What Counts as Credible Evidence in Evaluation Practice?

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What Counts as Credible Evidence in Applied Research and Evaluation Practice?

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"The issue of what constitutes credible evidence isn't about to get resolved. And it isn't going away. This book explains why. The diverse perspectives presented are balanced, insightful, and critical for making up one's own mind about what counts as credible evidence."
And, in the end, everyone must take a position. You simply can't engage in or use research and evaluation without deciding what counts as credible evidence. So read this book carefully, take a position, and enter the fray." 

(Patton, 2009)
Overview

- Contemporary Evaluation Practice
- Evidence-based Practice
- Debates about What Counts as Evidence
- Experimental Routes to Credible Evidence
- Non-Experimental Approaches
- Moving Beyond the Debates
TRUTH

RESEARCH

RESEARCH

RESEARCH

RESEARCH

ACTION

ACTION

EVALUATION

THERE GO PROPERTY VALUES IN THE OLD NEIGHBORHOOD
Contemporary Evaluation Practice

- Booming
- Global
- Diverse Contexts
- Many More Evaluands
- Multidisciplinary
- Many New Approaches & Methods
- More than Traditional Social Science Research Methods
Second Boom in Evaluation Practice

- 1980s – Only 3 National and Regional Evaluation Societies
- 1990 – 5
- 2000 – More than 50
- 2006 – More than 70 including a Formal International Cooperation Network
Enough Truth, how do we get into the Action?
Evidence-Based Practice

- Highly Valued
- Global
- Multidisciplinary
- Many Applications
Sample of Applications

- Evidence-based Medicine
- Evidence-based Mental Health
- Evidence-based Management
- Evidence-based Decision Making
- Evidence-based Education
- Evidence-based Coaching
Sample of Applications

- Evidence-based Social Services
- Evidence-based Policing
- Evidence-based Conservation
- Evidence-based Dentistry
- Evidence-based Policy
- Evidence-based Thinking about Health Care
Sample of Applications

- Evidence-based Occupational Therapy
- Evidence-based Prevention Science
- Evidence-based Dermatology
- Evidence-based Gambling Treatment
- Evidence-based Sex Education
- Evidence-based Needle Exchange Programs
- Evidence-based Prices
- Evidence-based Education Help Desk
What Counts as Credible Evidence?
Sample of The Debates

- Qualitative-Quantitative Debate
- Visions for the Desire Future of Evaluation Practice
- AEA Statement vs. Not AEA Statement
- The Lipsey vs. Scriven Debate
- What Counts a Credible Evidence?
- EES Statement
Experimental Design: Gold Standard?

- Random Assignment
- Experimental Control
- Ruling Out Threats to Validity
Supreme Courts of Credible Evidence

- What Works Clearinghouse
- Campbell Collaboration
- Cochrane Collaboration
Experimental Approaches

- Henry: When Getting it Right Matters
- Bickman & Reich: RCTs - A Gold Standard with a Feet of Clay
- Gersten & Hitchcock – The What Works Clearinghouse
- Julnes & Rog - Methods for Producing Actionable Evidence
Non-Experimental Approaches

- Scriven: Demythologizing Causation and Evidence
- Greene: Evidence as “Proof” and Evidence as “Inkling”
- Rallis: Reasoning With Rigor and Probity: Ethical Premises for Credible Evidence
- Mathison: Seeing Is Believing: The Credibility of Image-Based Research and Evaluation
- Schwandt: Toward a Practical Theory of Evidence for Evaluation
Challenges of the Gold Standard

- AEA Statement vs. Not AEA Statement
- Theoretical
- Practical
- Methodological
- Ethical
- Ideological
- Political
- Scriven’s Summative Conclusion
Scriven, 2009

To insist we use RCTs is simply bigotry ... not pragmatic and not logical. In short, it is a dogmatic approach that is an affront to scientific method.
AEA Statement vs. Not AEA Statement

- AEA Opposition to Priority on RCTs
  “Privileging RCTs: Back to the Dark Ages”
  “Priority Manifests Fundamental Misunderstandings Causality and Evaluation”

- AEA Members Opposition to AEA Statement
  “Lack of Input from Key AEA Members”
  “Unjustified, Speciously Argued, Does Not Represent Norms or Many AEA Members Views”

- AEA Compared to the Flat Earth Society
Diverse Prescriptive Theories of Evaluation Practice

- Social experimentation
- Science of valuing
- Results oriented management
- Utilization focused evaluation
- Empowerment evaluation
- Realist evaluation
- Theory-driven evaluation
- Inclusive evaluation
- Fourth generation evaluation
RCTs Not Practical/Feasible

- Often Impossible to Implement Well
- Not Cost Effective
- Very Limited Range of Applications

- Chapter Authors Provide Evidence to the Contrary
RCT Ethical Issues

- Unethical to Withhold Treatment from Control Groups
- Why Evaluate if Treatment is Better?
- Delay Treatment
- Non Evidence-Based Programs are Unethical
Methodological Challenges

- Zero Blind vs. Double Blind – Experimenter Effects
- Allegiance Effects
- Unmasked Assignment
- Misguided Arguments about Causality
- External Validity Concerns

- Chapter Authors Claim Recent Methodological Developments to Overcome Some Challenges Noted in the Past
Political Concerns

- The RCT Gang has hijacked the term “evidence-based” for political and financial gain.

- “Evidence” and especially “scientific or rigorous evidence” have become code for RCTs.

- Focusing evaluation around these particular ideas about “scientific evidence,” allows social inquiry to become a tool for institutional control and to advance policy in particular directions.
Political Concerns

- It is epistemological politics, not the relative merits of RCTs, that underlie federal directives on methodology choice.

- The demand for evidence advances a "master epistemology." The very dangerous claim is that a single epistemology governs all science.

- Privileging the interests of the elite in evaluation is radically undemocratic.
Ideological Differences: Paradigm Wars

- “The positivist can’t believe their luck, they’ve lost all the arguments of the last 30 years and they’ve still won the war!”

- “The world view underlying the current demand for evidence is generously speaking a form of conservative post-positivism, but in many ways is more like a kind of neo-positivism.”
Ideological Differences: Paradigm Wars

- Many of us thought we’d seen the last of this obsolete way of thinking about the causes and meanings of human activity, as it was a consensual casualty of the great quantitative-qualitative debate in the latter part of the 20th century.
- Human action is not like activity in the physical world.
- Social knowledge is interpreted, contextual, dynamic or even transient, social or communal, and quite complicated. Privilege and honor complexity.
Ideological Differences: Paradigm Wars

- Evidence-based evaluation concentrates evaluation resources around one small question, does the program work?, and uses but one methodology, despite a considerable richness of options. The result is but one small answer.

- So what kind of evidence is needed? Not evidence that claims purchase on the truth with but a small answer to a small question, neat and tidy as it may be.
So What Kind of Evidence is Needed? (Greene, 2009)

Evidence:
• that provides a window into the messy complexity of human experience
• that accounts for history, culture, and context
• that respects differences in perspective and values
• about experience in addition to consequences
• about the responsibilities of government not just responsibilities of its citizens
• with the potential for democratic inclusion and legitimization of multiple voices - evidence not as proof but as inkling
Changing the terms of the debate - Melvin Mark
An attempt to “Change the terms of the debate”

• Inputs: Claremont symposium, resulting chapters. Other writings, interactions, etc.

• Mark’s contention:
  • Divergent methods positions rest on differing assumptions
  • Focus on underlying assumptions may lead to more productive debate
Disagreement 1: What’s the preferred evaluation question? And evaluation use?

• (1) Average effect size. For use in program/policy choice.

• (2) Other. Understanding lived experience. Or complexity. Or…. For other uses.

• Each bolstered by “democratic” rationale
Alternative debate topics

- Value of estimating the effect of a given program?
- Value, relative to addressing other questions?
- Who decides the above, and how?
- If program’s average effects are of interest, what ancillary methods are needed?
Gold Standards *in context*

• “Unfortunately, too many people like to do their statistical work [or their evaluation/applied research planning] as they say their prayers – merely substitute in a formula found in a highly respected book written a long time ago.”  *Hotelling et al. (1948)*
Wide Range of Views about Credible Evidence
CDC Evaluation Framework: 6 Key Steps + 4 Standards
CDC: Gathering Credible Evidence

- **Definition**: Compiling information that stakeholders perceive as trustworthy and relevant for answering their questions. Such evidence can be experimental or observational, qualitative or quantitative, or it can include a mixture of methods. Adequate data might be available and easily accessed, or it might need to be defined and new data collected. Whether a body of evidence is credible to stakeholders might depend on such factors as how the questions were posed, sources of information, conditions of data collection, reliability of measurement, validity of interpretations, and quality control procedures.
So What Counts as Credible Evidence?

It depends:

Question(s) of Interest
The Context
Assumptions of Evaluators & Stakeholders
Theory of Practice
Practical, Time, & Resource Constraints
Some Guiding Principles for Evaluation Practice

- Ongoing Discussion of Stakeholder Expectations
- Secure Buy-in to the Evaluation Design Before Revealing Results
- Be Aware of Potential Standards of Judgment
- Be Prepared for Meta-Evaluation
- Credible Evidence is Key for Influence & Positive Change
From Experimenting Society to Evidence-based Global Society?

From “RCTs” as the Gold Standard to “Methodological Appropriateness”