

# **The Determinants of Life Satisfaction**

**by Phil Hoskins and Douglas May**



**Discussion by Rachel Soloveichik**

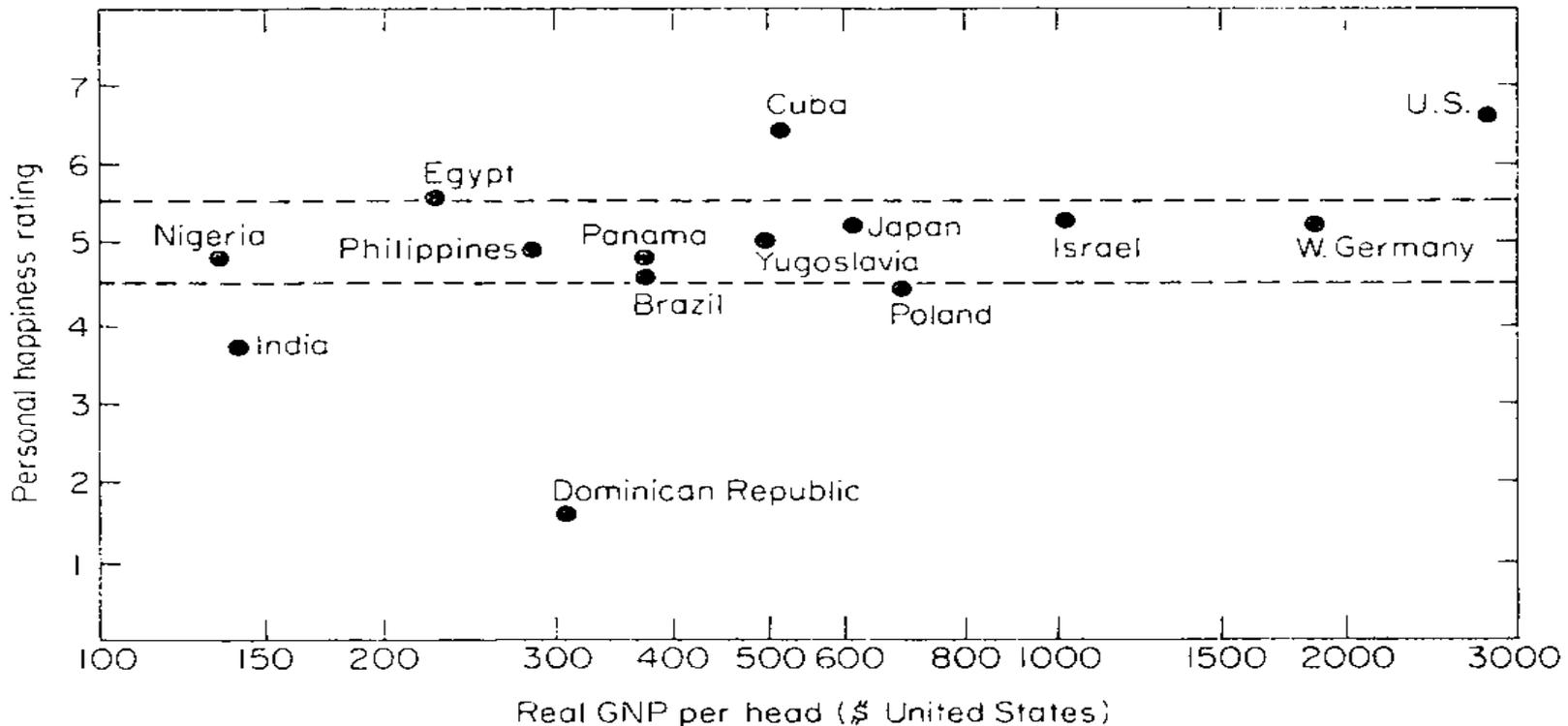
**Prepared for: IARIW 2016**

# Outline of Presentation

---

- Present the Paper
  - Describe the Easterlin Paradox
  - Review the literature of ‘happiness economics’
  - Show how micro-data on happiness can improve national accounting
  - Describe the empirical data and present results.
- Provide Comments
  - Overall, I really liked this paper.
  - Is the Happiness Stagnation Real?
  - Can Happiness Data Inform Policy?

# Easterlin Paradox



- This graph is from 1960, but recent surveys find similar results.
- Within countries, happiness does not grow with GDP growth

- GDP includes Stuff Which Causes Unhappiness:
  - “Air pollution and cigarette advertising, and ambulances to clear our highways of carnage. It counts special locks for our doors and the jails for the people who break them” (Kennedy 1968)
- GDP Excludes Household Production, Leisure and Other Stuff Which Causes Happiness
  - If a man marries his (paid) housekeeper, GDP falls
  - Working overtime increases GDP, even if it causes exhaustion and misery
  - Non-economic factors like good weather (Schwarz and Clore 1983; Kampfer and Mutz 2013) or sports victories aren’t counted in GDP at all.

# Three Possible Fixes for GDP

---

- ‘Heal’ GDP with Minor Fixes
  - Nordhaus and Tobin (1973) adjust GDP to include leisure time, unpaid work and exclude environmental damage.
  - Daly and Cobb (1989) create a ‘genuine progress indicator’ which also subtracts private defensive expenditures like security guards
- ‘Compliment’ GDP with Other Indicators
  - ‘Human Development Index’ combines GDP with data on life expectancy and education
  - ‘Better Life Index’ combines 24 indicators organized into 11 separate dimensions
- Replace GDP Entirely
  - ‘Happy Planet Index’ combines information on life expectancy, experienced well-being (from a Gallup Survey) and ecological footprint

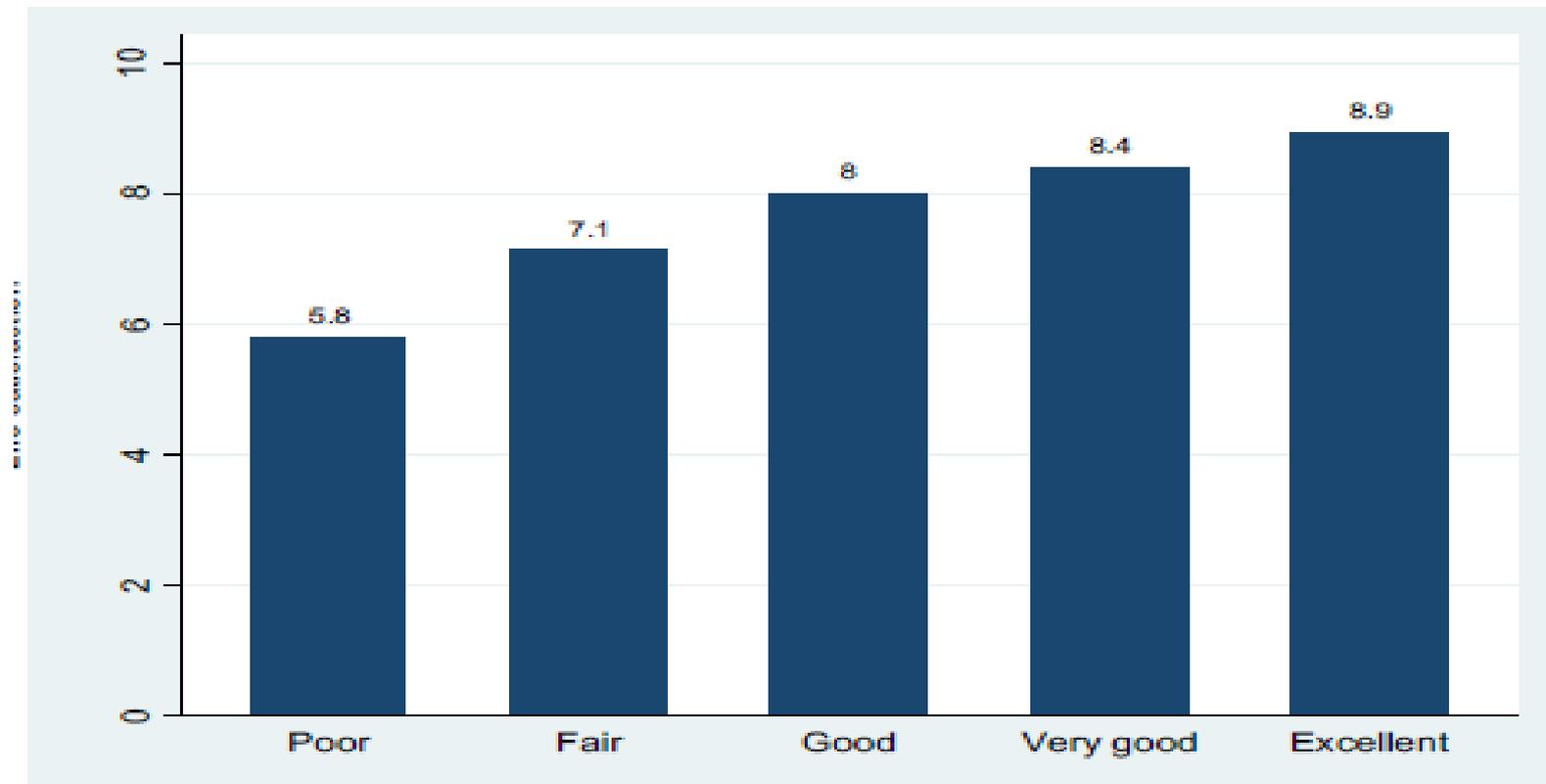
# This Paper Favors ‘Complimenting’ GDP



- Taken Alone, Self-Reported Happiness is too Hard to Measure
  - In Canada, ‘life satisfaction’ appears to depend on the point scale offered, the question ordering and maybe other factors.
  - Around the world, translation and cultural factors probably make consistent surveying very difficult
- However, Self-Reported Happiness Can Help Improve the ‘Better Life Index’
  - On its website, OECD currently allows users to pick their own weights and calculate a ‘Better Life Index’ based on those weights.
  - Those weights are subjective, and so the index is subjective.
- This Paper Estimates Weights by Regressing Self-Reported ‘Life Satisfaction’ on a Variety of Factors
  - Their data only covers Canada, but they show that Canadian visitors to the OECD website appear to have similar weights as the rest of the world.
    - On the other hand, ‘New Evidence on Trust and Well-being’ (Helliwell, Huang and Wang 2016) suggests that adversity causes less unhappiness in high trust countries.
  - As a robustness test, they use a variety of regression techniques.

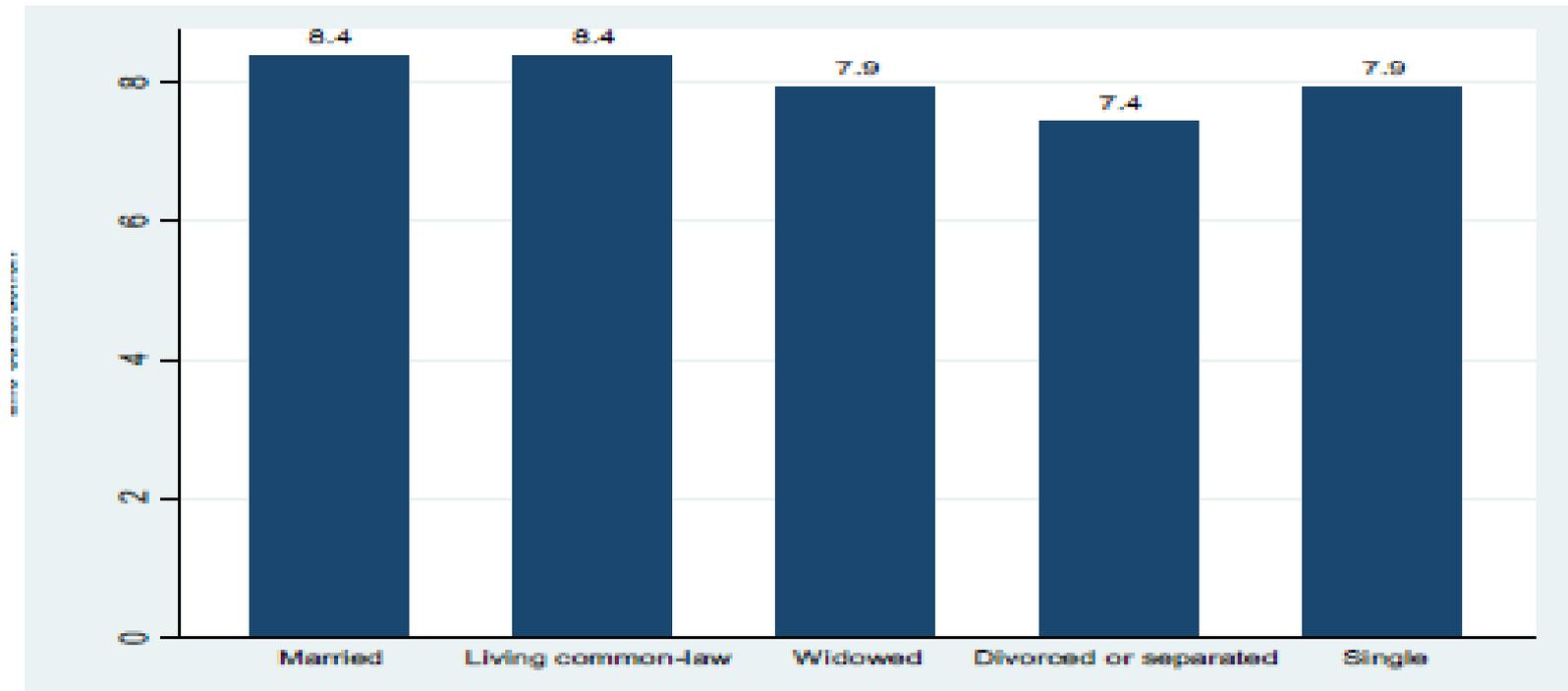
- The Canadian Community Health Survey (CCHS) is a large survey with rich data on income, demographics and lifestyle.
  - Thanks to the sample size, standard errors are quite low.
  - This paper only uses respondents from Newfoundland and Labrador.
- Factors Correlated with Happiness:
  - Higher Household Income; Marriage or Cohabitation; Employment; Owning a Home; Good Physical and Mental Health; Food Security; Belonging to a Community and Stress-free Life
  - These results are robust to a variety of regression techniques.
- Factors Not Correlated with Happiness:
  - Contrary to previous research, women and men report similar life satisfaction levels in the CCHS.
  - Life satisfaction is U-shaped with a minimum at middle age.
  - Neither education nor the presence of children has much effect.

# Self-Rated Health and Life Satisfaction



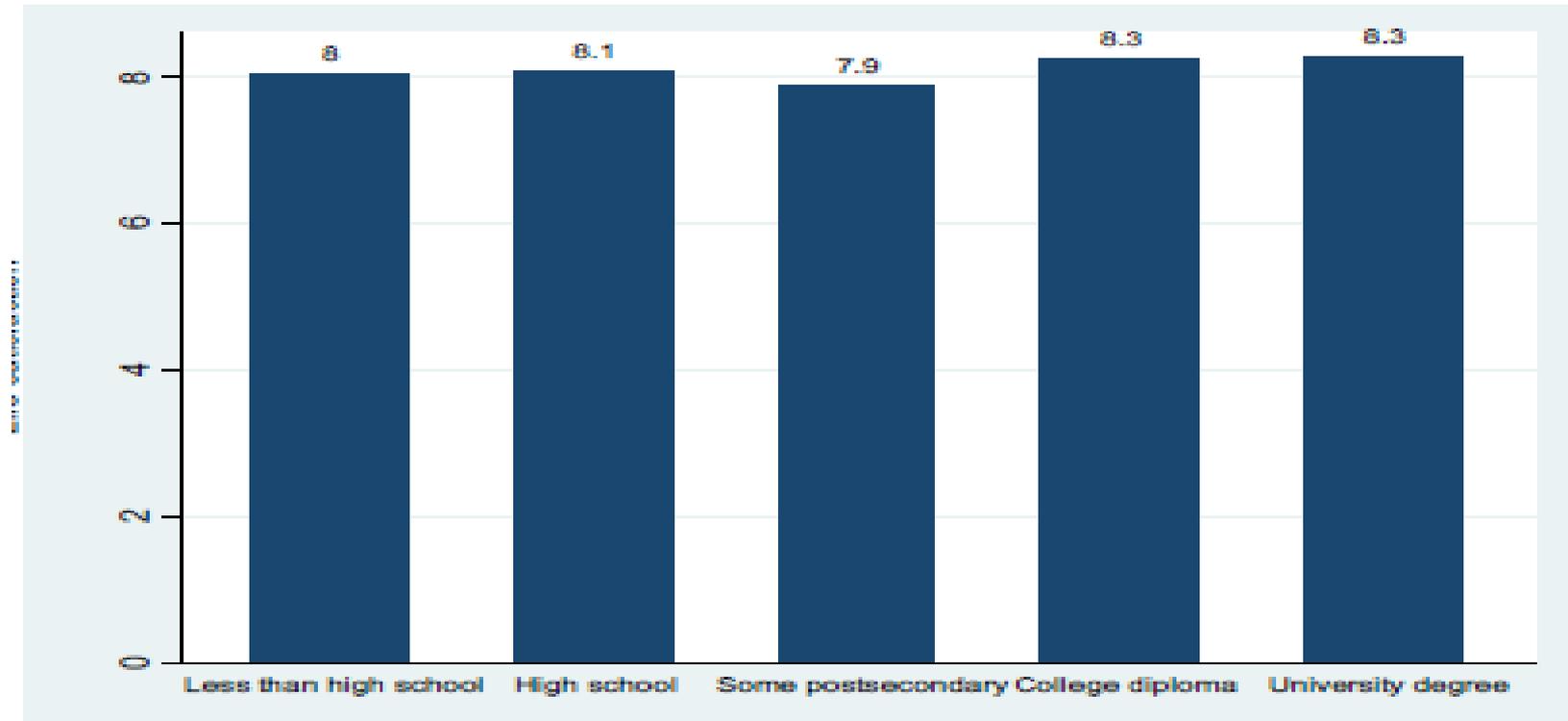
- The graph above shows simple means, without controlling for other factors. Results are similar with controls.
- Even after controlling for current health, people with healthier lifestyles also report higher life satisfaction.

# Marital Status and Life Satisfaction



- Among married couples, marriage quality is strongly correlated with happiness (Proulx, Helms and Buehler 2007).
  - Unmarried people who haven't found anybody suitable might not benefit from marriage.
  - The graph above combines all marriages, so it underestimates the value of a good marriage.

# Figure 5: Education and Life Satisfaction

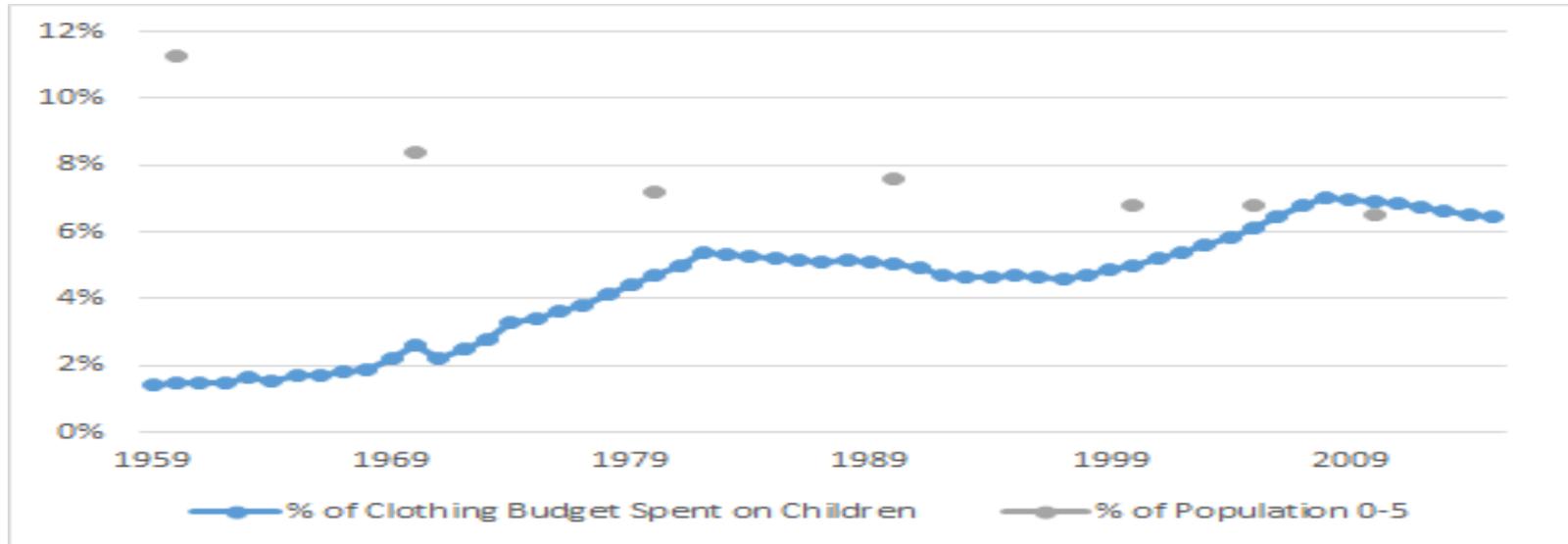


- This null result is consistent with previous research in the U.K. ([Stewart-Brown, Samaraweera, Taggart, Kandala, and Stranges](#)) but not the U.S. ([Yang 2008](#)) ([Easterlin](#))

# Self-Reported Variables Matter

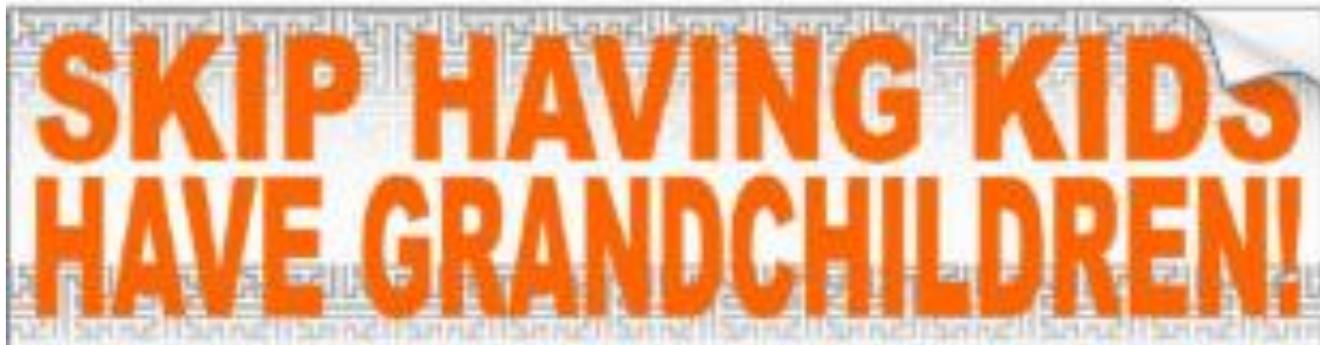
- Model 1 starts out with relatively objective demographic variables like education and marital status.
  - The authors find economically significant correlations between these demographics and ‘life satisfaction’
- Models 2-4 gradually add more subjective factors
  - These subjective factors reduce the coefficients on the demographics variables generally fall and sometimes even disappear.
  - These results a causal chain: demographics determine subjective factors like health status or stress level. In turn, these subjective factors determine ‘life satisfaction’
  - However, we can’t run a natural experiment to test causality.
- Unfortunately, the factors in the CCHS aren’t perfectly comparable to the 11 sub-indexes used to construct the OECD’s ‘Better Life Index’
  - Translating the regression results into weights is not straightforward

# Comment: Is The Happiness Stagnation Real?



- Like almost all social surveys, the happiness surveys exclude **children**
  - The CCHS starts at 12, but this study only covers individuals 15 or older.
  - Young children might have very different happiness trends
- The graph above focuses on clothing because that's easy to split by age.
  - My feeling is that modern children enjoy more purchased products and more permissive social attitudes than children did in the past.
  - Even non-parents are affected by cultural shifts. For example, adults once felt comfortable punishing other people's children for public misbehavior.
- The graph shown above only looks at nominal spending shares.
  - Clothing prices are hard to measure (Reinsdorf, Liegey and Stewart 1995),

- In the NIPA's, Personal Consumption Expenditures (PCE) doesn't always track GDP.
  - International aid can raise PCE without changing GDP.
  - Holding GDP fixed, investment lowers PCE
- Perhaps 'life satisfaction' has similar properties?
  - A simple regression analysis might miss externalities and long-term effects of current actions.
  - We need a model with careful accounting to track effects.



**SKIP HAVING KIDS  
HAVE GRANDCHILDREN!**

# Conclusion

---

- Overall, I really liked the paper.
  - This paper provides an important contribution to the new field of ‘happiness economics’
  - The authors show how empirical research on happiness can help national accountants develop better measures of welfare
    - Many previous researchers have noted the problem that GDP doesn’t track welfare – but few people have provided solutions.
  - Like most empirical data, self-reported ‘life satisfaction’ doesn’t always follow theory precisely.
    - The CCHS is large enough that the unexpected facts can’t be dismissed as measurement error.
    - I admire the authors for being upfront about the null results on gender.
- Long-term, I’d like to see more thought on a consistent accounting framework for ‘life satisfaction’
  - Without an accounting framework, it’s difficult to compare measured GDP with ‘life satisfaction’ surveys.