



Chapter 2



Threats to Validity



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Understanding Threats to Validity

- *Validity* refers to the extent to which the results of an evaluation are supportable, given the analytic methods used.
- Examine threats to validity—things that might undermine the soundness of your claims—regardless of what your evaluation design is or whether you ask process or outcome evaluation questions.
- There are two main types of validity: *internal validity* and *external validity*.

Internal Validity

- Relates to the results of an evaluation.
- Example 1: Attrition
- Example 2: Selection bias



Threats to Internal Validity: Attrition

- *Attrition* happens when participants (for example, individuals, schools) leave an evaluation after it begins but before it concludes.
- There are often no data on participants who leave, producing an incomplete picture of the impact of the program on the leavers.

Threats to Internal Validity: Selection Bias

- *Selection bias* happens when the treatment group differs from the comparison group in a meaningful way that is related to the outcomes of interest.

External Validity

- Refers to the extent to which the results of an evaluation may be generalized to different contexts.
- Example 1: Contextual factors of populations.
- Example 2: Multiple treatments
- Example 3: The Hawthorne effect.

Threats to External Validity: Contextual Factors of Populations

- When effects found for one population may not generalize to another.
- When effective strategies in one context may not be readily replicated in other contexts.



Threats to External Validity: Multiple Treatments

- External factors involved in addition to the program being evaluated may cause the evaluation to detect a different effect than it would if the external factors were not present.



Threats to External Validity: The Hawthorne Effect

- Individuals act differently because they are taking part in an evaluation.



Validity Summary



- Validity can be assessed internally – the extent to which results are justified based on the evidence gathered, including any relevant claims of cause and effect
- Validity can be assessed externally – the extent to which results may be generalized to other contexts.



Chapter 2 Complete

1

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3

Recommended next: Chapter 3 – Levels of Evidence and Design Standards



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