



Evidence-informed Management

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Quants ~~vs~~ and Quals

“There is a heavy whiff of the ‘paradigm wars’ in the literature surrounding them [methods of synthesis] and much mud slinging on behalf of the ‘quantitative’ versus ‘qualitative’, ‘positivism’ versus ‘phenomenology’, outcomes versus ‘process’ and so on” (Pawson, 2001: 3)

What is evidence?

‘the **available** body of facts or information indicating whether a belief or proposition is true or **valid**’.

Solesbury 2004

citing the Oxford English Dictionary
definition

What is evidence?

‘the kind of evidence that will tell us what works comes from trying it out – not from opinion, however plausible, but from **well-designed, well-evaluated, controlled trials**’.

Coe and Fitz-Gibbon 2004

The hierarchy of evidence

Rank

- **Systematic reviews and meta-analyses**
- **Randomised controlled trials**
- **Cohort studies**
- **Case-control studies**
- **Cross sectional surveys**
- **Case reports.**
- **Expert opinion**
- **Anecdotal**



The more
robust and
objective

Critique - Hammersley / Pawson and others...

- Inappropriateness for social sciences:
 - Randomised control trials (RCT)
 - Meta-analysis of evidence from those trials as a means of identifying best evidence for practice.
- locates evidence rather narrowly in the scientific domain
 - "administer 20ccs of strategy and stand well back..."

What is evidence?

‘evidence is factual **knowledge** or **data** that lends support to or casts doubt on a hypothesis. It is information on which we base our **beliefs** and **ideas** of how the world works.’

Morris (2004)

What is evidence?

‘It is information or data that people select to help them answer **questions** ... Evidence is **anything** that can be used as evidence *to answer questions* ... One person’s evidence is another’s information’

Knight 2004

The importance of criticality

‘As regards evidence based work, all too often this is deliberately divorced from critical thinking on the grounds that the evidence speaks for itself. It usually doesn't and, even when it does, it rarely answers “**why?**” questions. What is needed is a combination of evidence based work and **critical analysis** based on sound theory.’

Solesbury 2004

A

B



Hard

Soft

Quant

Qual

Models

Theories

Stories

Universal
facts /
laws

Net measures
of
effectiveness

Technological
rules

Cases

Experiences of
others

“proof”

Design
propositions

What works...

**...for whom, in which
circumstances...**

...and why

Three key questions about evidence

- How *relevant* is this to what we are seeking to understand or decide?
- How *representative* is this of the population that concerns us?
- How *reliable*, how well-founded theoretically, empirically is it [regardless of method]?

‘These are tough but necessary tests for evidence based policy and practice’

Solesbury 2004

Methods of synthesis – examples available

Primarily qualitative

- Narrative summary
- Grounded theory - Constant Comparison
- Meta-ethnography
- Meta-synthesis
- Meta-study
- Logical Analysis - Miles & Huberman's provide many similar data analysis techniques
- Metaphorical Analysis
- Domain Analysis
- Hermeneutical Analysis
- Discourse Analysis
- Analytic Induction

Primarily quantitative

- Content analysis
- Case survey
- Qualitative comparative analysis
- Meta analysis
- Bayesian meta analysis
- Quasi-statistics - frequency counting / vote counting

Primarily theory led

- Realist synthesis
- Theory driven synthesis

EBM has always a high importance on situated judgment and ethics

‘regardless of the definition used, the intent is that the use of current best evidence does not replace clinical skills, judgment, or experience but provides another dimension to the decision making process that also considers the patient’s preferences.’

Sackett *et al.* 2000



Agenda?

- **Formulating** (what questions / problems should we address?)
- Searching
- Selecting
- **Appraising** (what is good data?)
- Extracting
- **Synthesizing** (how do we integrate?)
- **Reporting**
- **Using**

We can
learn from
other fields

Other fields
want to learn
from us...