



GREEN TEMPLETON
COLLEGE | UNIVERSITY
OF OXFORD

**Evidence based
facts and the
fight for truth**



Professor Denise Lievesley
Former Principal, now Honorary Fellow
Green Templeton College
University of Oxford

Two meanings of word statistics

- The numbers themselves
- The science of understanding and interpreting the numbers.
 - Looking for patterns
 - And for relationships
 - Separating signal and noise
 - The science of uncertainty



Statistics are fundamental for evidence-based policy and decision making

- Statistics we can trust are essential for a healthy society
- Helping to ensure well-informed decisions by putting the best available evidence from research at the heart of policy development and implementation
- Enlightening through making explicit what is known through scientific evidence and importantly **what is not known**



Draw parallels between statisticians and journalists

- Seek to inform
- To speak truth to power
- Shine a light on marginalized
- To expose uncomfortable truths



Statistics are critical for decision making but, like responsible journalism, they also serve to empower

- enabling citizens to call governments, public servants etc to account
- part of the democratic system providing a window on society



Who sets the statistical agenda?

- Is it set centrally?
- Can users influence it?
- What isn't collected tells you something about the priorities of government, or of society



Policy based evidence has become a mantra but evidence is sometimes resisted...

“ There is nothing a government hates more than to be well-informed: for it makes the process of arriving at decisions much more complicated and difficult. ”

John Maynard Keynes



Pre-requisite for data to be of value is that they must be trustworthy

But it is not enough that the data are trustworthy they must also be trusted

We wish to avoid fights about the data rather than about the issues. Statistics need to be the currency of public debate.



How do we decide whether to trust statistics?

- Provenance/source
- Methodology used
- Participation rates
- Expertise of the statisticians
- Independence and transparency of the statistical system
- Incentives to report in particular ways
- Tri-angulation, other ways of checking validity



Critical issues are

- Are the statisticians shielded from undue political pressure?
- What happens when the statisticians produce uncomfortable truths?
- Do the politicians seek to distort the results, do they produce 'alternative facts' ...?
- Who appoints the statisticians?
- What is the relationship of statisticians to the media? Are they free to report their findings?



Quality of statistics



Quality is not an absolute – we have to think about fitness for purpose

For example

- Timeliness always has to be balanced against other aspects of data quality
- The data requirements of point-in-time estimates are very different to those for change over time
- Are the data being used to make comparisons across different parts of the population?
- Is a rough estimate adequate or must the results be precise?



Statistics for performance monitoring

- Governments are both monitoring the public services, and being monitored
- Many data are expressed as targets
- And some of the data are used for naming and shaming – or for league tables of performance
- <http://www.rss.org.uk/PDF/PerformanceMonitoring.pdf>



Goodhart's Law

When a measure becomes a target, it ceases to be a good measure.

David Boyle's *The Tyranny of Numbers*

Paradox

- If we don't count something it gets ignored
- If we do count it, it gets perverted



- Because it is hard to measure what is really important we often measure something else
- Resources can then be devoted to achieving the wrong target
- Unintended consequences



Hitting the target but missing the point



The gross national product does not allow for the health of our children, the quality of their education, or the joy of their play; it does not include the beauty of our poetry or the strength of our marriages, the intelligence of our public debate or the integrity of our public officials. It measures neither our wit nor our courage, neither our wisdom nor our learning, neither our compassion nor our devotion to our country, it measures everything in short except that which makes life worth while.

Robert Kennedy



Move from the MDGs to SDGs (sustainable development goals)

- Concern about an unrelenting pursuit of growth
- At the expense of the environment
- Concern too about inequalities within our societies
- Recognition that it behoves us to give visibility to the disenfranchised in our societies
- Challenge – should we concentrate on a small number of indicators or should we be all-embracing?



Turning now to global data- why do we collect it?

- For reasons of accountability
 - of national governments
 - of international agencies
- For advocacy and resource mobilisation
- For comparative purposes
 - ‘understanding of oneself is gained through knowledge of another’



How do we decide what to collect globally ?

- Governments sign up to goals and commitments at world and regional summits
- They are party to conventions and agreements
- They accept commitments as part of aid packages



Power has been held by richer countries

- Some shifts towards adjusting away from this ‘statistical colonialism’
- Resource issues remain critical
- Always a tension between globally determined and locally specific data
- How do we meet the needs of cutting edge and trailing countries
- Tools are owned by the richer countries



Figures have a spurious credibility and
are wielded like weapons

Your journalistic skills remain critical

Be sceptical and ask questions. It is important not to be beguiled by the fact that these are numbers. Numbers can be made up just in the same way as words can. They can mislead, and they may be misreported deliberately or through ignorance. Too often statistics are trusted simply because they imply scientific precision, without an appropriate investigation of their validity.



Thank you for your invitation and
attention

