Haven't We Been Here Before? Convince Me

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APPAM-Westat Forum

Bringing Rigor and Intentionality to Mixed Methods Evaluations of Social Programs

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I’ll talk about three things

- Why I am skeptical about qualitative analysis
- What I’ve heard today to cause me to change my skepticism
- A challenge for qualitative analysts
First, I want to make clear that qualitative analysis does some really useful things

- It can help design the intervention and the impact analysis
- It describes the intervention, so that we know what was tested
- It can measure the fidelity with which an intervention was implemented
- Sometimes it can suggest promising avenues of research
Why I am skeptical about qualitative analysis (as frequently practiced)

1. I’ve never seen a theory or rigorous logical model that leads from the data to conclusions. Method often seems to be just a search for correlations in the data.

2. Can’t make causal statements, but sometimes do (without realizing it?)

3. Entails serious risk of investigator bias

4. Samples are often small and unrepresentative
1. Lack of theory

- "Logic model" or "theory of action" isn’t a theory of how data supports a conclusion – it’s a theory of how the intervention works.

- Theory I’m looking for is one that tells me how to take data and logically infer that “Intervention X didn’t work because...” or “Intervention Y has a positive impact because...”

- This needs to be specified before the analysis.

- What qualitative analysts often seem to be doing is mining the data for correlations. There are two problems with that:
  - Correlation isn’t causation
  - There are a nearly infinite number of possible correlations in qualitative data (or quantitative data, for that matter).
Correlation isn’t causation
US spending on science, space, and technology correlates with
Suicides by hanging, strangulation and suffocation

<table>
<thead>
<tr>
<th>Year</th>
<th>US spending on science, space, and technology (Millions of today's dollars (US OMB))</th>
<th>Suicides by hanging, strangulation and suffocation (Deaths (US) (CDC))</th>
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<tbody>
<tr>
<td>1999</td>
<td>18,079</td>
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<td>2000</td>
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<td>8,578</td>
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<td>2009</td>
<td>29,449</td>
<td>9,000</td>
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</table>

Correlation: 0.992082
2. Can’t make causal statements (but sometimes do) – e.g.:

- “The intervention wasn’t administered in accordance with the program design” is not a causal statement. It’s a perfectly legitimate – and useful -- descriptive statement.

- “The intervention didn’t work because it wasn’t administered in accordance with the program design” is a causal statement. It presumes that it would have worked if it had been implemented as designed. You can’t know that.

- The most you can conclude is that we still haven’t tested the intervention.
3. Serious risk of investigator bias

I’ll defer to the philosophers on this one:

- “The human understanding, once it has adopted an opinion, collects any instances that confirm it, and though the contrary instances may be more numerous and more weighty, it either does not notice them or else rejects them, in order that this opinion may remain unshaken.”
  
  - Francis Bacon, 1620

- “...a man hears what he wants to hear and disregards the rest...”
  
  - Paul Simon, 1968

- “What a fool believes, he sees.”
  
  - Doobie Brothers, 1978
4. Samples are often small and unrepresentative

- Tendency to forget that the laws of statistics apply just as much to qualitative data as to quantitative data

- E.g., opinions and experiences vary across people just like welfare benefits and earnings; if you gather experiences from a small sample of people you may get a very unrepresentative – and therefore misleading – set of experiences.
What I’ve heard today to cause me to change my skepticism

- Qualitative researchers (in this room) are sensitive to many of my concerns
- There are a lot of ways that qual research can add value that I hadn’t thought about:
  - Building the culture of evaluation and evidence-based policy
  - Evaluability assessments
  - Help inform program improvements once quant results are known (cycle of test/improve/test)
  - Learn about effect of implementation through systematic variation of implementation strategies within RCT)
  - Measuring intensity of different program components to suggest what might be driving impacts

(more on next slide)
More on what I’ve heard that assuages my skepticism

- Understanding the counterfactual
- Qualitative assessment of staff behavior *relative to* control group staff
- Can sometimes suggest instrumental variables for quant analysis
- Can produce useful implementation guides for practitioners
Challenge for Qualitative Analysts:
Start with an impact estimate from an RCT
But there is a distribution of site-level impacts around that mean estimate.
A local decision-maker wants to know...Am I here?
...or here?
Please tell me I’m not down here!
The challenge

- Can you tell the local policy-maker where his site falls in this distribution? At least, is he above or below the mean impact?

- This presumably has something to do with site characteristics (possibly not quantifiable) that either facilitate or diminish the impact of the intervention.

- To date, quantitative analysts have barely begun to tackle this problem, and so far, it looks fairly intractable.
Questions, comments, complaints...

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