A social cure for social comparisons?

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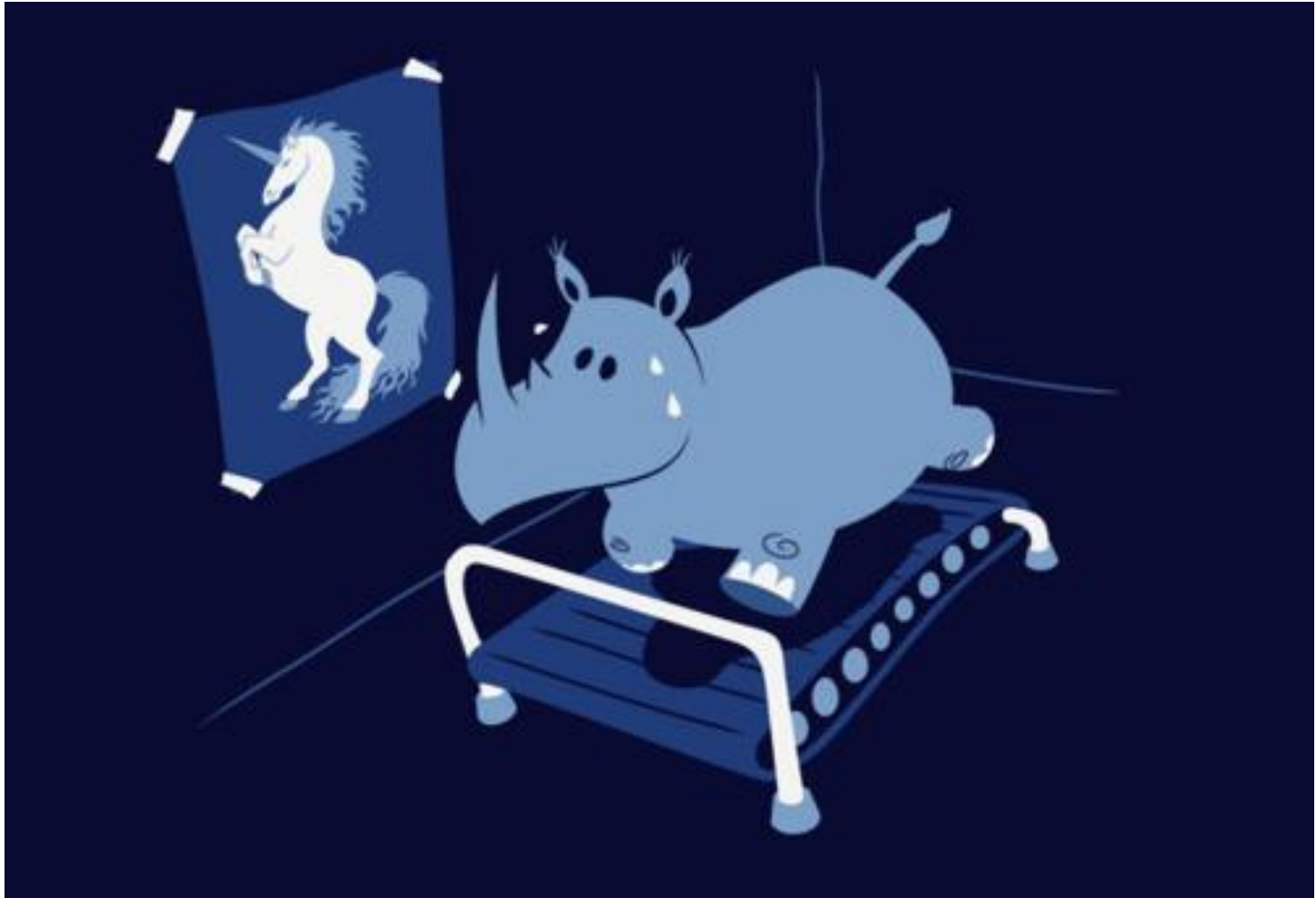
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Social comparisons

Social comparisons

Envy is bad for people's happiness

- Bertrand Russel claimed that "Whoever wishes to increase human happiness must ... diminish envy" (Russel 1930).

Envy is bad for physical and mental health

- Individuals with lower relative income have higher morbidity (Pham-Kanter 2009, Subramanyam et al. 2009).

- As high income inequality exacerbates income comparisons, more unequal countries exhibit higher morbidity and mortality (Wilkinson and Pickett 2009).

Envy is bad for economic decisions

- Social comparisons drive people into over-consumption and over-work (Hirsh 1976, Neumark and Postlewaite 1998, Bowles and Park 2005).

Does social capital mediate the relationship between income and well-being?

Figure: Hypothesis
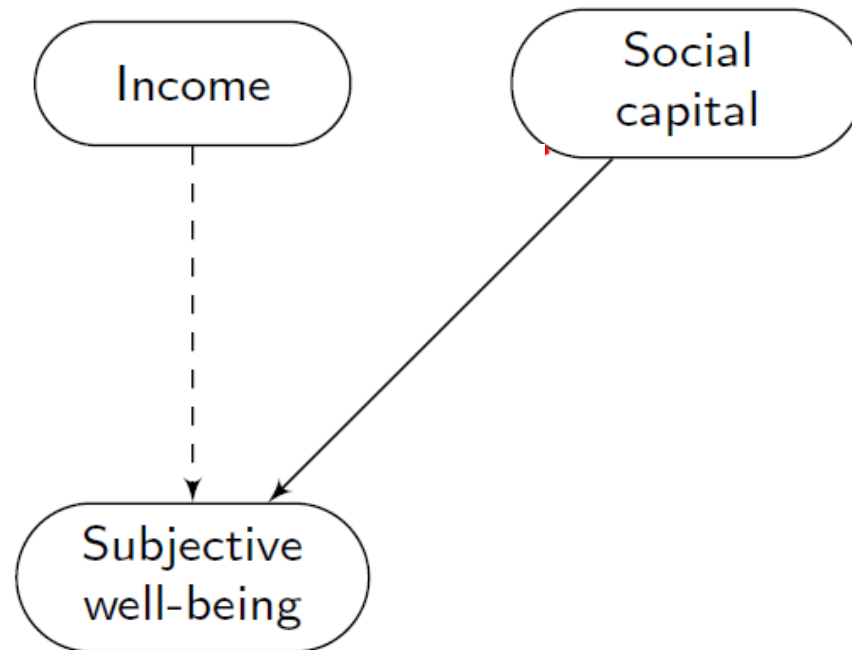
Database and variables

- German Socio-Economic Panel (GSOEP): 12 waves from period 1985-2011 (160,000 observations, 40,000 individuals)

- **Overall life satisfaction**: self reported (0-10)

- **Individual income**: monthly disposable equivalent income (in real terms, EUR 2011)

- **Reference income**: average income of the reference group (gender, age group, geographical area, year)

- **Social capital**: social gathering, helping friends, volunteering, local political participation (dummy variables: "at least once per month")

- **Controls**: socio-demographic characteristics, region, year

OLS with individual fixed effects: SCindex

$$LS_{i,t} = \alpha + \beta_1 * log(Individual.income)_{i,t} + \beta_2 * log(Reference.income)_{i,t} + \beta_3 * SCindex_{i,t}$$
$$+ \beta_{13} * SCindex_{i,t} * log(Individual.income)_{i,t}$$
$$+ \beta_{23} * SCindex_{i,t} * log(Reference.income)_{i,t}$$
$$+ \Sigma_j(\gamma_j * Control_{ji,t}) + \varepsilon_{i,t}$$

- SCindex = 0,1,2,3,4 (the sum of four dummies "at least once per month")
- SCindex = Social gathering + Helping friends + Volunteering + Local participation
- (e.g. SCindex=3 means performing three out of the four SC actions, at least once per month)

OLS with individual fixed effects: SCindex

Table: Moderation effects

	Social capital index = 1	Social capital index = 2	Social capital index = 3	Social capital index = 4
Log of individual income	-19%	-28%	-42%	-48%
Log of reference income	-38%	-60%	-78%	-105%

OLS with individual fixed effects: SCindex

	(1)	(2)	(3)
Log of individual income	0.387*** (20.03)	0.481*** (13.29)	0.498*** (13.57)
Log of reference income	-0.359*** (-3.45)	-0.361*** (-3.47)	-0.663*** (-4.77)
Social capital index = 1 * Log of individual income		-0.0804** (-2.23)	-0.0942** (-2.54)
Social capital index = 2 * Log of individual income		-0.113*** (-3.00)	-0.137*** (-3.53)
Social capital index = 3 * Log of individual income		-0.176*** (-4.06)	-0.210*** (-4.71)
Social capital index = 4 * Log of individual income		-0.188*** (-3.25)	-0.237*** (-3.95)
Social capital index = 1 * Log of reference income			0.254** (2.35)
Social capital index = 2 * Log of reference income			0.399*** (3.51)
Social capital index = 3 * Log of reference income			0.514*** (3.80)
Social capital index = 4 * Log of reference income			0.701*** (3.68)
Social capital index (main effect)	Yes	Yes	Yes
Controls (socio-demographic, region, year)	Yes	Yes	Yes
Individual fixed effects	Yes	Yes	Yes
Number of observations	158175	158175	158175
Number of individuals	40897	40897	40897
R^2 within	0.0420	0.0422	0.0424
R^2 between	0.0488	0.0491	0.0498
R^2 overall	0.0457	0.0459	0.0464

Note: OLS with individual fixed effects (robust standard errors). Dependent variable: Life satisfaction. Omitted categories: "Social capital index = 0 * Log of individual income" and "Social capital index = 0 * Log reference income". Each equation includes the main effect of social capital index (four dummies). Controls: sex (omitted due to fixed effects), age, age squared, marital status, years of education, labour market status, house owner, living in East Germany, regional dummies, year dummies. * $p< 0.1$, ** $p< 0.05$, *** $p< 0.01$, t statistics in parentheses. Source: GSOEP 1985-2011.

Results

- The relationship between absolute income and SWB halves when individuals are highly trustful and engaged in social activities.

- The well-being of individuals with high levels of social capital is unrelated to income comparisons.

Next steps

- Test of causality: does an increase in social capital decrease the importance of money for people's well-being?

- Evidence from positive psychology: poor relationships boost materialism.

- Status and success offer compensation for poor relationships

Test of causality

- Does changes in individuals' social capital later modify the importance of income for their well-being?

OLS with individual fixed effects: ΔSCindex

$$LS_{i,t} = \alpha + \beta_1 * log(Individual.income)_{i,t} + \beta_2 * log(Reference.income)_{i,t} + \beta_3 * \Delta SCindex_{i,t}$$
$$+ \beta_{13} * \Delta SCindex_{i,t} * log(Individual.income)_{i,t}$$
$$+ \beta_{23} * \Delta SCindex_{i,t} * log(Reference.income)_{i,t}$$
$$+ \Sigma_j(\gamma_j * Control_{ji,t}) + \varepsilon_{i,t}$$

- $\Delta\ SCindex_{i,t}$: categorical variable
- $\Delta\ SCindex_{i,t} =$
  - *negative change* if $SCindex_{i,t} < SCindex_{i,t-1}$
  - *no change* if $SCindex_{i,t} = SCindex_{i,t-1}$ (base level)
  - *positive change* if $SCindex_{i,t} > SCindex_{i,t-1}$

OLS with individual fixed effects: ΔSCindex

Table: Moderation effects

	Social capital index: negative change	Social capital index: positive change
Log of individual income	11% (n.s.)	-13%
Log of reference income	22% (n.s.)	-33%

Database and variables

- ▶ EU-Statistics on Income and Living Conditions (EU-SILC): last available wave, 2013 (29 countries, 320,000 individuals)

- ▶ **Overall life satisfaction**: self reported (0-10)

- ▶ **Individual income**: monthly disposable equivalent income (adjusted to country price level, 100=EU28)

- ▶ **Reference income**: average income of the reference group (gender, age group, geographical area)

- ▶ **Social capital**: getting together with friends (dummy: at least once per month), trust in others (dummy: high trust, 6-10)

- ▶ **Controls**: socio-demographic characteristics, country

OLS with country fixed effects: EU-SILC

|	Life satisfaction		Frequency of feeling downhearted or depressed		Job satisfaction	
	Social capital index		Social capital index		Social capital index	
	1	**2**	**1**	**2**	**1**	**2**
Absolute income	-13%	-45%	-33%	-55%	-39%	-56%
Reference income	-23% (n/s)	-102%	-56%	-102%	-57%	-72%

Instrumenting social capital: Lewbel method (EU-SILC)

	Life satisfaction		Frequency of feeling downhearted or depressed		Job satisfaction	
	Social capital index		Social capital index		Social capital index	
	1	2	1	2	1	2
Individual income	-20%	-53%	-38%	-64%	-43%	-61%
Reference income	-41%	-112%	-61%	-108%	-83%	-109%

OLS with country fixed effects: ESS

	Life satisfaction		Happiness		Happy: past week	
	Social capital index		Social capital index		Social capital index	
	1	2	1	2	1	2
Absolute income	-27%	-68%	-32%	-73%	-21%	-85%
Income rank 1-3	-35% (n/s)	-130%	-64%	-176%	-6% (n/s)	-145%
Income rank 8-10	-62%	-101%	-97%	-142%	-96%	-133%

The life satisfaction gap between rich and poor people declines with raising trust in others (32 European countries, EU-SILC data)
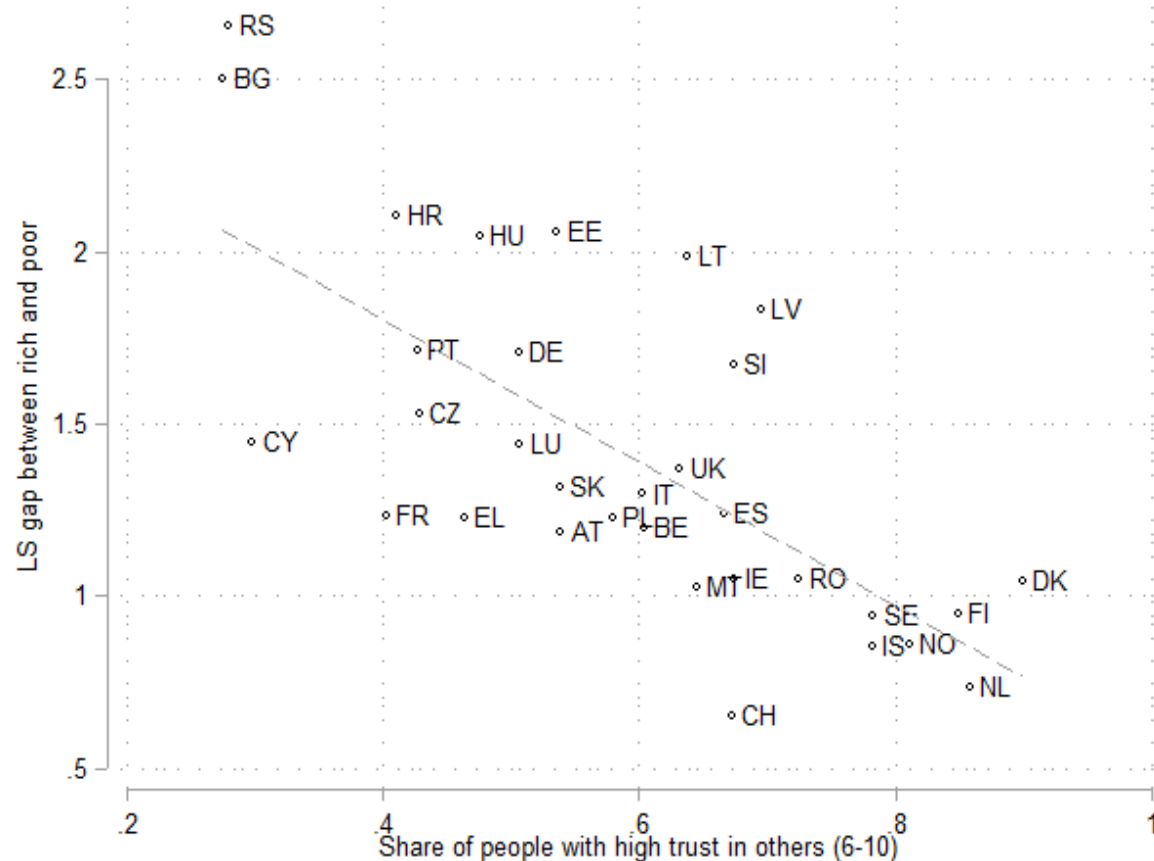
The life satisfaction gap between rich and poor people declines with raising trust in others (109 European regions, EU-SILC data)
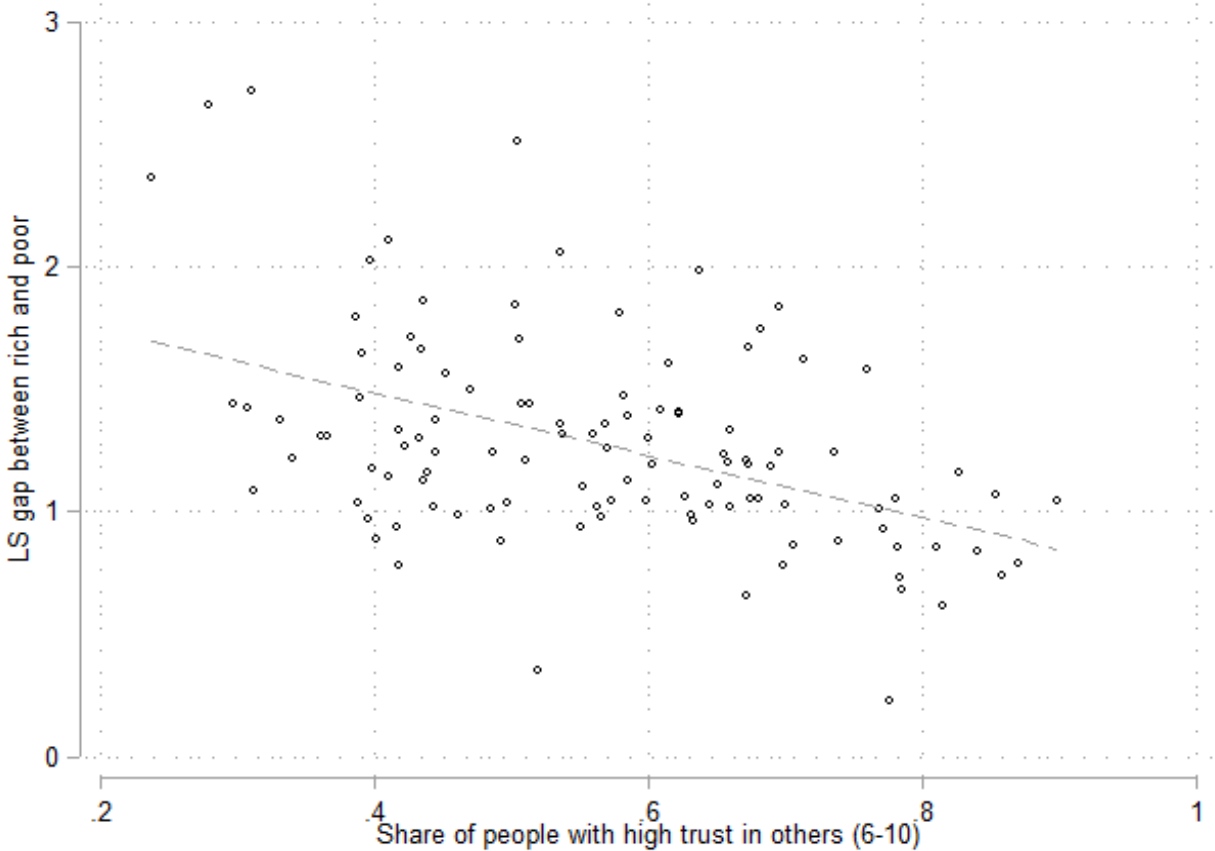
Across 32 European countries, the life satisfaction gap between rich and poor people negatively correlates with trust

	Life satisfaction gap between rich and poor people (standardized coefficients).					
	(1)	(2)	(3)	(4)	(5)	(6)
Trust in others (std.)	-0.700*** (-4.98)			-0.541*** (-3.72)	-0.577*** (-3.97)	-0.489*** (-3.38)
Gini index (std.)		0.587*** (3.74)		0.300** (2.18)		0.207 (1.53)
GDP per capita (std.)			-0.546* (-1.95)		-0.330* (-1.90)	-0.271 (-1.69)
Number of observations	32	32	32	32	32	32
Adjusted R^2	0.474	0.323	0.275	0.525	0.556	0.571

Across 109 European regions, the life satisfaction gap between rich and poor people negatively correlates with trust

	Life satisfaction gap between rich and poor people (standardized coefficients).					
	(1)	(2)	(3)	(4)	(5)	(6)
Trust in others (std.)	-0.431***			-0.431***	-0.404***	-0.408***
	(-4.68)			(-4.95)	(-4.49)	(-4.72)
Gini index (std.)		0.197*		0.197*		0.182*
		(1.79)		(1.89)		(1.79)
GDP per capita (std.)			-0.222*		-0.146*	-0.124
			(-1.90)		(-1.73)	(-1.61)
Number of observations	109	109	109	109	109	109
Adjusted R^2	0.178	0.0300	0.0405	0.210	0.192	0.218

Conclusion

- Money becomes more important when social capital is scarce
- The well-being of individuals with high levels of social capital is unrelated to income comparisons.
- Holding constant the income distribution, greater social capital reduces the well-being inequality among income classes

Results

- This evidence is consistent with substitution between social capital and income.

- It is inconsistent with complementarity