Evidence Reviews

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Outline

▪ Overview of Evidence Reviews
▪ Four Steps in Evidence Reviews
▪ Effect of Evidence Reviews
▪ Three Open Issues in Evidence Reviews
Outline

- Overview of Evidence Reviews
- Four Steps in Evidence Reviews
- Effect of Evidence Reviews
- Three Open Issues in Evidence Reviews
Evidence Based Policy Paradigm

- Research Evidence
- Better Policies and Programs
- Better Outcomes for Clients
Translate research evidence into correct and accessible guidance for decision makers requires …

- People with a range of skills
- Considerable resources
Translating research evidence into correct and accessible guidance for decision makers requires …

- People with a range of skills
- Considerable resources
Outline

- Overview of Evidence Reviews
  - *Four Steps in Evidence Reviews*
- Effect of Evidence Reviews
- Three Open Issues in Evidence Reviews
Step 1: Identify All Studies

- Identify All Studies
- Assess Quality of Individual Studies
- Combine Evidence from Multiple Studies
- Disseminate Results to Decision Makers

Accessible Product
Live Guidance
Step 2: Assess Quality of Individual Studies

1. Identify All Studies
2. Assess Quality of Individual Studies
3. Combine Evidence from Multiple Studies
4. Disseminate Results to Decision Makers
Step 3: Combine Evidence from Multiple Studies

- Study A
- Study B
- Study C
- Study D

Identify All Studies → Assess Quality of Individual Studies → Combine Evidence from Multiple Studies → Synthesis → Accessible Product → Live Guidance → Disseminate Results to Decision Makers
Step 4: Disseminate Results to Decision Makers

1. Identify All Studies
2. Assess Quality of Individual Studies
3. Combine Evidence from Multiple Studies
4. Synthesis
5. Accessible Product
6. Live Guidance
7. Disseminate Results to Decision Makers
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- Overview of Evidence Reviews
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- *Effect of Evidence Reviews*
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Direct Effect

Much more likely if an Evidence Review identifies program models and disseminates that information.
Indirect Effect

Positive Feedback Loop:

*Evidence Review*'s induce better evaluations: disseminating best practices, inducing Evaluation TA
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Issue 1: The Evidence Base

- Foundation of Evidence Reviews: The individual studies
- But, there simply aren’t enough studies
- One single positive result is only weak evidence
  - Efficacy vs. effectiveness
  - Replicability crisis
  - Generalization to other environments
- (potential for) Negative Feedback Loop: Once “demonstrated effective,” another/more evaluation(s) can only hurt the program

There is no substitute for replication; even though it’s expensive, long time-line, and unglamorous
Some Evidence Reviews are using simple heuristics to synthesize the evidence; e.g.,
- One significant positive impact (in any domain)
- Two significant positive impacts and no significant negative impacts
- Simple mean of impacts

Need to move towards formal “meta-analysis”; a formal statistical approach for
- Combining estimates across studies, and
- Exploring when and how impact varies

But meta-analysis requires 3+ studies …
Suppose a site has a choice between two program models
Should it choose the program model with
1. Strongest (most positive) overall evidence? or
2. Evidence of effectiveness on a population “most similar” to ours?
Recent academic work and efforts of evidence reviews leans strongly towards #2/“most similar”
My (personal) position: That’s a serious mistake
My (personal) Position

- Science/policy analysis/evidence-based policy making is impossible if we don’t think results generalize; so …

- Assume results generalize and choose the program with the strongest overall evidence, unless
  - Obviously implausible, or
  - Clear evidence that impacts are different for this population

- For demonstrated effective programs, move aggressively to explore external validity
  - Meta-analysis of existing studies
  - New studies focused on external validity; i.e., how results vary
  - Caveat: Requires huge samples; perhaps 5x cases required to demonstrate effectiveness
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Research Evidence
“Evidence Review”
Better Policies and Programs
Better Outcomes for Clients
Evidence Reviews

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Feel free to contact me if you want copies of the papers (or just to talk more about these issues)
For More on these Issues …

- Three 2017 issues of *Evaluation Review* on Evidence Reviews
  - For an overview, my “Special Issue Editor’s Overview Essay”

- Also two 2017 issues of *Evaluation Review* on “External Validity in Evidence Reviews”
  - On external validity: my “Editors Comment”
For More on these Issues …


Open Call for Papers for Special Issue of *Evaluation Review* on Evaluation Technical Assistance

- Looking for federal perspectives

For copies of any of these papers, shoot me an email: Jacob_Klerman@abtassoc.com
Back Up Slides
Outline

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With flimsy justification, and in small type buried in routine documents, the Trump administration has informed 81 local governments and health groups that it will end grants they have received to run teen pregnancy prevention programs, two years before the grants are scheduled to end. The decision is unsettling even by the disquieting standards of this anti-science administration.
Evidence reviews are designed to identify evaluations, assess their quality, and summarize evidence into user-friendly materials free or research jargon.

Some Federally Funded Evidence Reviews

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<tr>
<th>Funder</th>
<th>Name</th>
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<tr>
<td>DHHS/ACF</td>
<td>Employment Strategies for Low-Income Adults Evidence Review</td>
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<tr>
<td>DHHS/ACF</td>
<td>Home Visiting Evidence of Effectiveness</td>
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<td>DHHS/AHRQ</td>
<td>Evidence Based Practice Center (health care)</td>
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<td>DHHS/ASPE</td>
<td>Teen Pregnancy Prevention Review</td>
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<td>Crime Solutions</td>
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<td>What Works Clearinghouse</td>
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<td>DHHS/SAMHSA</td>
<td>National Registry of Evidence-Based Programs and Practices</td>
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<td>(mental health and subst. abuse disorders)</td>
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“Evidence reviews, and in particular federally funded evidence reviews, are perhaps the most exciting and most important developments in “evidence-based” policy-making — that is, the use of research evidence in deciding what programs and policies to implement and the details of those programs and policies.”

Often a Major Effort

- Person months
- By skilled scholars
  - In judging individual studies
  - In combining evidence from multiple studies
  - In disseminating findings to non-technical audiences
- Applying common and vetted standards

Certainly more than we can expect of practitioners, decision makers, and most scholars
Direct Effect

- National programs adopt “higher impact program models”
- National funding streams require or encourage (e.g., give additional points for) grantees to adopt “demonstrated effective program models”
- Local programs adopt “higher impact program models”

*Much more likely if an Evidence Review identifies program models and disseminates that information*
Issue 3: External Validity

- Formally, this in invalid!
- Worrying some scholars a lot
  - See two volume Special Issue of Evaluation Review
- Pushing some Evidence Reviews to emphasize evidence for “similar populations”
  - Rather than overall best program