Concept of Validity in the Context of Evaluation

Evaluation Cafe Brooks Applegate April 10, 2012

Is validity a noun or a verb?

- O Does it describe a process (a noun)
 - Is validity a 'thing'?
- O Is validity something you do, to validate.... (a verb)
 - O Is validity a process?

What is validity?

Audience generated ideas

Can We Define Validity?

What one can or cannot conclude from a study

Does validity have different 'definitions' for different applications, say research vs. evaluation?

Validation

Determining the appropriateness of interpretations, conclusions, and uses (inferences) of information (data)

As the interpretation, conclusion or inference changes the conversation of validity circles back to the practitioner for reconsideration

Two loci of validity

- O Study design (macro)
 - Campbell (1957); Campbell & Stanley (1963) Cook and Campbell (1979)
- Measurement (micro)
 - Cronbach & Meehl (1955); Cronbach (1971); Messick (1989); Kane (2006, 2009)

Does the information (data) support the USE the data are being put to?

- O What evidence exists that supports the use of the data for the intended and unintended decisions
- Internal evidence
 - O Study design, research protocol, analysis
 - O Accurate inferences drawn from the data
- External evidence
 - Classically we generalize across time, setting & populations

The precision – accuracy conundrum Is one more important?

- O Precision and concepts of reliability
 - Reproducibility, consistency, minimal error "truth in measurement"
- Accuracy and concepts of validity
 - O Does the data support the inference?

Research & Evaluation

- O Evaluation investigates things we know about
 - Answers the question "whether"
- O Research investigates things we don't know about
 - Answers the question "what, why & how"

Validity & Evaluation

How is the evaluation going to be used?

- O How evaluators personally USE information data vs how the primary stakeholders use information - data
 - Are evaluations idiosyncratic?
 - O I have heard it argued that many evaluations don't generalize but what is a generalization?
 - O Time, setting, people.....
- O To have valid evaluation, we must evaluate validity

Validity in the context of Evaluation

- O Does the Evaluation implement an evaluation function?
 - An evaluation function (heuristic evaluation function or static evaluation function) can be thought of as a function used to estimate the value or goodness of the evaluend?
- O Evaluation functions are common
 - Cost function, utility function, machine learning functions, computer simulations and games implement many evaluation functions, fuzzy logic, etc.
 - O Logic Models perhaps?
- The optimization of these "evaluation functions" is commonly seen as RESEARCH
- An evaluation/evaluator chooses one (or more) of these "functions"
- Only in trivial cases is the evaluation functions deterministic, in ordinary "real" problems the evaluation function must rely on HEURISTICS hence the need for VALIDITY
- Validity in the context of Evaluation can be seen as the optimal choice of an evaluation function

So - is validity a concept that is RESEARCHED or EVALUATED?