The Science of Happiness, Health, and Well-being during COVID-19

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Sir Michael Marmot

The Health Gap
The Challenge of an Unequal World
“Social Determinants of Health”
What does that mean?
“Between 1959 and 2016, life expectancy increased by almost 10 years, from 69.9 years in 1959 to 78.9 years in 2016… US life expectancy peaked in 2014 and subsequently decreased significantly for 3 consecutive years.”
From: Life Expectancy and Mortality Rates in the United States, 1959-2017


Figure Legend:

Age-Specific, All-Cause Mortality Rates Among US Youth, Aged 1-24 Years, 1999-2017

Source: CDC WONDER.

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US Life Expectancy by Year of Birth

- **MEN**
  - Life expectancy at age 50
  - Richest 10%
  - Middle 50%
  - Poorest 10%

- Year of birth:
  - 1920
  - 1930
  - 1940
  - 1950

Life expectancy increases over time for different income brackets.
US Life Expectancy by Year of Birth

- **WOMEN**
  - Life expectancy at age 50
  - Richest 10%
  - Middle 50%
  - Poorest 10%

- **Year of birth**
  - 1920
  - 1930
  - 1940
  - 1950
  - 70
Life Span and Life Circumstances

Loss of Life:
- 6 Months/Minute
- 2.3 Years/Mile

Life Expectancy
Δ 10 years
“6 months for every minute on the subway; 3.2 years for every mile travelled.”
Deaths of despair and its components
1900-2017

Deaths of despair
Suicide
Alcohol-related
Drug abuse

Source: Joint Economic Committee Social Capital Project | Dissect News

Angus Deaton and Anne Case – Princeton University
Social Engagement and Lifespan

Risk Ratio for Survival

-2  -1.5  -1  -0.5  0  0.5  1  1.5  2

Social Integration
Social Isolation
Living Alone
Loneliness

"Poor social relationships were associated with a 29% increase in risk of incident CHD (pooled relative risk: 1.29, 95% CI 1.04 to 1.59) and a 32% increase in risk of stroke"
The Mind Is a Gateway by Which Social Determinants Affect Ill-Health.

- Mental illness and well-being.
- Psychosocial pathways to physical illness
  - Behaviours
  - Stress pathways
Poverty: Prevalent, Deep

2016 Poverty Statistics
Overall rate: 12.7%
Twice FPL: 29.8%
Half FPL: 5.8%
Child rate: 18%
Latino rate: 19%
Black rate: 22%
N American rate: 26.2%

A journey through a land of extreme poverty: welcome to America

The UN's Philip Alston is an expert on deprivation - and he wants to know why 41m Americans are living in poverty. The Guardian joined him on a special two-week mission into the dark heart of the world's richest nation.
Poverty: Reified, Racialized

San Francisco elementary schools with lowest Academic Performance Index (API) scores

"More than half the Negro population of San Francisco are located here, and it is considered a highly hazardous area."

- 1937 Home Owner’s Loan Corporation
Poverty: Reified, Racialized

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San Francisco elementary schools with lowest Academic Performance Index (API) scores
Poverty thresholds developed in 1963.

- Based on Department of Agriculture’s “thrifty food plan” which was “designed for temporary or emergency use when funds are low.”

- 1955 Household Food Consumption Survey showed average family spent about 1/3 post-tax income on food.

*If it is not possible to state unequivocally ‘how much is enough,’ it should be possible to assert with confidence how much, on average, is too little.*
US Tax Rates by Income
US Tax Rates by Income

TOTAL TAX RATE (FEDERAL, STATE AND LOCAL)
US Tax Rates by Income

TOTAL TAX RATE (FEDERAL, STATE AND LOCAL)

2016
US Tax Rates by Income

TOTAL TAX RATE (FEDERAL, STATE AND LOCAL)
Change in Effective Tax Rates
1962-2018 USA

- Bottom 50%
- Middle 40%
- Top 10%
- Top 1%
- Top 0.1%
- Top 0.01%
- Richest 400

24.2% -> 27.6 -> 25.1 -> 22.5%
33.2 -> 29.0
43.1 -> 30.1
51.1 -> 31.4
53.6 -> 29.4
54.4 -> 23.0
“Inequities in power, money, and resources give rise to inequities in the conditions of daily life, which in turn lead to inequities in health.”

- Sir Michael Marmot
A Chain of Effect

- Regressive Policy
- Deepening Poverty
- Isolation
- Despair
- Poor Health
Child Poverty Rate in the USA … 2\textsuperscript{nd} Highest of 35 Nations

Child Well-Being in the USA … Ranked Last among 20 Nations

<table>
<thead>
<tr>
<th>Rank</th>
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<tr>
<td>1</td>
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<td>Spain</td>
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<td>21</td>
<td>United States</td>
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</tbody>
</table>

Steady decline in percentage of children earning more than their parents

Mean Rates of Absolute Mobility by Cohort

Source: Chetty et al., "The fading American dream: Trends in absolute income mobility since 1940", DB Global Research
Healthcare Is Complicit

Total health care investment in US is less than in OECD. In OECD, for every $1 spent on health care, about $2 is spent on social services. In the US, for $1 spent on health care, about 55 cents is spent on social services.
• “a wellbeing approach can be described as enabling people to have the capabilities they need to live lives of purpose, balance, and meaning for them.”
The US: Behind Many Other Nations

Shorter Lives, Poorer Health: US Health in International Perspective
-- IOM, 2013