Five Simple Steps to Reading Policy research

1. Filter

Look for research that has been peer reviewed by other experts in the field. Peer review is like a seat belt—it won’t save you every time but it will reduce the odds of injury. Also investigate whether the parties who conducted or funded the research had an interest in the outcome. But even if they did, don’t automatically conclude that they twisted the results to fit their needs.

2. Focus on Research Reviews

Any single study can be flawed. That is why it is better to familiarize yourself with a new topic by reading a research review. Meta-analyses are reviews that use numbers to summarize the results of multiple studies. Just as valuable are reviews that assess the overall research without summing things up numerically. Like individual studies, reviews also can be peer-refereed. If you read a single study instead of a review, you should at least know how your study’s results compare to outcomes from other studies and fit with the larger body of research.

3. Seek Statistical Significance ... Sometimes

Statistical significance is typically assessed with a $p$ value. If $p < .05$, the outcome is often called "statistically significant" because there is less than a 5 percent chance of seeing results at least that magnitude if the hypothesis being tested is untrue. $P$ is highly sensitive to sample size, meaning that a big study can generate results that are significant but meaninglessly small. If there was no chance process involved in the study (e.g., participants were not randomly selected), $p$ has no real meaning and should not be used.

4. Size Matters

A study finds that a new intervention increases test scores. But by how much? Effect sizes can help you answer important questions about the magnitude of an impact. Sometimes effect sizes are reported in units such as standard deviations that are difficult to understand. Ask the researchers for a translation—e.g., points on the SAT. Once you have a good sense of how much bang you can expect for your buck, it is then up to you to figure out if the program is worthwhile, given the costs associated with achieving the desired effects.

5. Ask About Applicability

The most well-designed research in the world may not be useful in a policy context if the subject or situation studied was different from your own in a way that could impact the outcome. Always learn the who, what, when, and where of the research, not just the how. Otherwise, you might find yourself comparing apples to oranges.