G. S. (1974): "A Theory of Social Interactions," The Journal of Political Economy, 82, 1063–1093.
- BJORNSKOV, C., A. DREHER, AND J. A. FISCHER (2006): "Cross-Country Determinants of Life Satisfaction: Exploring Different Determinants across Groups," Political Economy and Public Policy Series, London School of Economics and Political Science, No 21.
- BRICKMAN, P., D. COATES, AND R. JANOFF-BUMAN (1978): "Lottery winners and accident victims: Is happiness relative?" Journal of Personality and Social Psychology, 36, 917–927.
- DAVIS, J. A. (1966): "The Campus as a Frog Pond: An Application of the Theory of Relative Deprivation to Career Decisions of College Men," American Journal of Sociology, 72, 17–31.
- DI TELLA, R. AND R. MACCULLOCH (2006): "Some Uses of Happiness Data in Economics," The Journal of Economic Perspectives, 20, 25–46.
- DI TELLA, R. AND R. J. MACCULLOCH (2005): "Gross National Happiness as an Answer to the Easterlin Paradox?" EconWPA.
- DI TELLA, R., R. J. MACCULLOCH, AND A. J. OSWALD (2001): "Preferences over inflation and unemployment: evidence from surveys of happiness," American Economic Review, 91, 335–341.
- DIENER, E. AND R. BISWAS-DIENER (2002): "Will money increase subjective well-being? A Literature Review and Guide to Needed Research," Social Indicators Research, 57, 119–169.

- DIENER, E., E. SANDVIK, L. SEIDLITZ, AND M. DIENER (1993): "The relationship between income and subjective well-being: relative or absolute?" Social Indicators Research, 28, 195–223.
- DIENER, E. AND M. E. P. SELIGMAN (2004): "Beyond Money: Toward an Economy of Well-Being," Psychological Science, 5, 1–31.
- DIENER, E., E. M. SUH, AND R. E. LUCAS (1999): "Subjective well-being: three decades of progress," Psychological Bulletin, 125, 276–302.
- DURKHEIM, E. (1950): The Rules of Sociological Method, New York: The Free Press.
- EASTERLIN, R. A. (2005): "Building a better theory of well-being," in Economics and Happiness. Framing the Analysis, ed. by L. Bruni and P. L. Porta, Oxford University Press, 29–65.
- FOWLER, J. H. AND N. A. CHRISTAKIS (2008): "Dynamic Spread of Happiness in a Large Social Network: Longitudinal Analysis Over 20 Years in the Framingham Heart Study," British Medical Journal, Vol. 3, January 2009.
- FREY, B. S. AND A. STUTZER (2000): "Happiness, Economy and Institutions," Economic Journal, 110, 918–938.
- HELLIWELL, J. F. (2006): "Well-being, social capital and public policy: what's new?" The Economic Journal, 116, C34–C45.
- LAYARD, R. (2005): Happiness. Lessons from a new science., The Penguin Press. New York.
- MICHALOS, A. C. (1985): "Multiple discrepancies theory (MDT)," Social Indicators Research, 16, 421–448.
- MOHR, L. B. (1995): Impact Analysis for Program Evaluation, Sage, second edition ed.
- MYERS, D. G. (2000): "The funds, friends, and faith of happy people," American Psychologist, 55, 56–67.
- VEENHOVEN, R. (2000): "A comparative study in 46 nations in the early 1990's," in Culture and subjective wellbeing, ed. by E. Diener and E. Suh, MIT press, 257–288.