Is Happiness Different From Flourishing? Cross-Country Evidence from the ESS

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Economics has arguably caught on late to the idea of measuring subjective well-being. This is useful both descriptively (as a measure of the distribution of well-being) and to help us understand preferences: what do individuals want?

Although some (not all) now agree that such broad types of measures are useful, we are not exactly sure how to obtain hard data on them, i.e. How to measure them.

We are often in the context of **survey questions** here, as we would like to obtain such measures from many thousands of people.

Some of the relevant issues here include:

- Top-down vs. bottom-up
- Experienced vs. Remembered well-being (e.g. Happiness versus EMS or Day Reconstruction)
- Hedonic vs. Eudaimonic well-being

It is the latter that I would like to talk about briefly today.

"Eudaimonia refers to the idea of flourishing or developing human potential, as opposed to pleasure, and is designed to capture elements such as mastery, relations with others, selfacceptance and purpose."

Practically, eudaimonic well-being is measured by questions on autonomy, determination, interest and engagement, aspirations and motivation, and a sense of meaning, direction or purpose in life.

- The argument is that this is picking up something that is different from our standard "hedonic" measures like happiness or life satisfaction.
- We tested this in a recent paper with Claudia Senik, using information from the third wave of the European Social Survey (ESS: freely available from http://www.europeansocialsurvey.org).
- The ESS is a multi-country survey which has covered 30 different countries at various points over its first three rounds.
- Clark, A.E., and Senik, C. (2011). "Is Happiness Different From Flourishing? Cross-Country Evidence from the ESS". *Revue d'Economie Politique*, *121*, 17-34.

• Wave 3 of the ESS, collected in 2006/2007, covers 25 different countries and contains a special module on well-being (see Huppert, H., Marks, N., Clark, A.E., Siegrist, J., Stutzer, A., Vittersø, J., and Wahrdorf, M. (2009). "Measuring well-being across Europe: Description of the ESS Well-being Module and preliminary findings". *Social Indicators Research*, *91*, 301-315).

The original sample includes just over 47 000 observations.

We drop four countries where the income variables were measured and coded differently, and restrict the sample to those of working age (16-65), for an analysis sample size of just over 32 000 individuals.

The huge advantage of the ESS is that we were able to ask the same individuals a wide range of different well-being questions.

We don't have to worry about sample comparability then: it's the same people answering the questions.

ESS hedonic questions

Happiness: "Taking all things together, how happy would you say you are?", with answers on a 0 to 10 scale, where 0 corresponds to "Extremely Unhappy" and 10 to "Extremely Happy".

Life satisfaction: (more cognitive?) "All things considered, how satisfied are you with your life as a whole nowadays?", with answers on a 0 to 10 scale, where 0 means extremely dissatisfied and 10 means extremely satisfied.

How happy are you?	Frequency	Percent	Cumulative Percentage	Life satisfaction as a whole	Frequency	Percent	Cumulative Percentage
			1 creentage	whole			1 creentage
Extremely unhappy	147	0	0	Extremely dissatisfied	477	2	2
1	183	1	1	1	380	1	3
2	367	1	2	2	648	2	5
3	688	2	4	3	1082	3	8
4	853	3	7	4	1236	4	12
5	2921	9	17	5	3355	11	23
6	2566	8	25	6	2682	9	32
7	5944	19	44	7	5392	17	49
8	8966	29	72	8	8144	26	75
9	5427	17	90	9	4783	15	90
Extremely happy	3161	10	100	Extremely satisfied	3116	10	100
Total	31222			Total	31294		

The distributions actually look very similar: happiness and life satisfaction scores are almost the same

ESS eudaimonic questions

Our first eudaimonic measure here is that of flourishing, as described in Huppert and So (2009).

This is based on the answers to **seven** different well-being questions. The first one of these is a happiness question: as our goal here is to see how hedonic and eudaimonic measures relate to each other, we therefore drop the happiness aspect of flourishing. Our modified version of Huppert and So's index is defined by the answers to the six different questions below.

Engagement, interest	I love learning new things.
Meaning, purpose	I generally feel that what I do in my life is valuable and worthwhile.
Self-esteem	In general, I feel very positive about myself.
Optimism	I'm always optimistic about my future.
Resilience	When things go wrong in my life it generally takes me a long time to get back to normal. (reverse coding)
Positive relationships	There are people in my life who really care about me.

The measure they propose of **flourishing** is agreement with the first two "core" questions, plus agreement with at least three of the next four questions.

Fifty six percent of the ESS sample is flourishing according to this definition.

Cronbach's alpha for the answers to the six measures we keep from Huppert and So's measure is 0.63.

The second measure is developed by the New Economics Foundation (2008), creating indices of:

- Vitality
- Resilience and Self-Esteem
- Positive Functioning, Supportive Relationships, Trust and Belonging

Each of these three is constructed as the unweighted sum of the answers to a number of **z-score transformed** questions (such that each of the questions has a mean of zero and a variance of one).

Vitality consists of answers to questions on how much of the time during the past week the individual felt **tired**, felt that everything they did was an effort, could not get going, had restless sleep, had a lot of energy, and felt rested when they woke up in the morning, plus the respondent's general health and whether their life involves a lot of physical activity.

All of these are recoded so that higher values reflect greater vitality.

- Similarly, resilience and self-esteem is given the sum of the answers to the four following z-score transformed questions:
- "In general I feel very positive about myself"
- "At times I feel as if I am a failure"
- "I'm always optimistic about my future"
- "When things go wrong in my life, it generally takes me a long time to get back to normal".

Again, all of these are recoded so that higher numbers reflect greater resilience.

- Last, **positive functioning** is determined by the answers to the following questions:
- "In my daily life I get very little chance to show how capable I am"
- "Most days I feel a sense of accomplishment from what I do"
- "In my daily life, I seldom have time to do the things I really enjoy"
- "I feel I am free to decide how to live my life"
- "How much of the time during the past week have you felt bored?"
- "How much of the time during the past week have you been absorbed in what you were doing"
- "To what extent do you get a chance to learn new things?"
- "To what extent do you feel that you get the recognition you deserve for what you do?"
- "I generally feel that what I do in my life is valuable and worthwhile"

Pairwise correlations between Hedonic and Eudaimonic Measures of Well-Being (All converted into dichotomous measures)

Table 2. Pairwise correlations between Hedonic and Eudaimonic Measures of Well-Being

	Happiness	Life Satisfaction	Flourishing	Vitality	Resilience	Functioning
Happiness	1					
Life Satisfaction	0.6106	1				
Flourishing	0.2718	0.2629	1			
Vitality	0.2573	0.2574	0.2752	1		
Resilience	0.2635	0.2608	0.4967	0.3207	1	
Functioning	0.2866	0.2987	0.3126	0.3084	0.3105	1

Is someone who is deprived hedonically also more likely to be deprived eudaimonically?

	Flourishing	Vitality	Resilience	Functioning
High Life Satisfaction	69.2	62.7	62.7	64.8
Low Life Satisfaction	43.1	37.0	36.7	34.9
High Happiness	68.5	61.7	61.8	62.9
Low Happiness	41.4	35.8	35.3	34.1
All	56.2	50.0	49.7	50.0

Someone with high life satisfaction or happiness is fairly likely to also be flourishing, have vitality, resilience and functioning as well.

A second simple way of evaluating the difference, if any, between hedonic and eudaimonic measures of well-being is to carry out a regression analysis using "standard" socio-demographic variables as controls.

Here's the regression table, just to prove that we did it....

	Life Satisfaction	Happiness	Flourishing	Vitality	Resilience	Functioning
Male	-0.052**	-0.074**	0.090**	0.946**	0.582**	0.021
	(0.014)	(0.014)	(0.018)	(0.060)	(0.036)	(0.052)
Age	-0.051** (0.004)	-0.056** (0.004)	-0.005 (0.005)	-0.116** (0.018)	-0.105** (0.010)	-0.054** (0.015)
Age-squared/1000	0.539**	0.565**	-0.014	1.325**	1.125**	1.070**
ige-squared/1000	(0.047)	(0.047)	(0.059)	(0.205)	(0.121)	(0.178)
Secondary Education	0.047**	0.025	0.149**	0.349**	0.328**	0.487**
•	(0.017)	(0.017)	(0.022)	(0.076)	(0.045)	(0.066)
Tertiary Education	0.090**	0.069**	0.243**	0.408**	0.357**	0.946**
	(0.020)	(0.020)	(0.025)	(0.085)	(0.050)	(0.074)
Separated	-0.267**	-0.339**	-0.085**	-0.471**	-0.177**	-0.284**
	(0.022)	(0.022)	(0.028)	(0.096)	(0.056)	(0.083)
Vidowed	-0.310**	-0.492**	-0.127*	-1.699**	-0.385**	-0.266
Investo County	(0.039)	(0.039)	(0.050)	(0.173)	(0.101)	(0.152)
Never in Couple	-0.200** (0.019)	-0.322** (0.019)	-0.129** (0.025)	-0.271** (0.084)	-0.337** (0.050)	-0.259** (0.073)
og Income	0.201**	0.164**	0.116**	0.545**	0.437**	0.517**
og meone	(0.009)	(0.009)	(0.012)	(0.040)	(0.024)	(0.035)
T Education	0.093**	0.079**	-0.019	-0.232	-0.121	0.197
Lauditon	(0.028)	(0.028)	(0.035)	(0.121)	(0.071)	(0.104)
active Unemployed	-0.429**	-0.273**	-0.293**	-0.847**	-0.518**	-1.531**
	(0.034)	(0.034)	(0.043)	(0.150)	(0.088)	(0.131)
nactive Unemployed	-0.366**	-0.295**	-0.427**	-1.535**	-0.801**	-1.400**
	(0.043)	(0.043)	(0.057)	(0.191)	(0.113)	(0.168)
ick or Disabled	-0.473**	-0.376**	-0.470**	-5.745**	-1.542**	-2.043**
	(0.038)	(0.038)	(0.049)	(0.166)	(0.097)	(0.146)
tetired	0.030	-0.007	-0.125**	-1.000**	-0.156*	-0.156
	(0.028)	(0.029)	(0.036)	(0.125)	(0.074)	(0.109)
Community or Military Service	0.145	0.019	-0.068	0.473	0.282	-0.052
	(0.154)	(0.155)	(0.196)	(0.670)	(0.406)	(0.595)
Iousework, looking after children, others	0.028	0.040*	0.003	-0.079	-0.055	-0.052
Other	(0.017) 0.022	(0.017) 0.047	(0.022) 0.100	(0.076) -0.336	(0.045) 0.063	(0.066) 0.018
Julei	(0.050)	(0.051)	(0.064)	(0.219)	(0.130)	(0.192)
ustria	0.462**	0.213**	0.172**	1.442**	0.077	1.250**
	(0.039)	(0.039)	(0.050)	(0.173)	(0.102)	(0.150)
elgium	0.287**	0.265**	-0.164**	-0.148	-1.032**	0.142
	(0.038)	(0.038)	(0.048)	(0.165)	(0.098)	(0.142)
Bulgaria	-0.404**	-0.468**	0.134*	0.848**	0.280*	0.683**
	(0.048)	(0.048)	(0.062)	(0.216)	(0.126)	(0.186)
witzerland	0.555**	0.486**	0.259**	0.903**	-0.200*	1.032**
	(0.040)	(0.040)	(0.051)	(0.171)	(0.102)	(0.148)
Denmark	0.901**	0.681**	0.251**	0.086	-0.198	2.299**
	(0.041)	(0.041)	(0.051)	(0.174)	(0.103)	(0.150)
pain	0.452**	0.413**	0.166**	-0.334	0.018	-1.343**
	(0.043)	(0.043)	(0.054)	(0.185)	(0.110)	(0.161)
inland	0.590**	0.528**	0.130**	0.154	-1.287**	0.175
iranca	(0.038) -0.149**	(0.038)	(0.047)	(0.163)	(0.096) -0.978**	(0.140)
rance	(0.037)	(0.044	-0.256** (0.047)	-0.346* (0.162)	(0.096)	-0.928** (0.140)
Jnited Kingdom	0.136**	0.152**	-0.025	-1.275**	-0.990**	-1.027**
mica ringaoni	(0.037)	(0.037)	(0.047)	(0.162)	(0.096)	(0.140)
reland	0.304**	0.287**	0.262**	0.318	-0.355**	0.512**
	(0.041)	(0.041)	(0.052)	(0.179)	(0.105)	(0.155)
atvia	-0.094*	-0.183**	-0.080	-0.017	-0.910**	-1.295**
	(0.040)	(0.040)	(0.051)	(0.177)	(0.104)	(0.154)
letherlands	0.372**	0.294**	-0.007	0.441**	-0.608**	0.702**
	(0.038)	(0.038)	(0.047)	(0.163)	(0.096)	(0.141)
lorway	0.362**	0.361**	0.079	0.493**	-0.986**	0.325*
	(0.037)	(0.037)	(0.047)	(0.161)	(0.096)	(0.139)
oland	0.250**	0.148**	-0.012	0.360*	-0.143	0.459**
toutneel	(0.041)	(0.041)	(0.052)	(0.180)	(0.106)	(0.157)
ortugal	-0.435**	-0.224**	0.279**	-1.778**	-0.095	-0.963**
ussia	(0.044) -0.286**	(0.045) -0.225**	(0.056)	(0.194)	(0.115)	(0.168)
	(0.041)	(0.041)	-0.301** (0.053)	-0.030 (0.183)	-0.210* (0.107)	(0.160)
weden	0.536**	0.460**	0.110*	-0.019	-0.684**	-0.193
···········	(0.037)	(0.037)	(0.047)	(0.160)	(0.095)	(0.139)
lovenia	0.243**	0.203**	0.099	0.668**	-0.138	-0.315*
	(0.042)	(0.042)	(0.053)	(0.184)	(0.109)	(0.159)
lovakia	-0.117**	-0.135**	-0.121*	-0.717**	-1.322**	-0.420*
	(0.044)	(0.044)	(0.055)	(0.193)	(0.114)	(0.166)
Constant			-0.562**	-1.911**	-0.788**	-3.665**
			(0.146)	(0.504)	(0.297)	(0.437)
Observations	24297	24247	23773	23694	23917	23317
og-Likelihood	-47346.81	-44715.03	-15496.34	-68824.05	-56948.91	-64182.61
og-Likelihood at zero	-50460.01	-47167.79	-16299.51	-70480.96	-58139.32	-65784.43
t-squared				0.131	0.095	0.128

Note: The omitted categories are: primary education, married, employed and Germany. Standard errors in parentheses.

* significant at 5%; ** significant at 1%

So how similar are these measures?

One way of finding out is to compare the data shapes in the regressions above: Do the same variables explain both hedonic and eudaimonic happiness?

There are two levels at which the comparison between the regression results can be carried out: individual-level variables, such as age, sex and education, and the country fixed effects.

There are 17 individual socio-demographic variables. The perhaps surprising conclusion is that the **patterns of hedonic and eudaimonic regressions are similar** for most of them.

Opposition for only four variables:

- Men have consistently lower hedonic well-being scores, but report significantly higher levels of eudaimonia.
- The retired have lower levels of eudaimonic well-being, but are not significantly different from non-retirees in hedonic terms.
- Labour-force status variables of Full-Time education and (to a certain extent) looking after the house and children: both of these groups do relatively well hedonically, but do not have higher eudaimonia scores.

It thus turns out that in spite of the vivid debates about the correct notion of well-being, the subjective appreciation of life satisfaction, happiness and eudaimonia are similar to each other, and are characterized by very similar socio-demographic patterns (for example, the richer and the higher-educated are both happier, more satisfied and have higher eudaimonia scores).

Not true for groups of countries.

Considering life satisfaction and flourishing, the estimated country dummies are oppositely signed, and both significant, for Belgium, Bulgaria and Portugal. Further the significant life satisfaction effect is not reflected in any flourishing effect for the United Kingdom, Latvia, the Netherlands, Norway, Poland and Slovenia.

Only very few countries attract consistent estimated coefficients across the six regression columns: all else equal, living in Austria is associated with significantly higher scores in all the well-being dimensions, whereas the opposite is true of France, Latvia, Russia and Slovakia.

The group of countries whose inhabitants are always found to score higher in terms of subjective happiness and satisfaction, i.e. Scandinavian countries (Denmark, Norway Sweden), Ireland and Switzerland actually attract higher scores in all hedonic and eudaimonic dimensions except resilience, where the effect is negative.

	Life Satisfaction	Happiness	Flourishing	Vitality	Resilience
Happiness	0.961				
	[0.957]				
Flourishing	0.585	0.545			
	[0.533]	[0.539]			
Vitality	0.545	0.483	0.579		
	[0.592]	[0.506]	[0.523]		
Resilience	0.133	0.091	0.457	0.553	
	[0.094]	[0.040]	[0.483]	[0.499]	
Functioning	0.641	0.536	0.614	0.686	0.491
	[0.610]	[0.540]	[0.556]	[0.763]	[0.443]

The first figure in the cell is the Pearson correlation; the second is the Spearman correlation.

In terms of correlations with explanatory variables, happiness and life satisfaction are the same thing.

Hedonia and Eudaimonia are also reasonably well-correlated.

- These are averages of course: some are dissatisfied but enjoy eudaimonic well-being. These individuals are more likely to be:
- Men, middle-aged, educated, single and separated.
- Income plays only a very minor role in distinguishing hedonic and eudaimonic well-being.
- The retired (but not the unemployed) are significantly less likely to report low life satisfaction and high levels of eudaimonia.
- Least likely to be in the Nordic countries, Switzerland, the Netherlands and Belgium.

Things that I don't know:

- Does eudaimonia exhibit adaptation? Where would we obtain panel data on it?
- Is eudaimonia subject to social comparison?
- Which well-being measure better predicts behaviour?

One piece of evidence for the latter: Benjamin *et al.* (2012), "What Do You Think Would Make You Happier? What Do You Think You Would Choose?", *American Economic Review*.

Regress hypothetical choice on predicted SWB (how happy you think it will make you) and eleven non-SWB aspects of life:

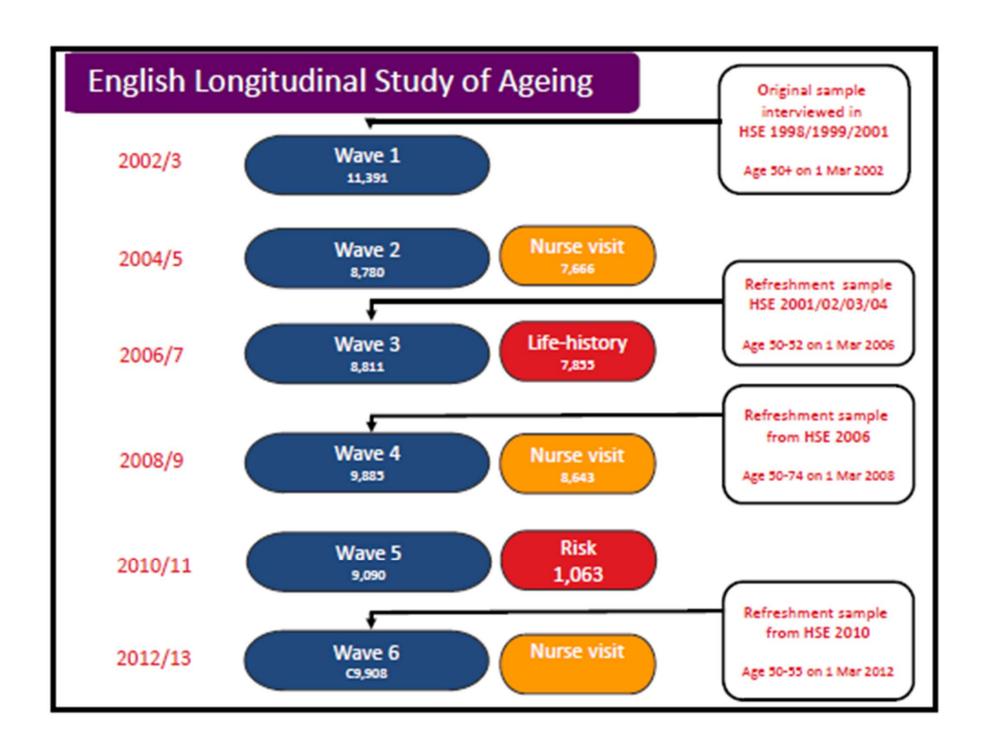
- Family happiness
- Health
- Life's level of romance
- Social life
- Control over your life
- Life's level of spirituality
- Life's level of fun
- Social status
- Life's non-boringness
- Physical comfort
- Sense of purpose

As shown by the R², 0.38 of the variation in choice is explained by SWB (own happiness) alone.

Regressing choice on both SWB and the eleven non-SWB aspects yields a barely higher R² of 0.41.

But: "the four scenarios we designed to be representative of typical important decisions facing our college-age Cornell sample... socialize versus sleep, family versus money, education versus social life, and interest versus career... are among the scenarios with the lowest univariate R^2 and, correspondingly, the highest incremental R^2 from adding non-SWB aspects as regressors"

Eudaimonia may then matter much more in certain reallife situations



Psychological wellbeing

Hedonic / affective

· Happiness, joy

Evaluative

Life satisfaction

Eudemonic

 Sense of purpose, autonomy, self-realization Wave 2 of ELSA took place in 2004/5.

This covers individuals aged 50 or over.

We can model deaths by Wave 5 in 2010/11, six years later.

Which measures of well-being at Wave 2 best predict death by Wave 5?

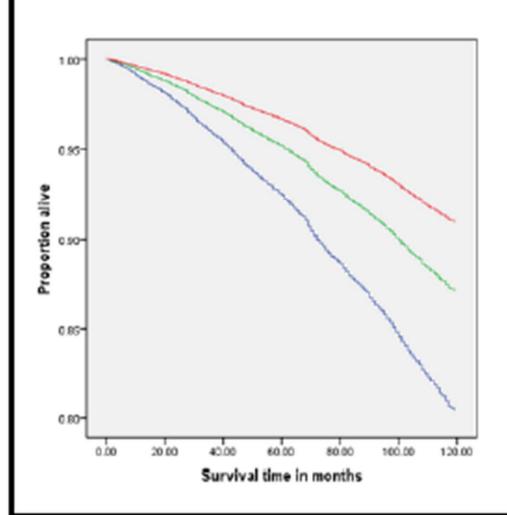
This is work by Andrew Steptoe and colleagues at UCL, available from the ELSA website.

http://www.ifs.org.uk/ELSA

Enjoyment of life and survival in ELSA

- 9,025 core members of ELSA (aged 50+) followed for 9 years, 5 months
- 1,785 dated fatalities
- Enjoyment of life from CASP19
 - ➤I enjoy the things that I do
 - I enjoy being in the company of others
- Cox proportional hazards regression

Enjoyment of life and survival in ELSA

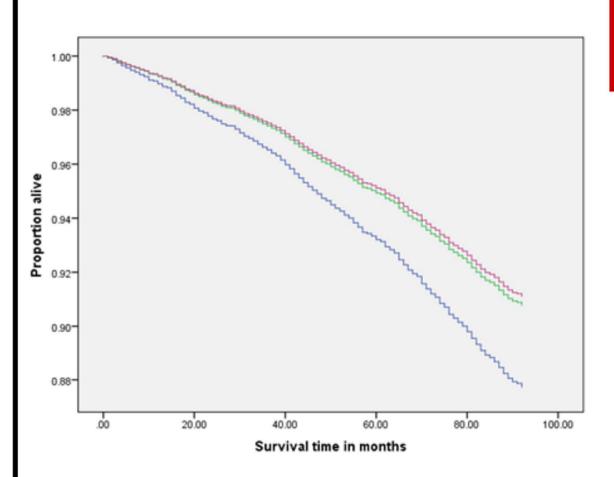


Deaths

Lowest enjoyment: 28.8% Second: 18.7% Highest enjoyment: 9.9%

Age,gender: HR 0.43 (.37 - .51)

Life satisfaction and survival in ELSA



Deaths

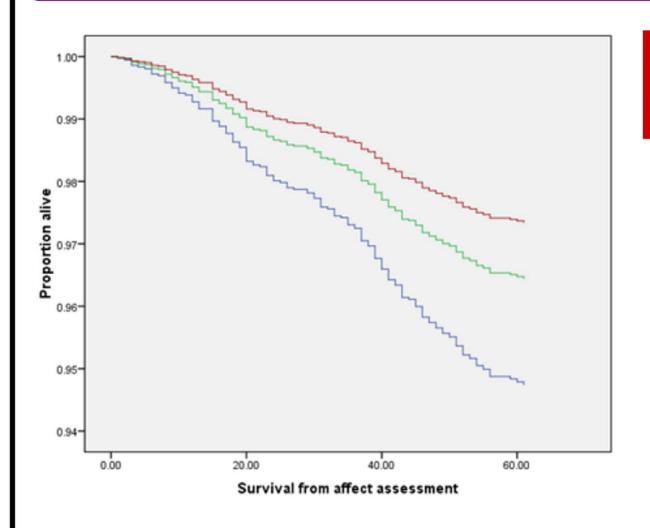
Lowest satisfaction: 17.4% Second: 13.5% Highest satisfaction: 13.1%

> Age,gender: HR 0.69 (.60 - .80)

Ecological momentary assessment

- 4,732 participants in wave 2 (data from 4,258, 90%)
- Mean age 64.39, range 52 79
- Four assessments
 - Waking
 - 30 minutes after waking
 - > 7:00 pm
 - Bedtime
- 4-point ratings (1 = not at all; 4 = extremely)
 - > Happy, excited, content
 - Anxious, worried, fearful
 - Tired

EMA positive affect and survival in ELSA



Deaths

Lowest PA: 7.3% Second: 4.6% Highest PA: 3.6%

Age,gender: HR 0.50 (.35 - .72)

+ demographics & health indicators HR 0.56 (.38 - .82)

+ depression and health behaviour HR 0.65 (.44 - .96)

PNAS 2011