Life Satisfaction and Quality of Development

Indian Statistical Institute 75th Anniversary
Dehli, December 18-20, 2007

John F. Helliwell
Arthur J.E. Child Foundation Fellow of the
Canadian Institute for Advanced Research
and Department of Economics, UBC

Research from the CIFAR program on “Social Interactions, Identity and Well-Being”

In collaboration with Chris Barrington-Leigh and Haifang Huang
Why Now?

► Current development goal mainly GDP
► If focus is to shift to a broader concept, measurement is needed
► Global application of current rich-country practices does not meet fundamental resource constraints
► Focus on the quality of development would ease resource constraints and increase life satisfaction.
Aristotle’s Question

►► How satisfied are you with your life as a whole these days? (on a 10-point scale)
►► Life satisfaction or happiness?
►► Hedonism or eudaimonia?
►► How do capabilities fit in?
►► Positive or negative affect?
►► Adaptation and relativities? (Diener & Lucas)
►► Remembered vs experienced? (Kahneman)
Much well-being research ignores the social context: it shouldn’t.

What types of community have been the focus of well-being research?

► Families and friends.
► Neighbourhoods
► Workplaces (better late than never)
► Community and religious organizations
► Nations, and regions within them
► My examples relate to nations, neighbourhoods and workplaces
National-Level Results

- Range of life satisfaction averages across nations is large.
- Our new results based on Gallup World Poll data; social capital effects from both trust and engagement.
- Explained variance across countries 60% to 85%, compared to 6%-30% across individuals, and 20%-40% across communities. (would be nice to have workplace data for comparison)
Income & Well-being Measures from Gallup and WVS

Yellow line: 2003 per capita PPP income as ratio of US
Blue line: Life today from the Gallup
Red dots: Life satisfaction from the WVS-4

Footnotes:
Life today is from the Gallup Survey conducted in 2006/07
Life satisfaction is from the WVS and EVS between 1995-2001
Index of income is per capita PPP GDP from WPT6.2, expressed as ratio of the US
Footnotes:
Life today is from the Gallup Survey conducted in 2006/07
Life satisfaction is from the WVS and EVS between 1995-2001
Index of income is per capita PPP GDP from WPT6.2, expressed as ratio of the US
Income and Well-being: Selected Countries

Footnotes:
Life today is from the Gallup Survey
Life satisfaction is from the WVS surveys between 1995-2001
Index of income is per capita PPP GDP from WPT6.2, relative to the US, with US=10.
Gallup and WVS broadly consistent; Gallup has better coverage, quality

- R=+.78 between Gallup and WVS SWB (n=75)
- Gallup has higher cross-country correlation with log income than WVS (r=.82 vs .64, 75 countries)
- Also for government quality (r=.79 vs r=.71)
- Gallup and WVS reveal consistent evidence of non-economic sources of international SWB differences
  - Gallup=.99*\log Y + .43*WVSresidual (betas .81, .34, R2=.77 for 75 countries)
  - WVS=.81*\log Y + .80*Gallresid (betas .64, .45)
- Structural models for Gallup explain 85% of cross-country variance, 33% of individual SWB variance
International share of individual-level variance of SWB and its correlates

- Life satisfaction 25%
- Subjective health 5%
- Business and government corruption 23%
- Running water in home 55%
- Not enough money for food 18%
- Has someone to rely on 8%
- Has university degree 14%
- Log of household income 42%
Well-being effects of individual variables

From a two-level estimation with gender, age, and marital status
Estimated coefficients as columns; t-stat as text within the chart

- Attained tertiary education: 8.2**
- Log of household income: 15.1**
- Home has running water: 3.4**
- Not enough money for food in last 12 months: -16.6**
- Perception of corruption: -5.4**
- Has someone to count on: 15.9**

** sig. at 1%
Individual effects for India, Non-OECD, Asia

- Attained tertiary education
- Log of household income
- Home has running water
- Not enough money for food in last 12 months
- Perception of corruption
- Has someone to count on

<table>
<thead>
<tr>
<th>Variable</th>
<th>India</th>
<th>Non-OECD</th>
<th>Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attained tertiary education</td>
<td>1.7</td>
<td>3.6*</td>
<td></td>
</tr>
<tr>
<td>Log of household income</td>
<td>5.7</td>
<td>10.0*</td>
<td></td>
</tr>
<tr>
<td>Home has running water</td>
<td>3.3</td>
<td>1.7</td>
<td></td>
</tr>
<tr>
<td>Not enough money for food in last 12 months</td>
<td>-6.0*</td>
<td>-18.9*</td>
<td></td>
</tr>
<tr>
<td>Perception of corruption</td>
<td>0.3</td>
<td>-0.8</td>
<td></td>
</tr>
<tr>
<td>Has someone to count on</td>
<td>5.5*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* (sig. at 1%)
Well-being effects of contextual variables

From a two-level estimation with gender, age, and marital status
Estimated coefficients as columns; t-stat as text within the chart

-2 -1 0 1 2 3
Percentage with tertiary education

-0.1 -0.3 1.0 -0.1 -4.5** 3.1**
t-stat ** (sig. at 1%)

Log of GDP per capita in year 2003

-2 -1 0 1 2 3
Running water

Average: Average: Average: Average: Average: Average:
Not enough money for food corruption someone to count on
Perception of Has

contextual effect
Well-being and demographic factors

From a two-level estimation
Estimated coefficients as columns; t-stat as text within the chart

Footnote:
marrasmarr: married or as if married
sepdivwid: separated, or divorce, or widowed
Well-being and demographic factors

From a two-level estimation
Estimated coefficients as columns; t-stat as text within the chart

Footnote:
marrasmarr: married or as if married
sepdivwid: separated, or divorce, or widowed
Community-Level Results

- Range of life satisfaction averages across neighbourhoods is large.
- Strongest explanatory variable is the extent to which people think their neighbours can be trusted.
- Over half the variance in neighbourhood trust explained by census data for variables theoretically linked to the creation of trust: length of residence in neighbourhood and country, education, age, but not income.
Neighbourhood Trust in Toronto

Trust in neighbours

University of British Columbia (2007)
John Hellwell & Chris Banting-Leigh
Explaining trust in neighbours

Fraction of movers (5 years)
Explaining trust in neighbours

Fraction without highschool diploma
Explaining trust in neighbours

Fraction married

[Map showing the fraction married with color gradient]
Life Satisfaction and Income

![Graph showing life satisfaction and income for various cities.](image)
Life Satisfaction and Trust

Life Satisfaction vs Trust in Neighbours

Cities: Quebec, St. John, Charlottetown, Moncton, St. John's, Saskatoon, Kitchener, Regina, Halifax, Winnipeg, Vancouver, Edmonton, Hamilton, Ottawa-Hull, Toronto, Calgary, Victoria.
Workplaces are important communities

- For employed respondents, workplace trust is the strongest variable in life satisfaction equations, t-values and betas even greater than for health, marital status, income, and other forms of trust.

- Large compensating differentials for workplace trust: 1 point on a ten-point scale for trust in management has the life satisfaction equivalence of a change in income of more than one-third.
Life Satisfaction (left axis) and trust in management (on scales of 1 to 10)

- 5 or below: 27%
- 6: 12%
- 7: 18%
- 8: 20%
- 9: 12%
- 10: 11%
Compensating differentials as % of income for a change in workplace characteristics that covers 10% of the surveyed sample, from ESC
Compensating Differentials for Trust in Management by Population Groups, from ESC

- Compensating differentials for a move that covers about 10% of the sample
- Standard error of the estimate
Why are these effects so large?

- Managers may not realize how important trust is, or know what to do to improve it
  - Business training dominated by easily measured profit outcomes
    - Human relations treated as fuzzy stuff, not part of the business core
    - Measures taken to guard against fraud may be reducing trust
- Employees in low trust jobs may just assume that work is hell.
- Experiments show that people over-estimate the SWB effects of consumption, under-estimate the importance of social factors
- Perhaps there are omitted factors that affect both trust and well-being (but not income). Time for experiments?
How can trust be built?

► Engagement is key
  ▪ Haslam UK experiments with office space

► Flexibility and trust are mutually supportive.

► Are all those progress reports necessary?

► Re-consider the trade-offs between paper trails and human engagement.

► Take risks: trust must be offered before being returned.
What does a good life look like?

► Where trust is high, people expect the best from each other
► Where trust is high, people reach out, not hunker down
► Jobs are social and engaging, with shared goals
► Time for family, friends and neighbours
► Spaces and places for doing things together
► Lots of chances to do things for others
Example Opportunities

► Process matters (Barefoot College, Chandler and Lalonde)
► Well-being and trust both built by co-operation, for a good purpose (Gallup results for volunteering and good turns; local engagement)
► Combining elder care and child care (stroke study)
► A word to the wise, or not-so-wise? (ref Ariely, Dunn)
► Urban design: places and spaces for doing things together. Insure the risks? (Bogota?)