

Ch. 6 Observational/Descriptive Methods

- I. Observational / Descriptive Methods
 - A. Observation is both a Research Design and a measurement tool
 - B. Designs
 1. Naturalistic Observation
 2. Structured Observation
 3. Field Experiments (not covered in book)
 4. Case Studies
 5. Archival Research (not really observation, but it is descriptive)

C. Observational Measures

1. These measures can be used in either the lab, or the real world.

Lab Example – Mary Main’s Strange Situation
Measure of attachment / Piaget

Real World – Our Cell Phone Study

2. The measures can be either Quantitative or Qualitative.

- Our study took a more Quantitative Focus.
- Qualitative observations might have focused on the purpose of each subjects helping.

II Advantages of Descriptive Methods

1. Provides Basic Knowledge: gives you a rich source of data
2. Flexibility in Research Question
3. Identifies Ecological Function:
Studying in the real environment you can ID the adaptive function of certain phenomena

III. Naturalistic Observation: We observe phenomenon in the environment in which they actually occur. e.g. Jane Goodall and her observations of Chimps in Africa.

A. **External validity (Generalizability)**

- to population (representativeness) =
Low (no random sampling)
- to situation (Realism)
 - Mundane Realism = high
 - Experimental Realism (involvement) = high
 - Functional Realism (Ecological) = high

B. **Internal Validity** = Low, no random assignment

C. **Strengths:**

- Research agenda can be rather flexible
- Can identify ecological function (role of behaviors in adapting to the environment.
- High in Realism (looks and functions like the real world, because it is measured in the real world.
- Provides Basic Knowledge

D. Weakness:

1. Reactance

- studying a phenomenon will change it in some way
- People react differently when they know you are watching them
 - Social Desirability /
 - Self-Presentation Strategies - Impression Management
 - Self Deceptive Positivity
 - Self-Awareness / Self-Consciousness

Solutions -

- Unobtrusive Observation
- The Participant Observer (Ethnographic Approach)
- Habituate Participants to observation.
- Unobtrusive Measures (Indirect Measures)

D. Weakness

2. Frequency of Behaviors.

- Infrequent behaviors will be difficult to observe

3. Non-equivalence of Behaviors

- There may be non-equivalence of complex behaviors. Difficult to compare two subjects behaviors that differ, even to a small degree, with respect to elicitors and outcomes.
- Solutions – Structured Observation

IV. Structured Observation:

Constrain the situation (real world or lab) so that desired event will occur consistently and frequently (equivalence of elicitors).

External validity

- Generalizability to population =
 - can be high (more control over sample selection)
- Generalizability to situation = Realism
 - Mundane Realism = can be low (especially in lab)
 - Experimental Realism = can be high
 - Functional Realism (Ecological) = should be high

Internal Validity = Low, no random assignment

B. Structured Observation:

Strengths:

- Increase likelihood of seeing desired behaviors & increase equivalence of behaviors.
- reduce time & cost

Weakness:

- May lose realism & increase artificiality
- e.g. when does the Levin study happen in the real world.

V. Field Experiment:

External validity

- to population = can be high (more control over sample selection)
- to situation = Realism
 - Mundane Realism = Should be high
 - Experimental Realism = Can be high
 - Functional Realism (Ecological) = should be high

Internal Validity = Can be high, if use random assignment to condition, though you lose control in the real world.

Strengths:

- Higher level of control = can infer causality

Weakness:

- May lose realism & increase artificiality

VI. Case Study:

External validity

- to population = Low
(one subject tells us little about the population)
- to situation = Realism
 - Mundane Realism = Can be high
 - Functional Realism (Ecological) = should be high

Internal Validity = very low

Strengths:

- Can investigate very rare psychological phenomenon.
- Rich source of data. Potentially, Longitudinal.

Weakness:

- No causal inferences or generalizability to the population

VII. Observer Bias

- Confirmatory Bias in Hypothesis Testing
- Perceptual Bias
- Error
- Solutions - Inter-Rater Reliability
 - Two raters must agree at some minimum level (depending on the type of ratings and data).
 - Generally 70-80% agreement is considered adequate.