

Intro to Evidence

Practitioners want to make decisions based on good data, but not all data is good data. This session reviews important epistemological considerations (i.e., what constitutes meaningful data) as well as factors of reliability and validity, which differ slightly from traditional requirements of rigorous scientific inquiry.

Session attendees will learn how to:

- identify and describe differences in two main epistemological approaches.
- describe general standards of rigor for qualitative and quantitative methodologies.
- describe methods of triangulation and why triangulation is a desired method.

Types of assessment

- **Summative Assessment**
 - **Assessment Uses**
 - Assessing the final desired **Outcomes**
 - Tracking Usage
- **Formative Assessments**
 - Identifying Student Needs
 - Intermediate assessments for **Satisfaction** mid-program adjustments
 - **Outcomes**
- **Direct Measures**
 - **Campus Climate**
 - Tangible, observable, more **objective than subjective**
 - **Program Review**
- **Indirect Measures**
 - **Resource Effectiveness**
 - Perceptions, inferences, more **subjective than objective**
 - **Accreditation**

Ways of knowing

- Sensory Experience
- Agreement with others
- Expert Opinion
- Logic/reason
- Scientific Method
- Logic Models

Paradigms Of Inquiry

➤ Positivism

- Seeks ultimate Truth.
- Only verifiable claims based on experience is considered knowledge.
- Postpositivism accepts bias, but demands it be controlled.

➤ Interpretivism

- Believes in truth, not Truth.
- Seeks to understand specific phenomenon people experience

➤ Constructivism

- Believes in truth, not Truth.
- Seeks to understand phenomena through the interpretation and meaning constructed by the individual.

Epistemological

Differences

<u>POSITIVISM</u>	<u>CONSTRUCTIVISM</u>
Reality is objective and observable	Reality is subjective and constructed
Data are static	Data are evolving
Attempts to control bias and errors	Bias is part of the construction and interpretation of data
Researcher is disconnected from the data	Researcher is connected to the data
Data are often numbers and analyzed w/ quantitative methodologies	Data are often words, stories, pictures Analyzed w/ qualitative methodologies
Data from surveys, tests, quasi-experiments	Data: interviews, focus groups, narratives
Methods of inquiry: frequencies, cross-tabs, t-tests, ANOVAs	Method of inquiry: content and thematic analysis, open-coding

Good data Has

➤ Reliability

- Consistency and objectivity
- A concern of data collection

➤ Validity

- Appropriateness, correctness, meaningfulness, and usefulness of analysis
- A concern of variable selection, management, & data interpretation

➤ Trustworthiness

- The quality or characteristics of the research that make the findings believable to the audience
- A concern throughout the assessment cycle

Standards for Rigor

Quantitative Projects (numbers)

Internal Validity: Appropriately controlling for extraneous variables,

External Validity: Using random sampling to improve

Reliability: Measurement consistency; e.g., Cronboch's Alpha,

Objectivity: Controlling and working toward eliminating bias

Qualitative Projects (words/stories)

Credibility: Results are believable from the respondents' perspective

Transferability: Generalizability, as determined by the one doing the

Dependability: A researcher's ability to accurately and consistently

Confirmability: Controlling and working toward eliminating bias

Helpful notes

- Assessment does not develop or confirm theory, rather seeks to demonstrate program and service impact.
- Let the question (i.e., the item to be assessed) influence the data-collection method
 - Disregard your individual epistemological preferences.
 - Learn and prioritize stakeholders' and leaderships' preferences.
- Seek triangulation (multiple methods) whenever possible.

Approaches to Triangulation

- **Data Triangulation:** The use of a variety of data sources in a study
- **Investigator triangulation:** The use of several different researchers or evaluators
- **Theory triangulation:** the use of multiple perspectives to interpret a single set of data
- **Methodological triangulation:** the use of multiple methods to study a single problem.

(Jansick, 1998 as cited in Henning and Roberts, 2016)

The TQA

A Three Question Assessment

- What ideas did this presentation generate for you?
- Did you learn something today that might help you perform your job better.? Please describe.
- What could be changed about this presentation to make it more helpful or effective?

➤ Most of the information in this presentation is from Henning, G. W. & Roberts, D. (2016). Student affairs assessment: Theory to practice