

OUR SENSITIVITY TO INEQUALITY

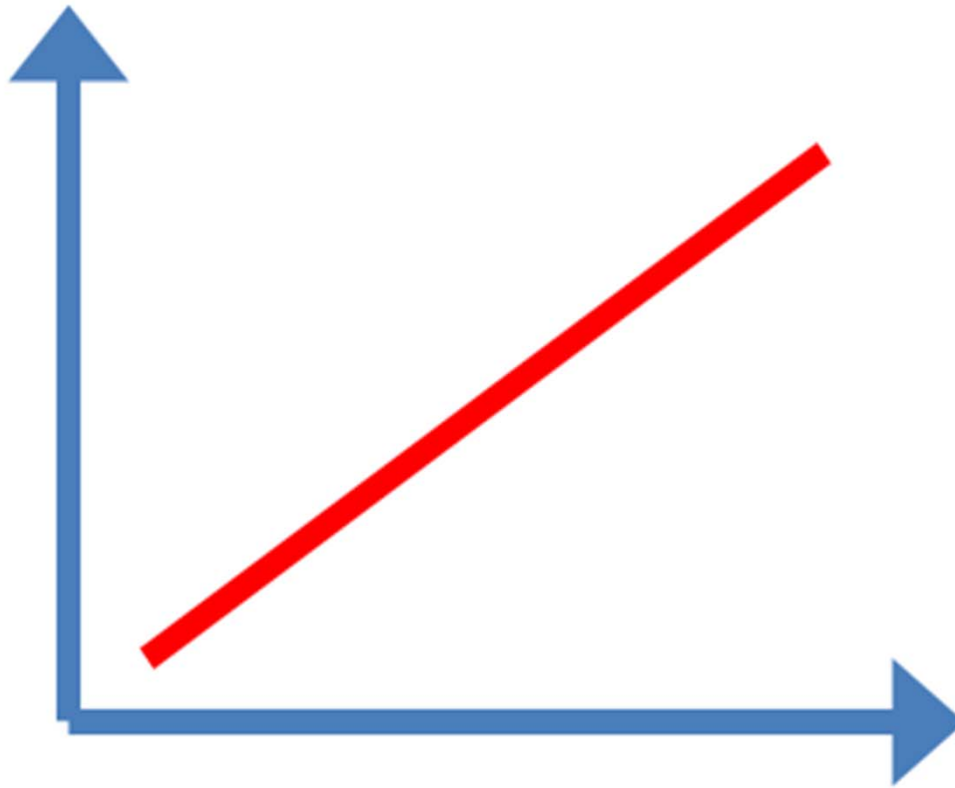
Richard Wilkinson

PhD, Professor Emeritus of Social Epidemiology at the University of Nottingham. Honorary Professor of Epidemiology and Public Health at University College London and Visiting Professor at University of York

INRICH
7th Annual Workshop

Concordia University, Loyola Campus
Montreal, Quebec, Canada
June 26-27, 2015

Problems

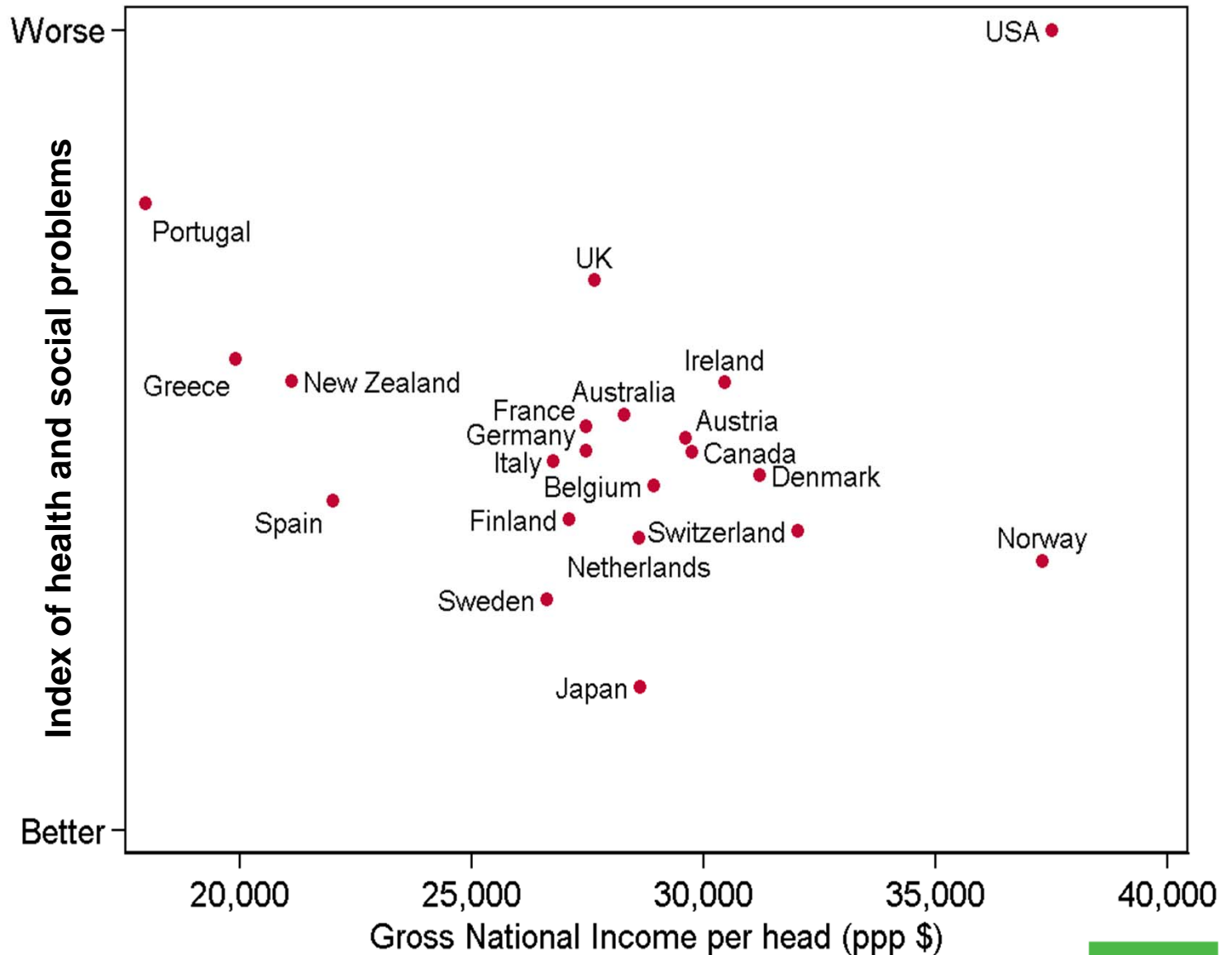


**Income
inequality**

Neither health nor social problems are related to national income per head

Index of:

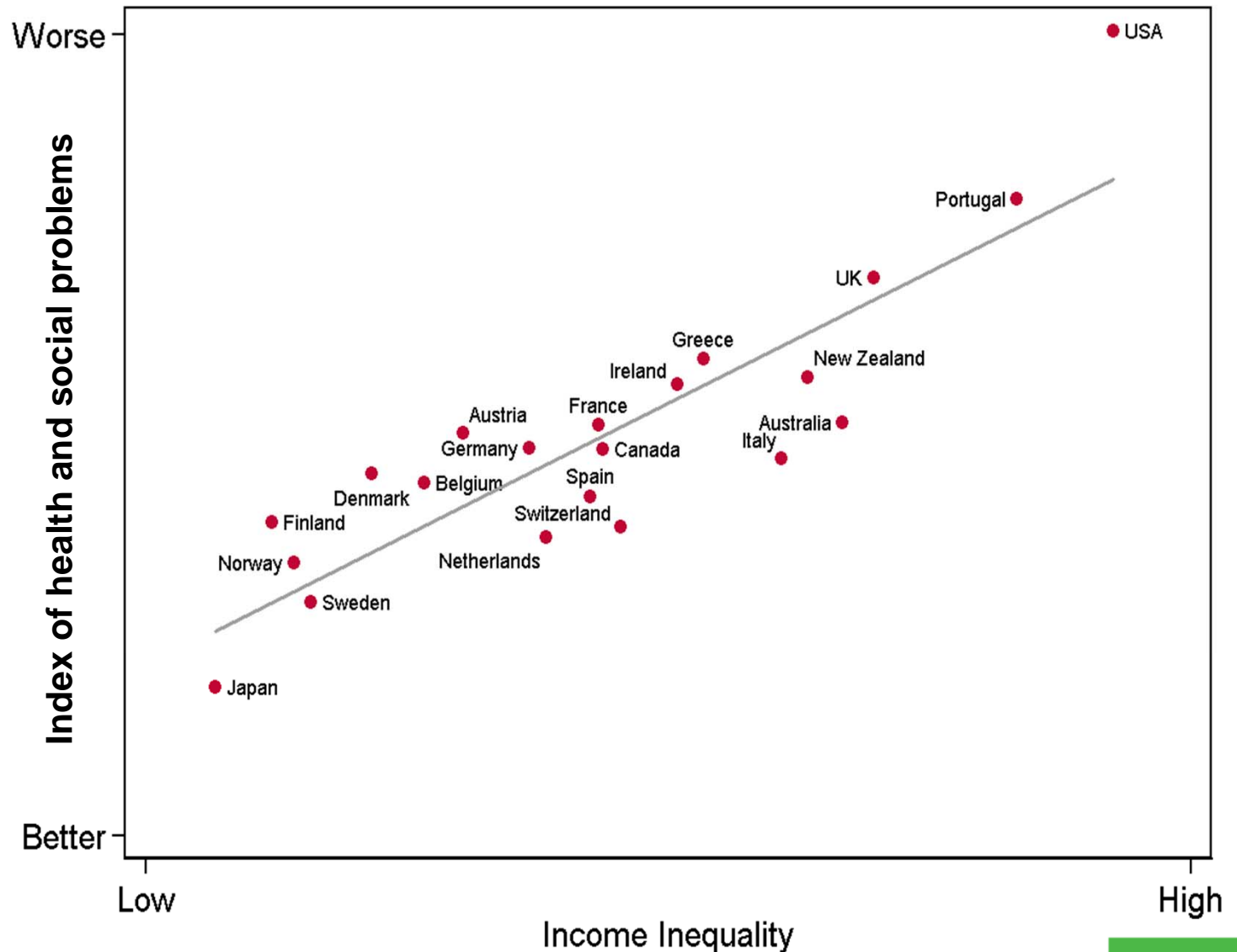
- Life expectancy
- Math & Literacy
- Infant mortality
- Homicides
- Imprisonment
- Teenage births
- Trust
- Obesity
- Mental illness – incl. drug & alcohol addiction
- Social mobility



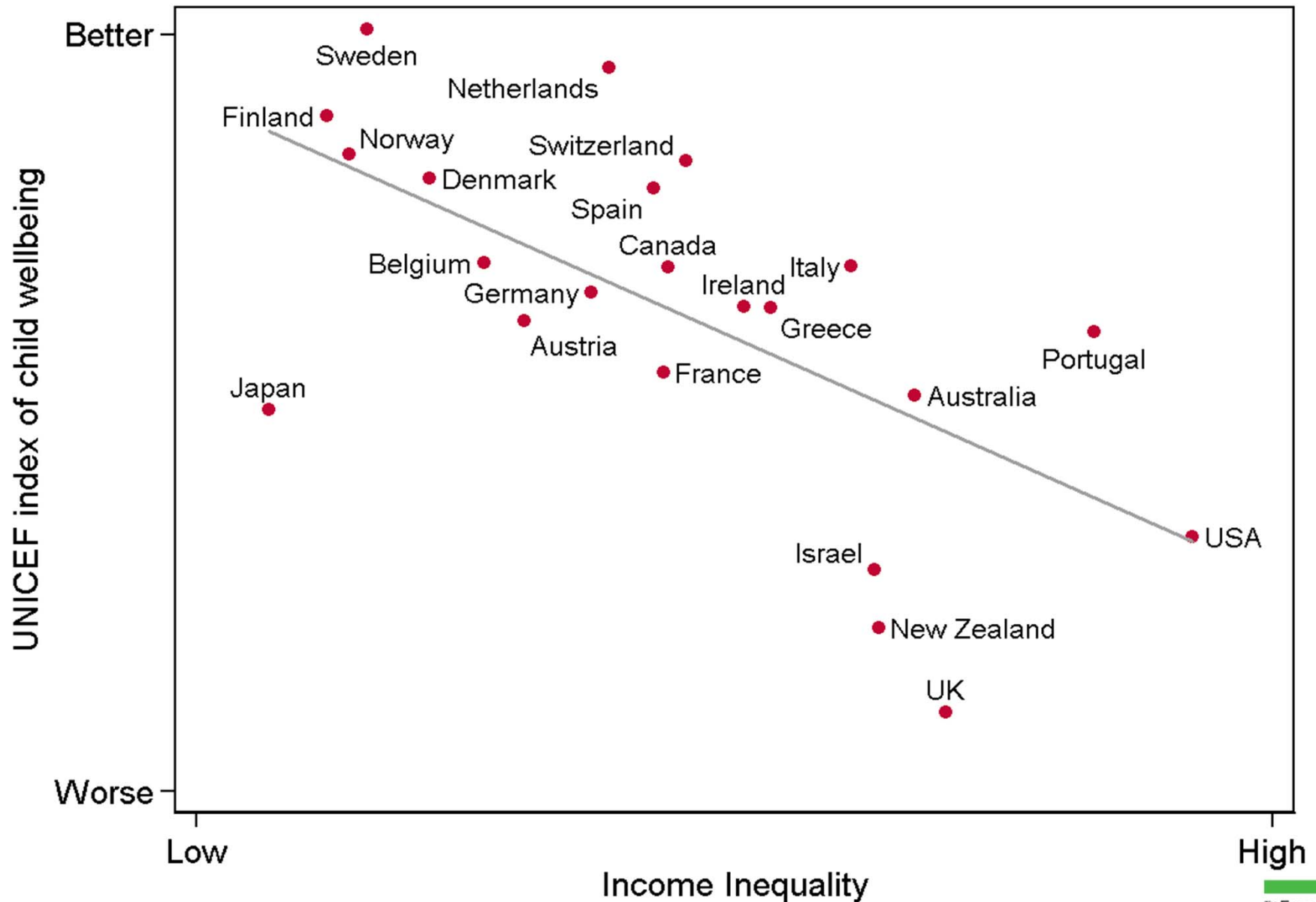
Health and social problems are worse in more unequal countries

Index of:

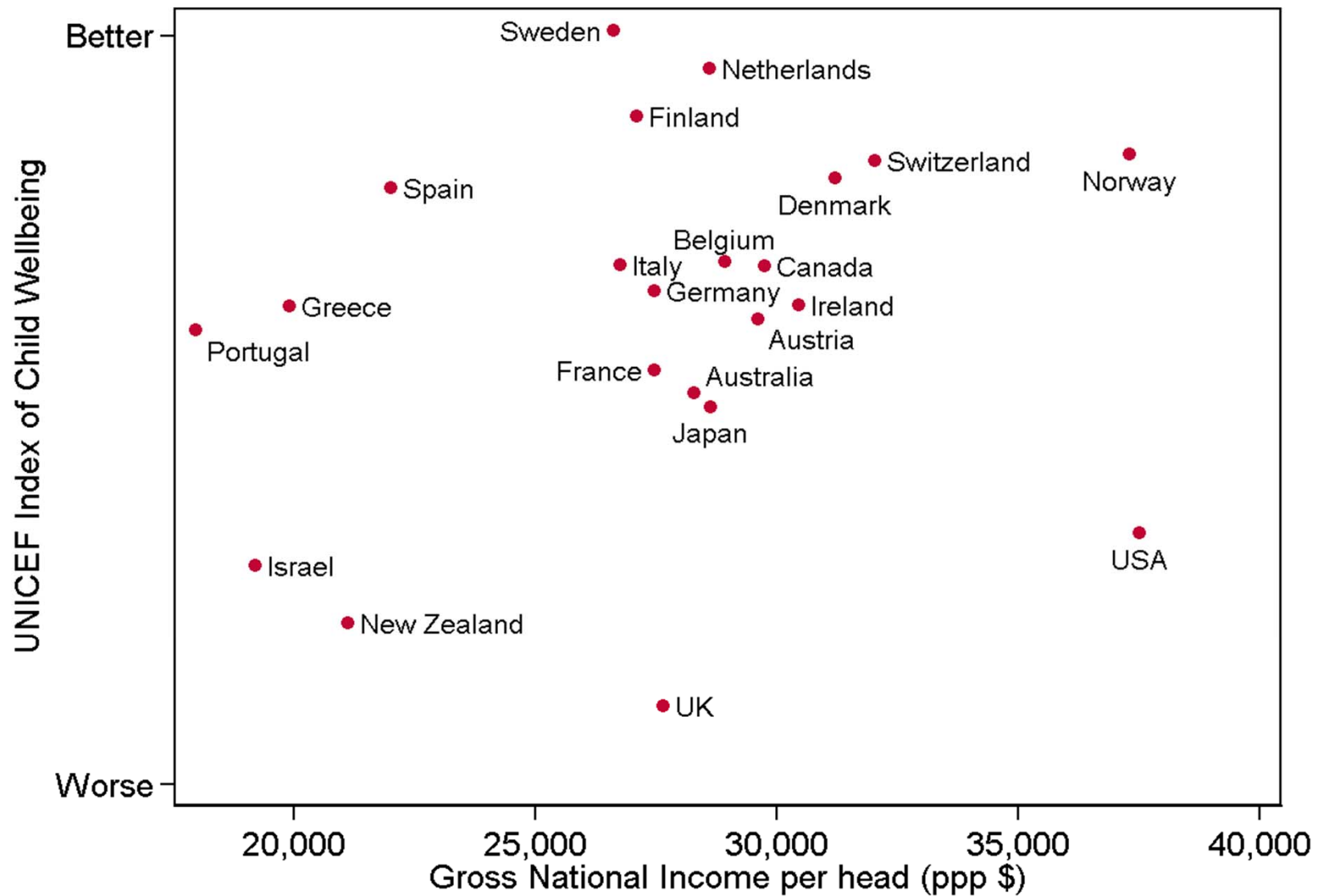
- Life expectancy
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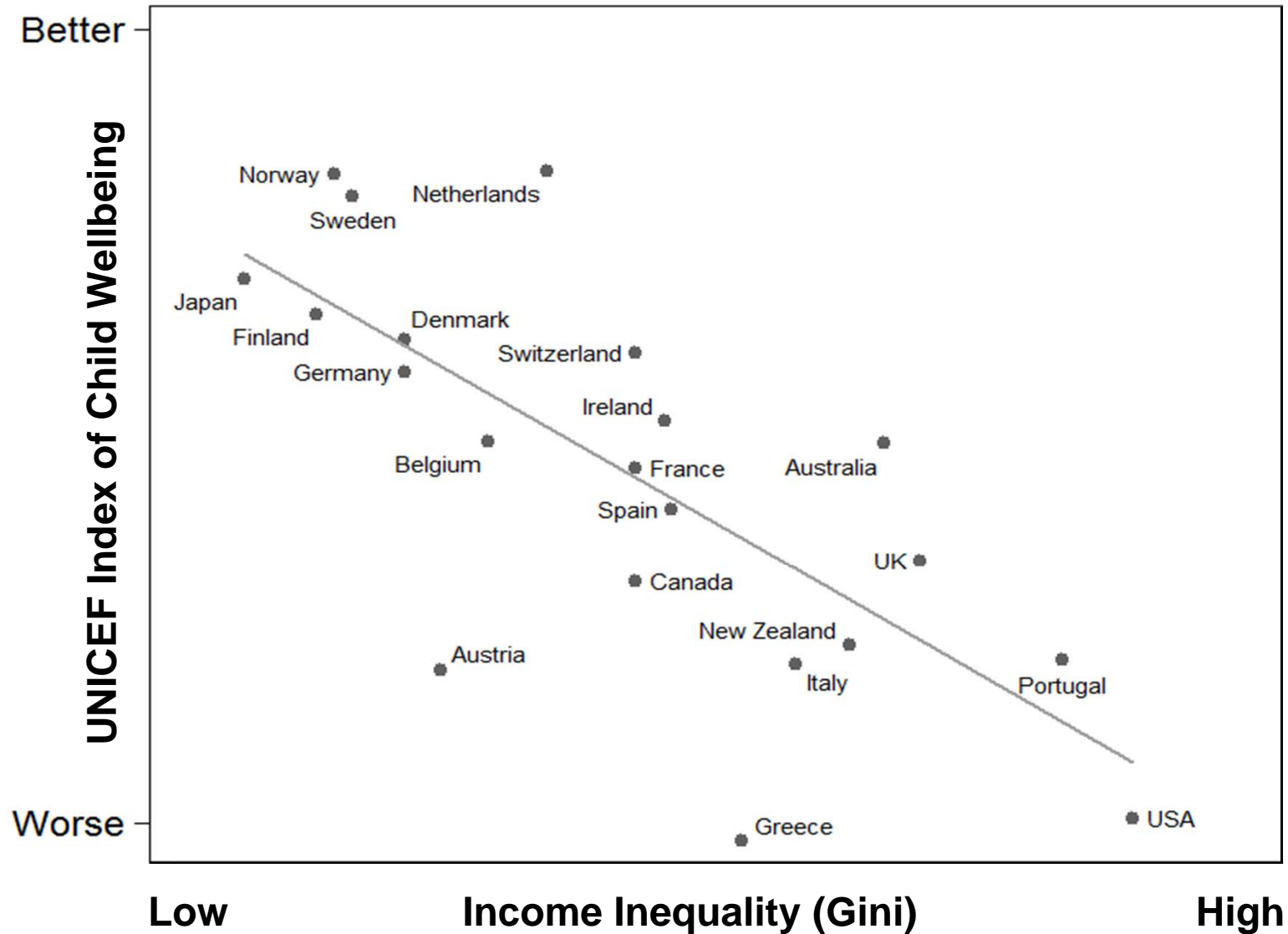
Child well-being is better in more equal countries



Child Wellbeing is not related to National Income per head

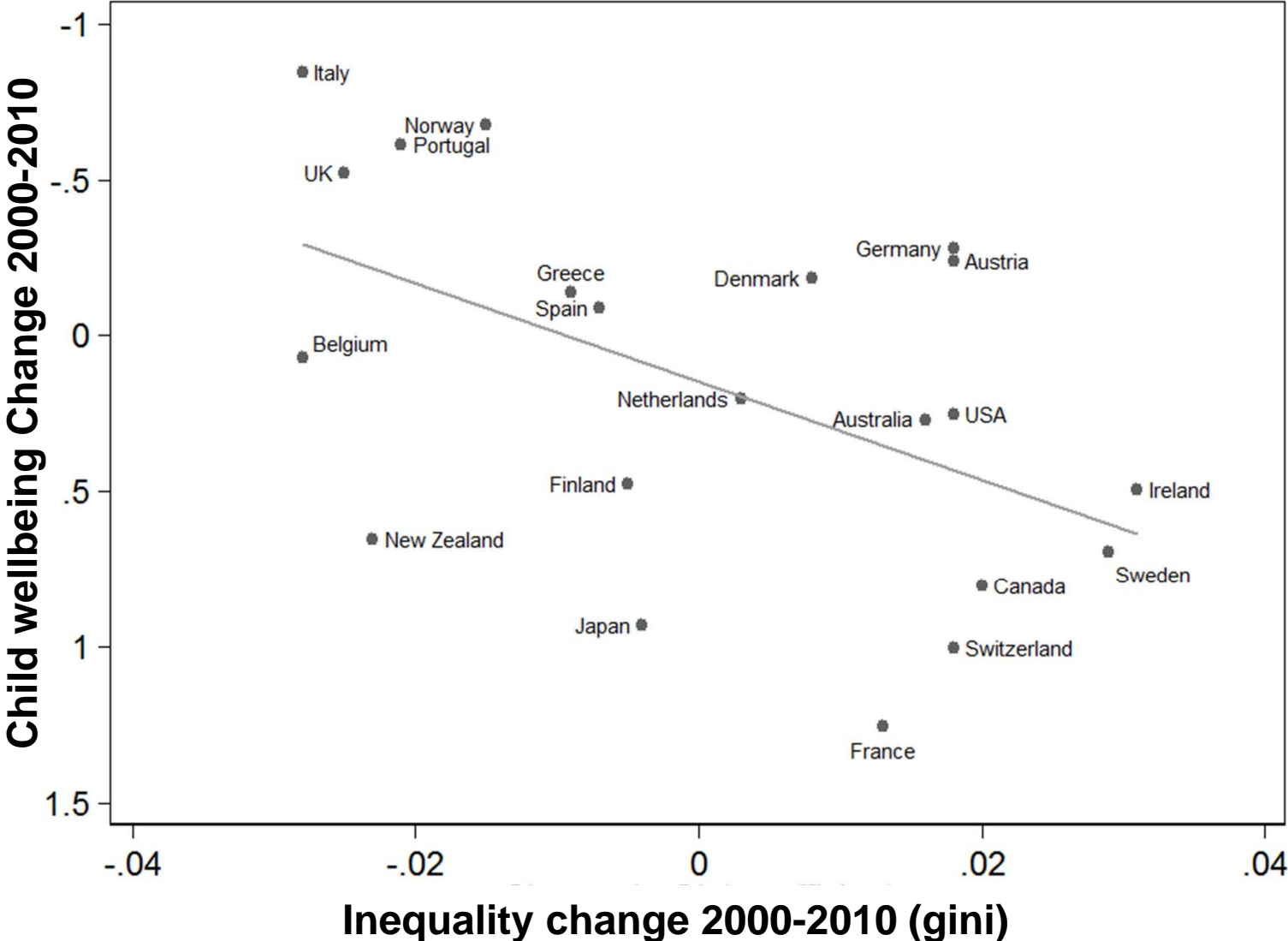


Child Wellbeing is lower in more unequal countries (UNICEF Index 2013)



Pickett & Wilkinson, Pediatrics 2015; 135 (1): S39-S47

Changes in inequality and child wellbeing (UNICEF Index)



Pickett & Wilkinson, Pediatrics. (forthcoming)

In summary... bigger income gaps lead to deteriorations in:-

Social Relations

- **Child conflict**
- **Homicide**
- **Imprisonment**
- **Social capital**
- **Trust**

Health

- **Drug abuse**
- **Infant mortality**
- **Life expectancy**
- **Mental illness**
- **Obesity**

Human Capital

- **Child wellbeing**
- **High school drop outs**
- **Math & literacy scores**
- **Social mobility**
- **Teenage births**

DECEMBER 9, 1985 \$1.95

TIME

Children Having Children

Teen Pregnancy In America

SPIES SPY EVERYWHERE
The U.S. Roundup Accelerates



MAY 21, 2000 \$2.50

TIME

SPECIAL REPORT/SCHOOL VIOLENCE

HOW TO SPOT A TROUBLED KID

DEPRESSION: Do pills help or hurt?
How bad is the copycat problem?
The tide turns on guns

Is Jeff Gordon good for NASCAR?
JIM CROMER on should you day trade



SHATTERED LIVES

Portraits From America's Drug War

by Mikki Norris
Chris Conrad & Virginia Resner

APRIL 17, 2006

JOE KLEIN: HOW CONSULTANTS RUINED POLITICS

TIME

SPECIAL REPORT

DROPOUT NATION

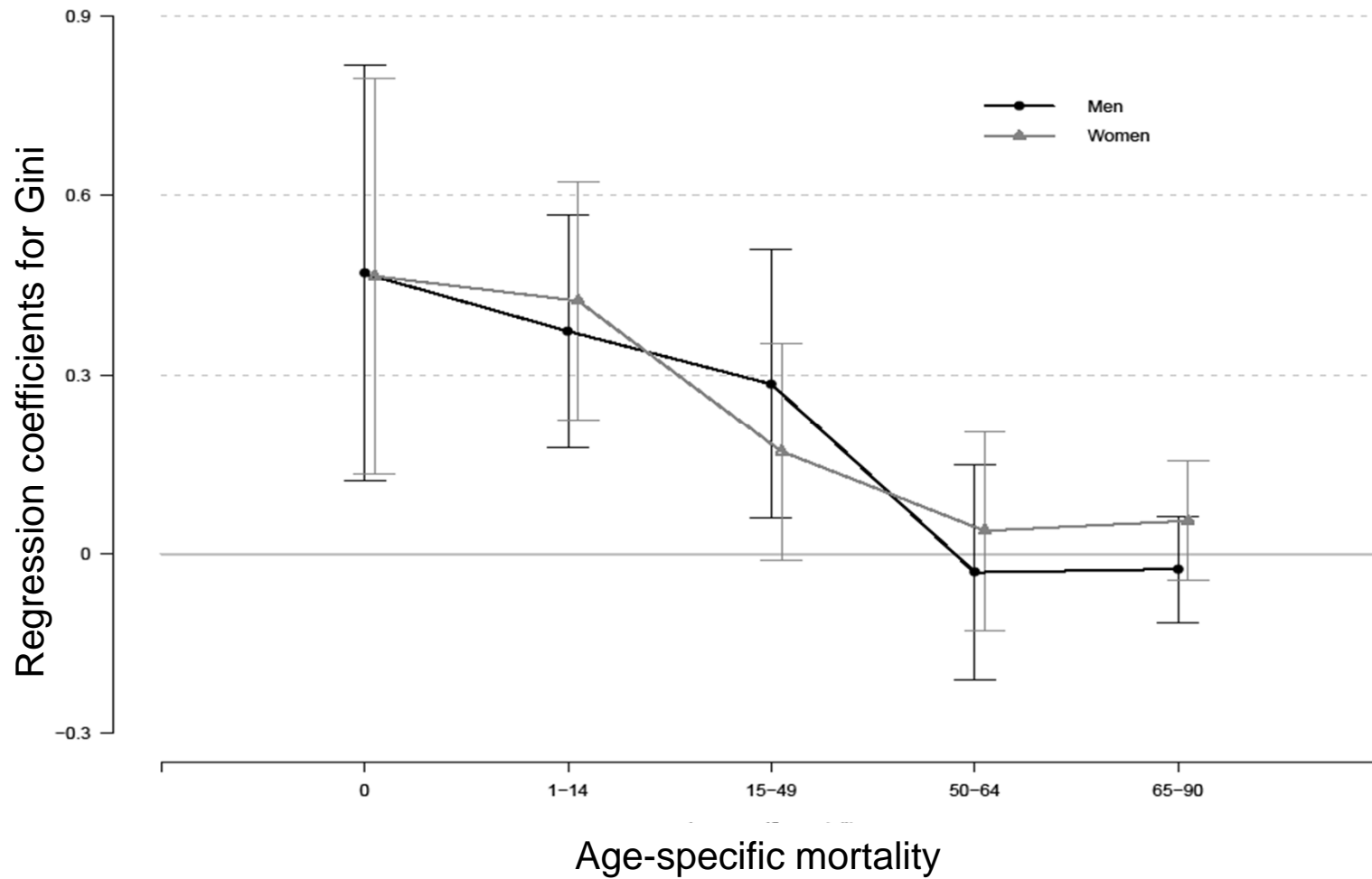
30% of America's high school students will leave without graduating. Here is what one town tells us about the crisis

BY NATHAN THORNBURGH

Christine Harden, 18, of Shelbyville, Ind.

FLIGHT 93: THE MOVIE EXCLUSIVE FIRST LOOK

Age-specific mortality and income inequality in 21 OECD countries



Torre R, Myrskylä M. Max Planck Institute, Working Paper WP-2011-006 2011

Early-life income inequality predicts self-reported health in later life

**Adult health is associated with societal income inequality
experienced in childhood up to 80 years earlier.**

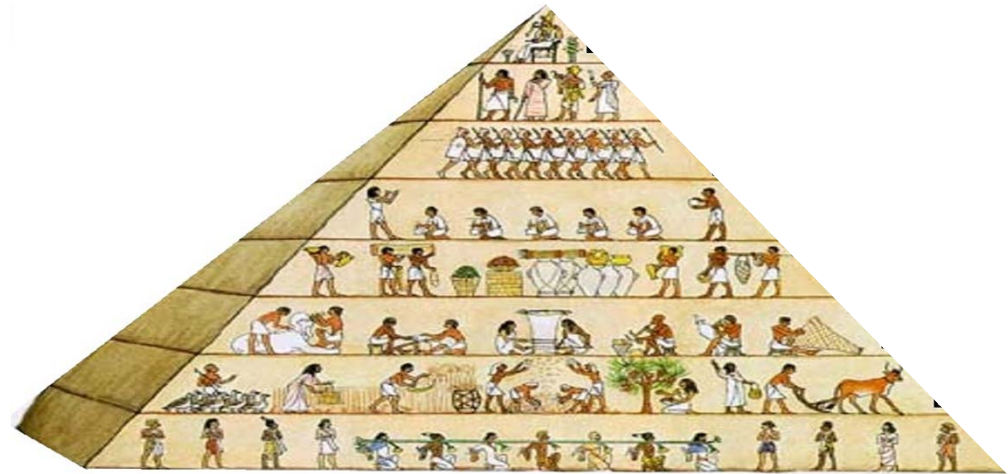
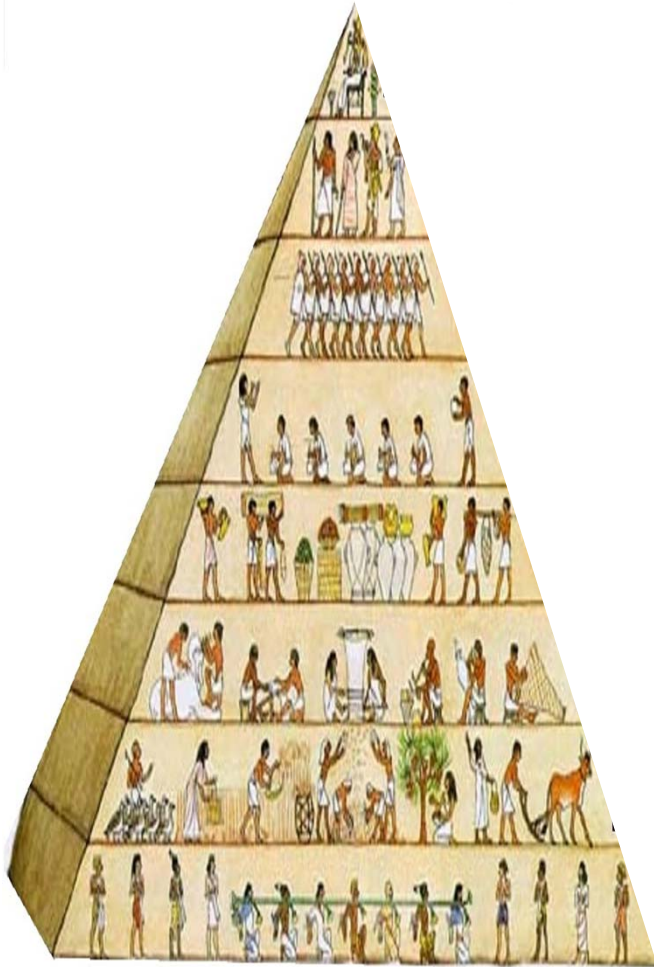
Lillard D, Burkhauser R, Hahn M, Wilkins R. *Soc Sci & Med* 2015; 128: 347-355

“Controlling for demographic and economic factors, we find both men and women are...more likely to report poorer health if income was more unequally distributed during the first years of their lives. The association is robust to alternative specifications of income inequality and time trends and remains significant even when we control for differences in overall childhood health. Our results constitute prima facie evidence that adults' health may be adversely affected by the income inequality they experienced as children.”

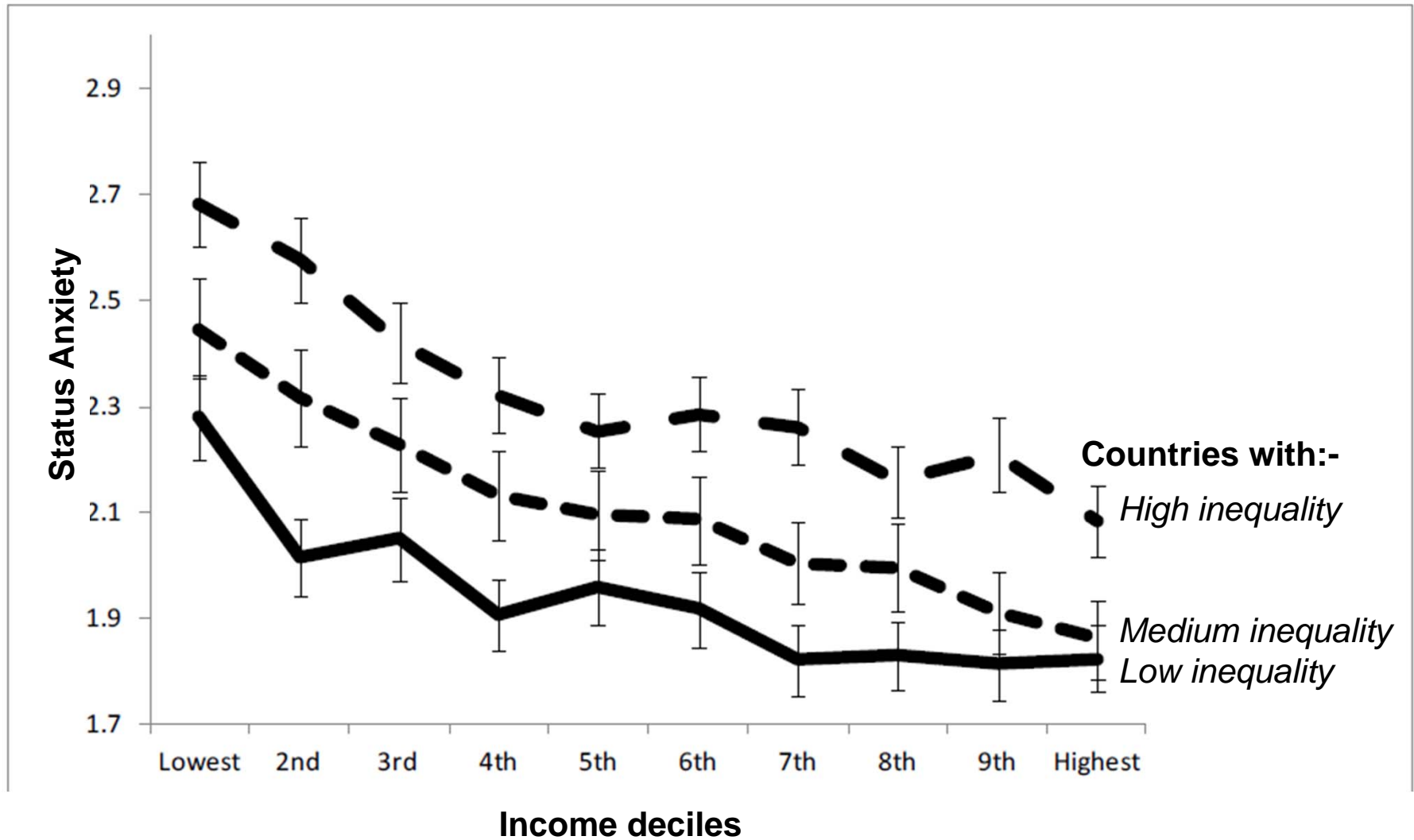
Income differences increase social class differentiation

Bigger income differences:-

- **Class becomes more important**
- **The social pyramid is higher and more hierarchical**
- **The quality of social relations deteriorates**



Status Anxiety across income deciles for high, medium and low inequality countries

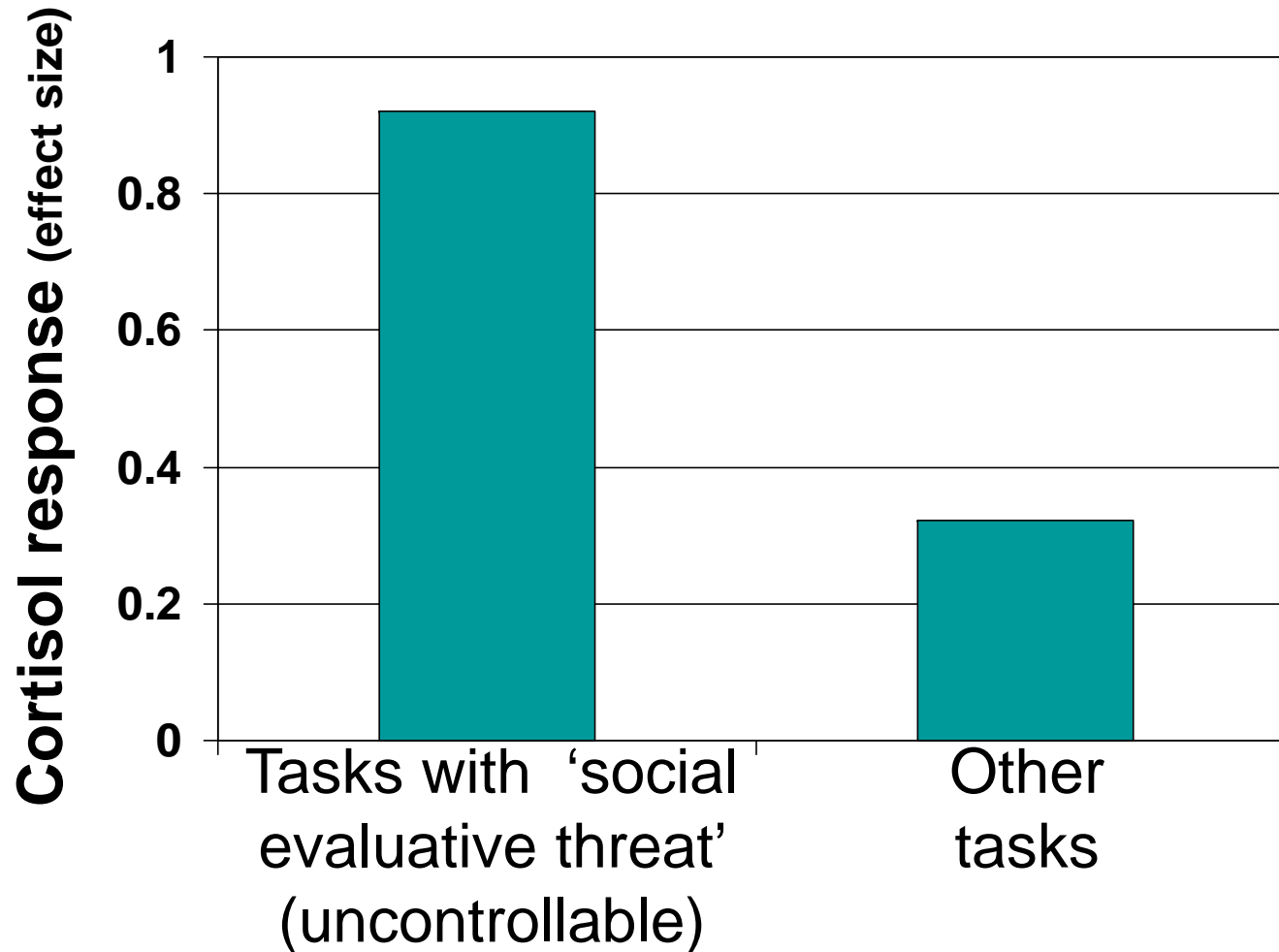


Layte R, Whelan CT. Who Feels Inferior? A Test of the Status Anxiety Hypothesis of Social Inequalities in Health. *European Sociological Review*, 2014.

Psychosocial risk factors for ill health

- **Low social status**
- **Weak social connections**
- **Stress in early life (pre- and postnatally)**

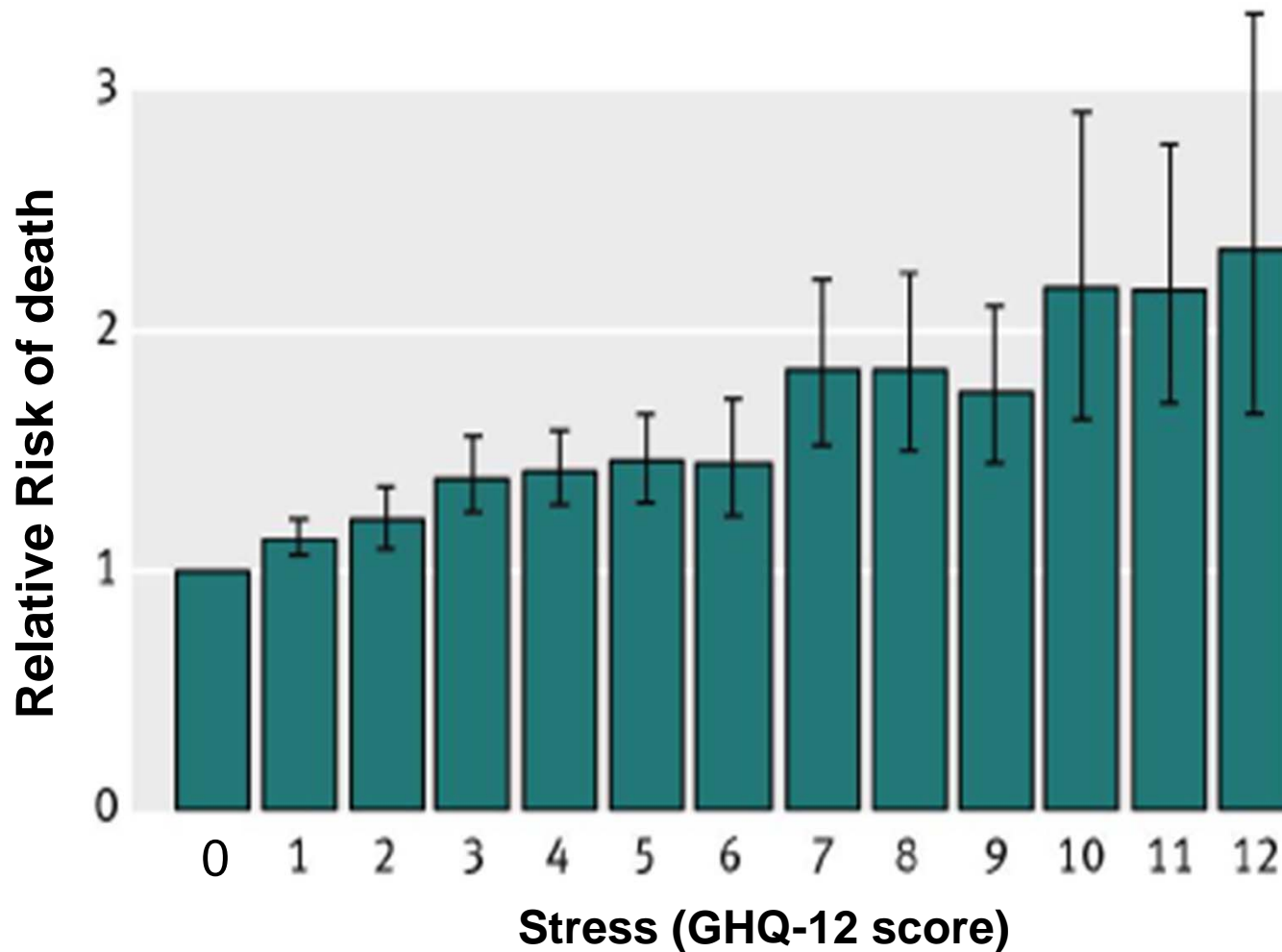
What kind of stressful tasks raise stress hormones most?



Dickerson SS, Kemeny ME. Acute stressors and cortisol responses. *Psychological Bulletin* 2004; 130(3): 355-91.

Even low levels of stress increase death rates

Health Survey for England 1994-2004. n=68,222; deaths = 8365



Russ TC, Stamatakis E, Hamer M, Starr JM, Kivimäki M, Batty GD.
Distress and mortality. *BMJ* 2012;345:e4933.



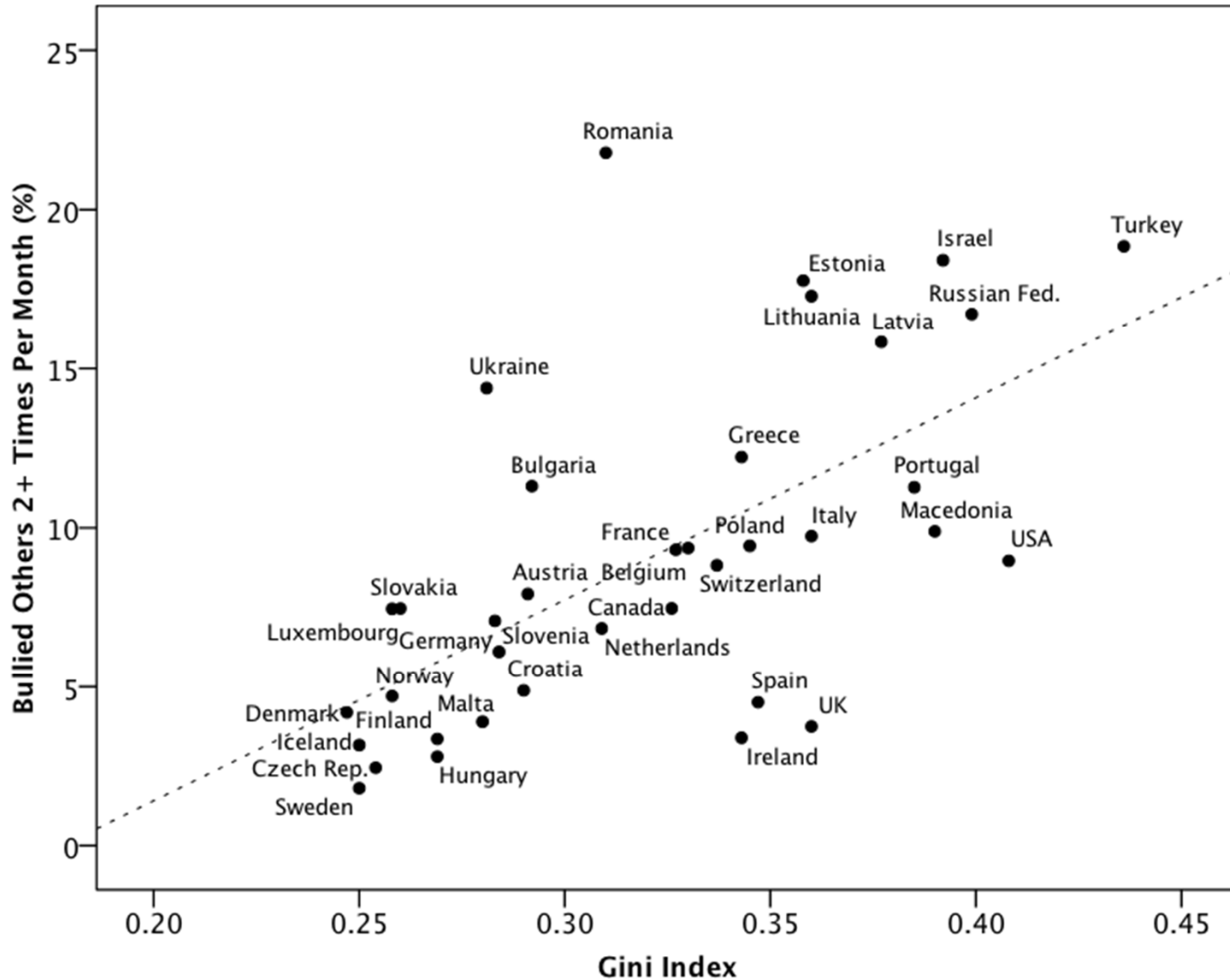
The Jekyll & Hyde of Public Health?

- **Social status** (dominance hierarchies, pecking orders) are orderings based on power, coercion and privileged access to resources – regardless of the needs of others.
- **Friendship** in contrast, is based on reciprocity, mutuality, social obligations, sharing and a recognition of each other's needs.

Thomas
Hobbes, *The
Leviathan*
1651

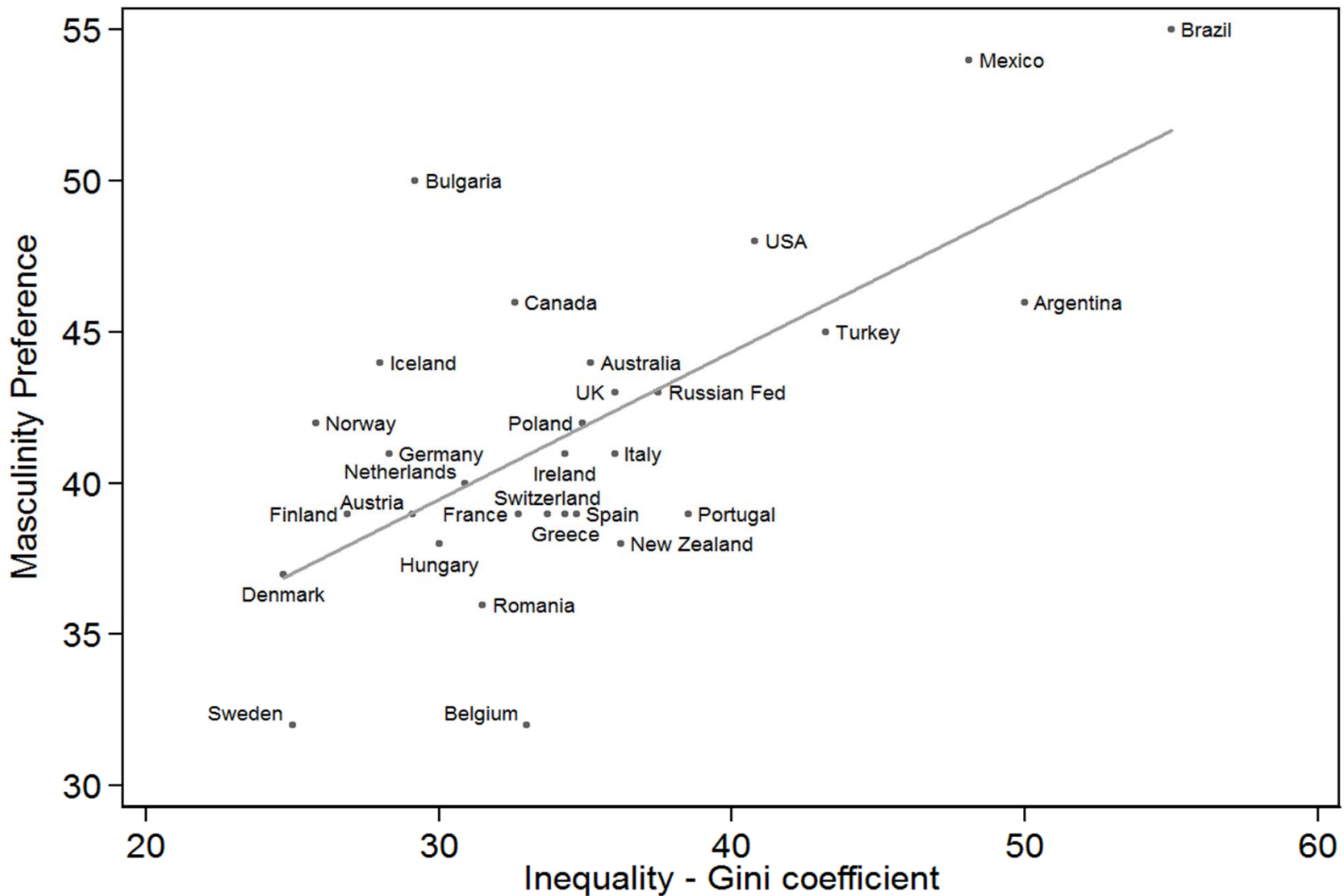


Income inequality & bullying in 37 countries



Elgar FJ, Craig W, Boyce W, Morgan A, Vella-Zarb R. Income Inequality and School Bullying: Multilevel Study of Adolescents in 37 Countries. *J. Adolescent Health* 2009; 45(4): 351-359 .

Women's preference for more masculinized faces is stronger in more unequal societies



Brooks R, Scott IM, et al. Proceedings of the Royal Society, B, 2011;

270. 010. 12

Companion

Spanish: Compañero;

French: Copain

from the Latin “Con” (with)

and “Pan” (bread)

- someone with whom you eat bread

“Gifts make friends and
friends make gifts”

Stone Age Economics (1974)



**Marshall
Sahlins**

Johnson SL, Leedom LJ, Muhtadie L.

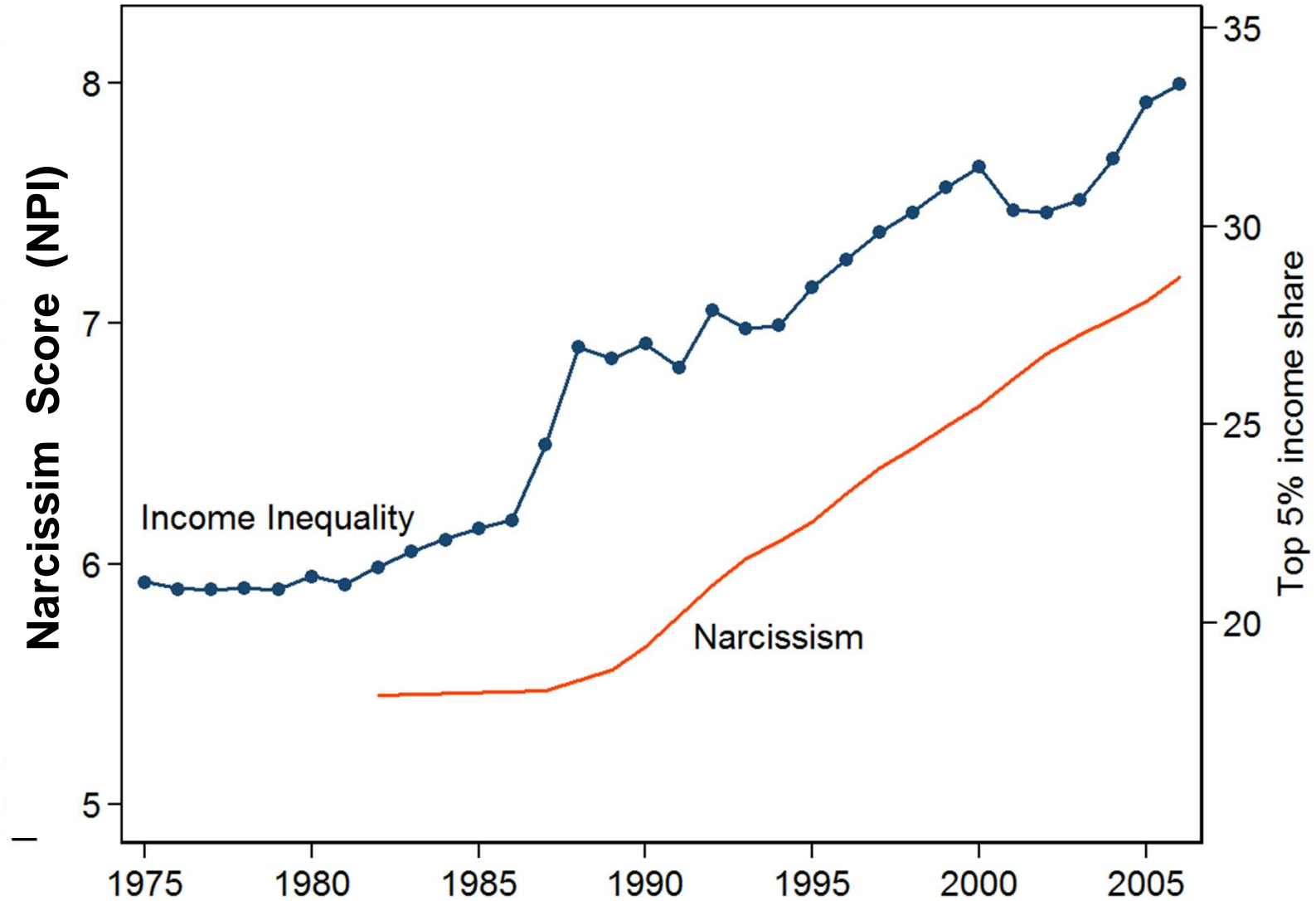
The Dominance Behavioral System and Psychopathology: evidence from self-report, observational, and biological studies. *Psychological Bulletin*. 2012; 138(4): 692-743.

ABSTRACT: “We begin by describing psychological, social, and biological correlates of the **Dominance Behavioral System**. Extensive research suggests that externalizing disorders, mania proneness, and narcissistic traits are related to heightened dominance motivation and behaviors. Mania and narcissistic traits also appear related to inflated self-perceptions of power. Anxiety and depression are related to **subordination and submissiveness**, as well as a desire to avoid subordination. Models of the DBS have received support from research with humans and animals; from self-report, observational, and biological methods; and use of naturalistic and experimental paradigms.”

Mental illness is more common in more unequal societies

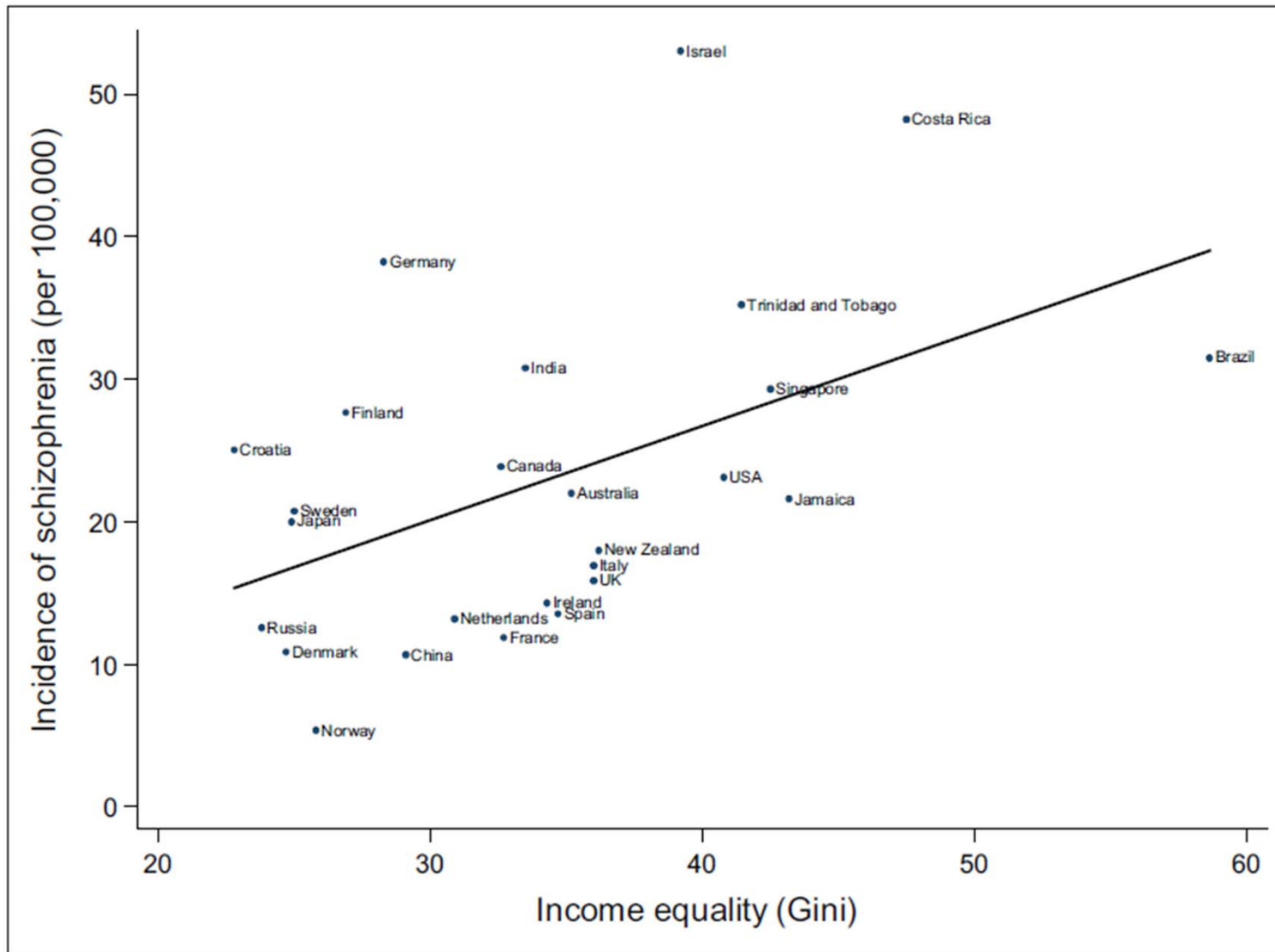


Rising Narcissism & Income Inequality in the USA



Inequality data from World Top Incomes Database
Narcissism data from Twenge JM, et al., *Journal of Personality* 2008; 76(4): 875-901.

Schizophrenia is more common in more unequal countries

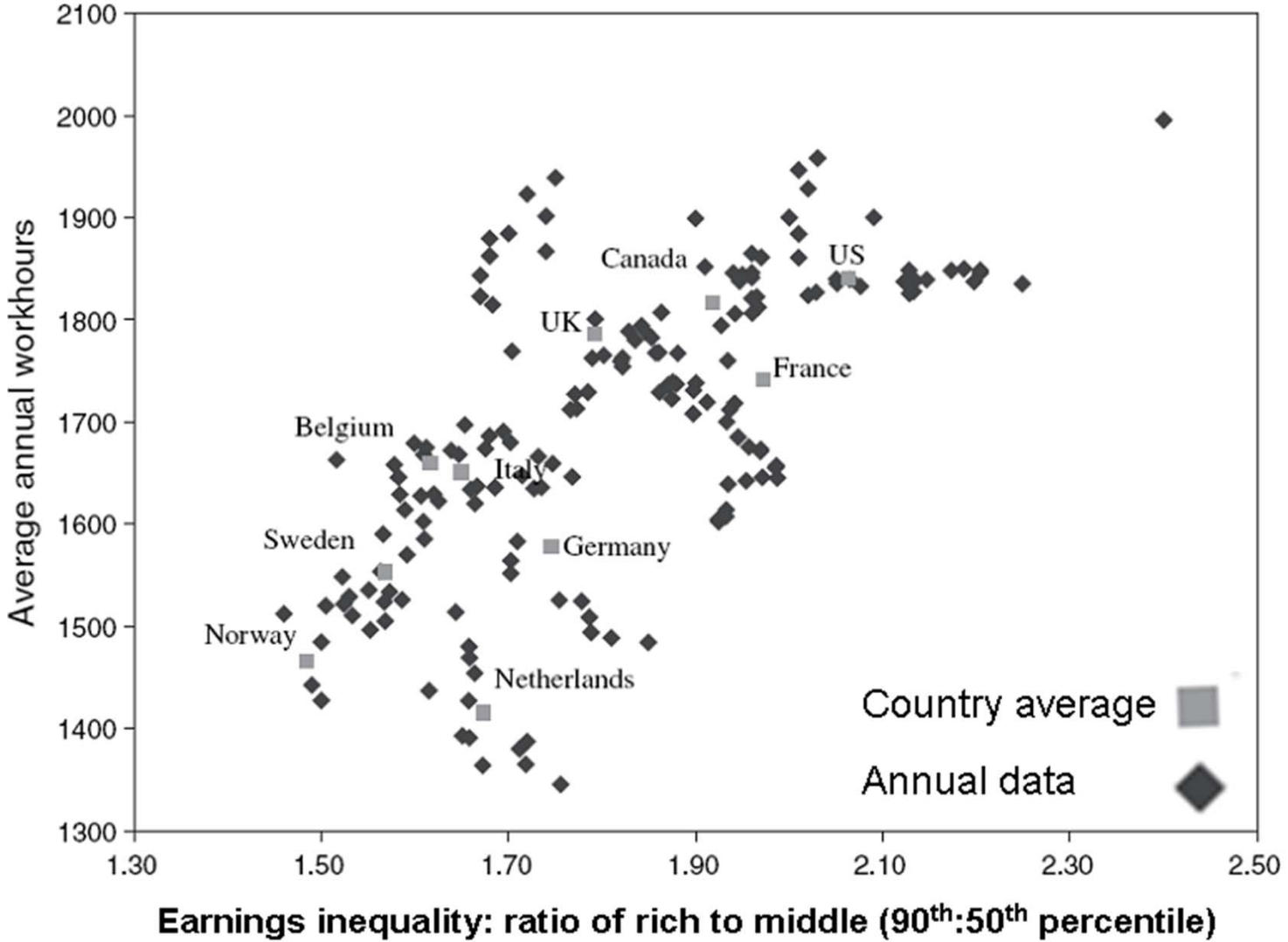


Burns JK, Tomita A, Kapadia AS. Income inequality and schizophrenia.
International Journal of Social Psychiatry 2013

Two recent studies show that inequality increases conspicuous consumption and consumerism

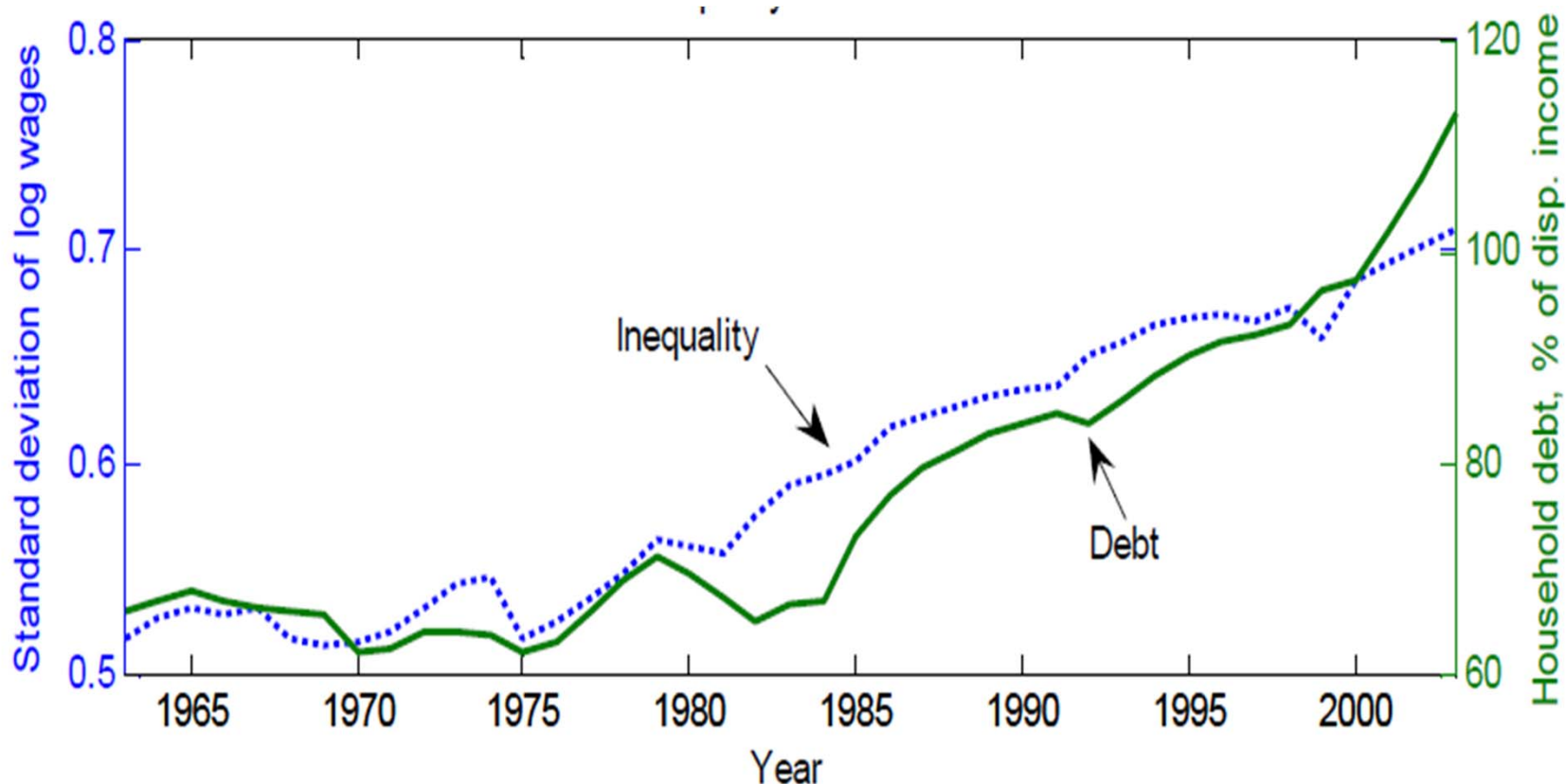
- People in more unequal areas of the USA are more likely to buy high status cars
- Data from Google searches shows that people in more unequal states are more likely to search for status goods

Working hours are longer in more unequal countries



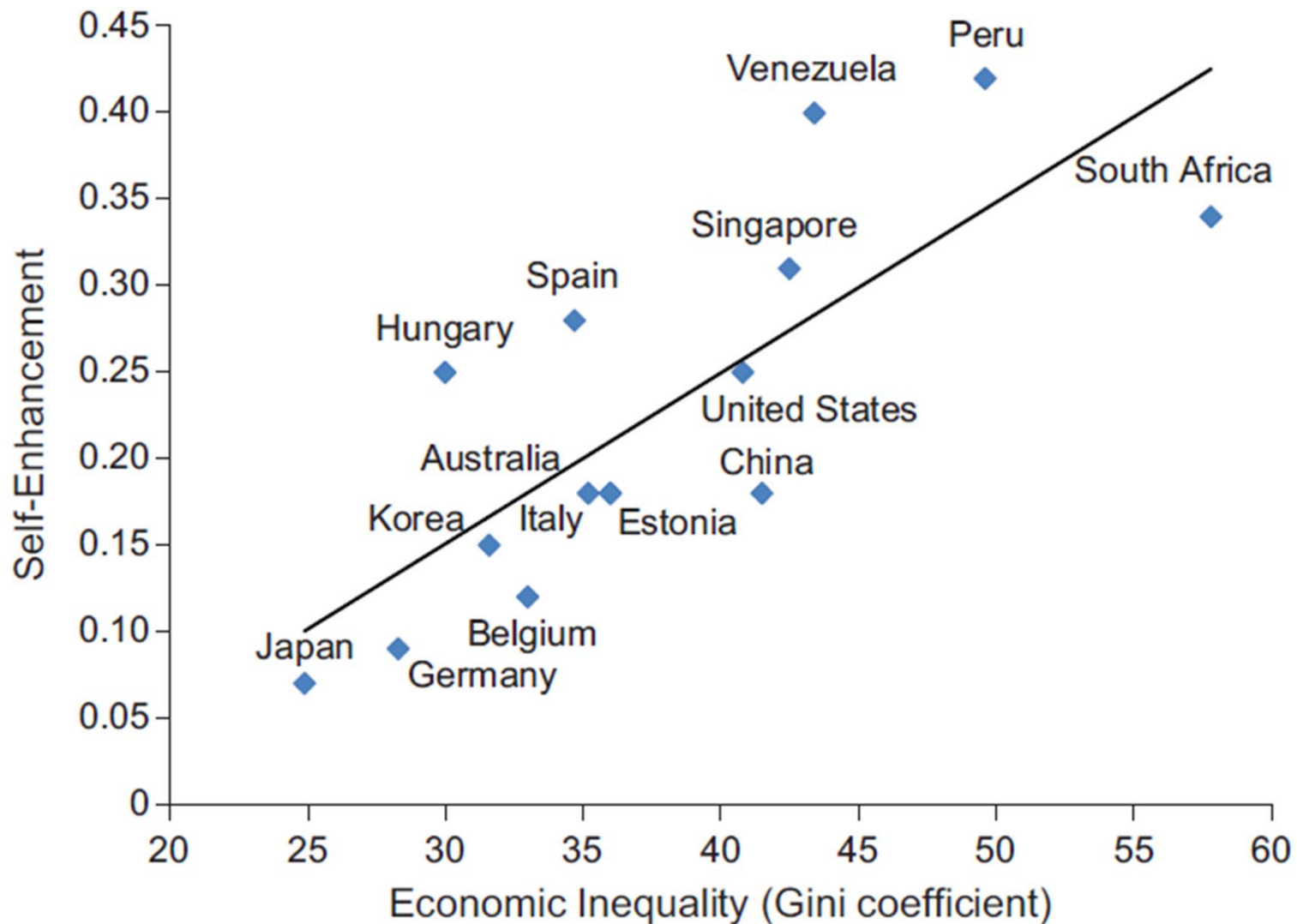
Source: Bowles S, Park Y. Economic Journal 2005; 115 (507): F397-F412. 2005.

Household Debt and Income Inequality USA



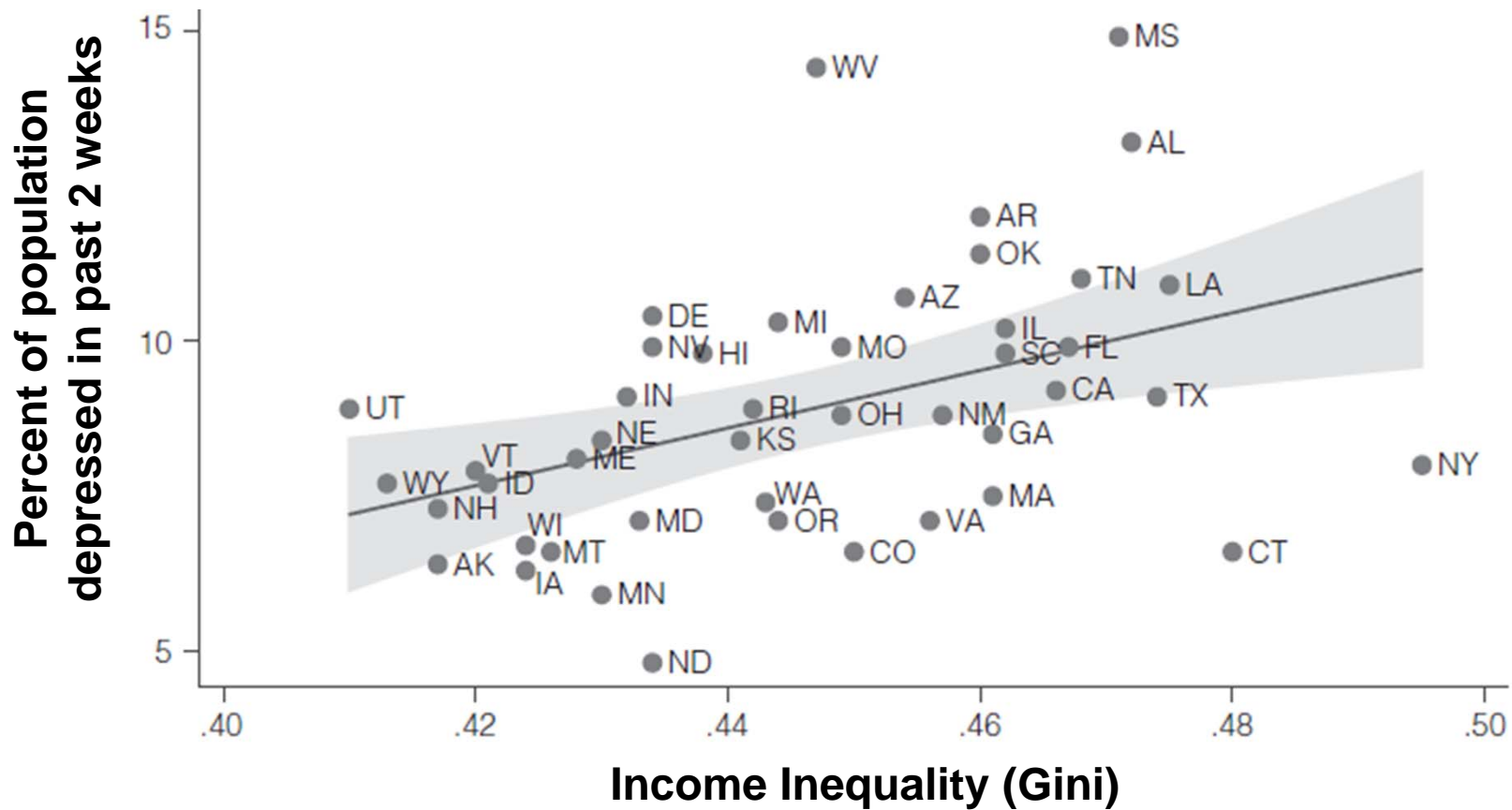
Iacoviello M. Household Debt and Income Inequality, 1963–2003. *Journal of Money, Credit and Banking* 2008;40(5):929-65.

Self-enhancement is more common in more unequal societies



Loughnan S, et al. Economic Inequality is linked to biased self-perception.
Psychological Science, 2011; 22: 1254

Depression is more common in more unequal states



Messias E, Eaton WW, et al. . Economic grand rounds: Income inequality and depression across the United States: an ecological study." Psychiatric Services, 2011; 62(7): 710-2.

NOT PRETTY
ENOUGH

NOT SMART
ENOUGH



NOT GOOD
ENOUGH

NOT FUNNY
ENOUGH

Ecstasy: a treatment for social anxiety?

**Danforth AL, Struble CM, Yazar-Klosinski B, Grob CS.
MDMA-assisted therapy: A new treatment model for
social anxiety in autistic adults.**

***Progress in Neuro-Psychopharmacology and
Biological Psychiatry, 2015.***

Alan Bennett, *Untold Stories*, Faber/Profile, 2005

“(My parents) put...down...most of their imagined shortcomings to their not having been educated, education (was) to them a passport to everything they lacked: self-confidence, social ease and above all the ability to be like other people.

Put simply and as they themselves would have put it, both my parents were shy, a shortcoming they thought of as an affliction while at the same time enshrining it as a virtue.

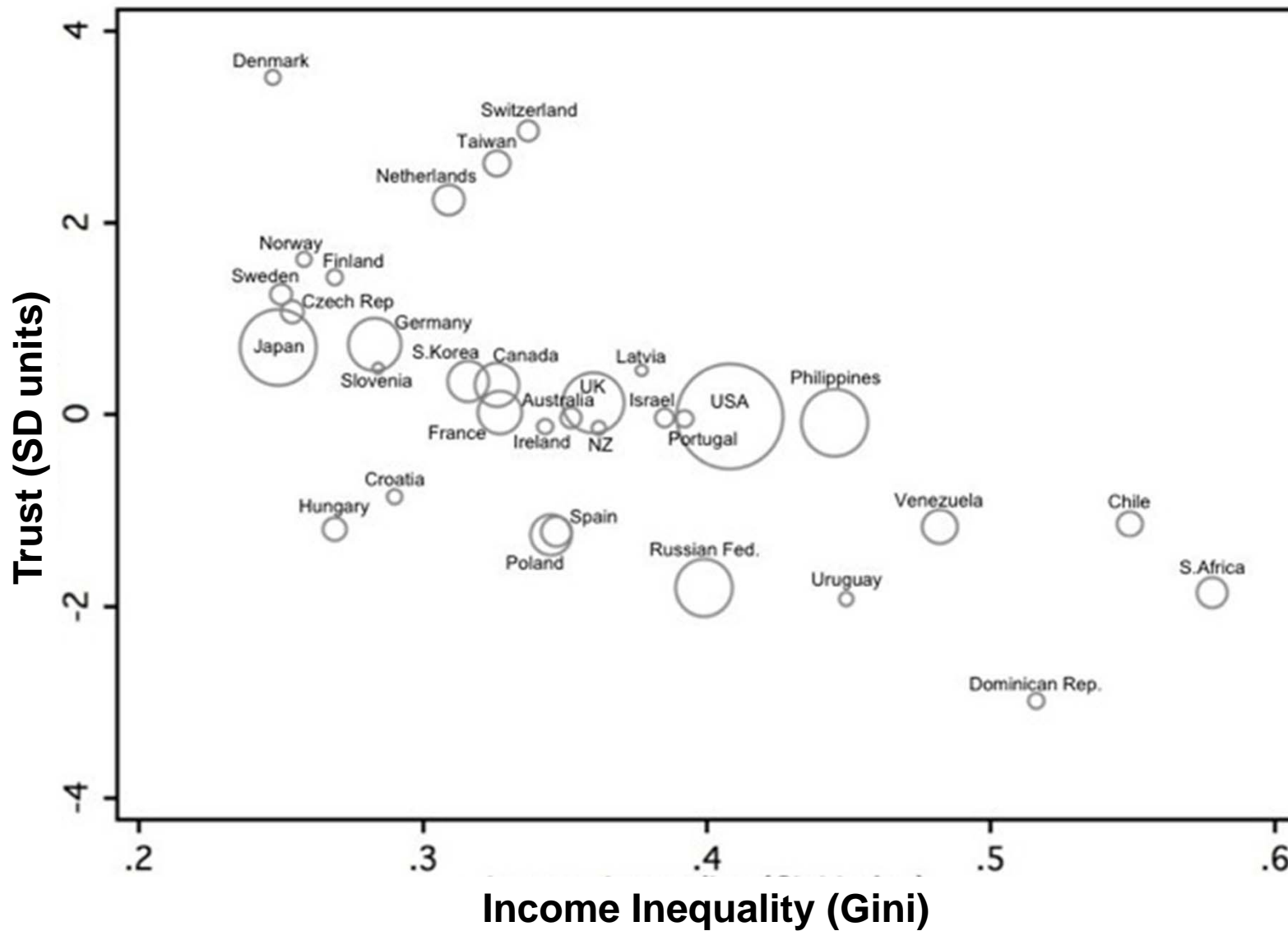
I assured them, falsely, that everybody felt much as they did but that social ease was something that could and should be faked.

‘Well, you can do that,’ Dad would say, ‘you've been educated,’ adding how often he felt he had nothing to contribute. ‘I'm boring, I think. I can't understand why anybody likes us. I wonder sometimes whether they do, really.’

People in more unequal countries trust each other less



People trust each other less in more unequal countries



Elgar FJ. Income inequality, trust, and population health in 33 countries.
Am J Public Health 2010;100(11):2311-5

**The effects of inequality:
– a two stage process?**

- 1. adult experience of inequality**
- 2. passed on to children
– incl. epigenetics**

Slavich GM, Cole SW. The emerging field of human social genomics. *Clinical Psychological Science*, 2013.

...research is demonstrating that external social conditions, especially our subjective perceptions..., can influence our most basic internal biological processes—namely, the expression of our genes.

...social-environmental factors can substantially alter the expression of literally hundreds of genes...

...although as adults we are often physically separated from those around us, our presence in different social groups means that we are transcriptionally connected, giving rise to a human metagenome that has implications for collective health and behavior.

Anacker C, O'Donnell KJ, Meaney MJ. Early life adversity and the epigenetic programming of the HPA function. *Dialogues in Clinical Neuroscience* 2014; 16: 321

We review studies with human and nonhuman species that examine the hypothesis that epigenetic mechanisms, particularly those affecting the expression of genes implicated in stress responses, mediate the association between early childhood adversity and later risk of depression.

The resulting studies provide evidence consistent with the idea that social adversity, particularly that involving parent-offspring interactions, alters the epigenetic state and expression of a wide range of genes, the products of which regulate hypothalamic-pituitary-adrenal function.