Descriptive Research
Chapter 13

Descriptive Strategy Overview
- Measures a variable or set of variables as they exist naturally
- Not concerned with relationship between variables but with description of individual variables
- Useful as preliminary research

Observational Studies
- Naturalistic/behavioural observation
  - Natural setting
  - E.g. Education and Clinical Research
  - Systematic technique
  - Subject reactivity
    - Hidden observers
    - Habituation
  - Subjective interpretations by observer
    - List of behaviour categories
    - Well-trained, multiple observers
      - Inter-rater reliability (Cohen's Kappa – 0 to 1.0)

Ethogram

Observational Methods

- **Frequency Method**
  - Instances of behavior during fixed time period
- **Duration Method**
  - Time engaged in each behavior during fixed time period
- **Interval Method**
  - Does behavior occur during pre-determined intervals?
  - Can be more representative
  - Like: One/Zero Sampling
  - Record whether or not a behavior is occurring at predetermined intervals
  - Tends to overestimate duration and underestimates frequency
  - Better with shorter intervals

Part of an Ethogram

<table>
<thead>
<tr>
<th>Time</th>
<th>Ears Forward</th>
<th>Ears Out</th>
<th>Ears Back</th>
<th>Body Normal</th>
<th>Body Low</th>
<th>Body Arched</th>
<th>Tail Midline or Up</th>
<th>Tail Tucked (around body, between legs)</th>
<th>Tail Below Midline</th>
</tr>
</thead>
<tbody>
<tr>
<td>0:15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0:45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sampling Observations

- **Time Sampling**
  - Observe-record sequence through series of intervals
  - Observe at every X seconds interval
- **Event Sampling**
  - Shift to different behaviors or events at each new interval
- **Individual Sampling**
  - Id one participant to be sampled during 1st interval, then switch etc.
  - Like: Focal Individual Sampling
  - Focus on one subject at a time

Sampling cont.

- **Continuous Recording**
  - Record everything that happens
- **Scan Sampling**
  - Scanning whole group simultaneously
Content Analysis and Archival Research

- Content Analysis
  - Measure behaviors in movies or books
- Archival Research
  - Study historical documents

- Same techniques:
  - Catalog behaviors
  - Frequency, duration or interval method
  - Inter-rater reliability

Participant Observation

A type of naturalistic observation in which the researcher participates in the research setting and interacts with the informants

- Can range from complete participation to complete nonparticipation
- Level of deception varies from
  - Complete deception: Others are unaware of observer’s role as a researcher
  - Absence of deception: Others are fully aware of researcher’s role

Naturalistic Observation

- Also called nonparticipant observation
- Observe and record behavior in natural setting without intervening in any way

- Pros
  - High external validity
  - Can measure behaviors not able to manipulate
- Cons
  - Time-consuming
  - Important not to be disruptive

Types of Participant Observation

Complete participant
- The researcher participates as a full member of the group or community being studied
- Others are unaware of observer’s role
  - Offers unique insight into events of interest
  - Raises ethical issue of deception
Participant Observation

- Research interacts with and becomes one of the participants
  - Rosenhan (1973)
  - Drug busts
  - Mobs
  - Occult activities

The main experiment illustrated a failure to detect sanity (of 8 actual), and the secondary study demonstrated a failure to detect insanity.

Pros
- Insight, accessibility
- High external validity

Cons
- Time consuming
- Dangers
- Loss of objectivity

Types of Participant Observation

Participant as observer
- The researcher participates fully in the research setting
- Others know that s/he is a researcher
- Deception therefore not an issue

Disguised vs. Nondisguised Observation

- Should participants know that they are being observed?
  - Problem with undisguised observation:
    - Reactivity – participants act differently because they know they are being watched
  - Problems with disguised observation:
    - May violate right of informed consent
    - Potential violation of privacy
Disguised vs. Nondisguised Observation

- Ways to minimize reactivity:
  - Habituation
  - Partial concealment
    - participants know that they are being observed but not the specific aspects of behavior being observed
  - Knowledgeable informants
    - people who know the participants well observe and rate their behavior
  - Unobtrusive/ nonreactive measures
    - indirect measures that can be taken without participants knowing they are being studied

Contrived Observation

- Also called structured observation
- Sets up situation instead of waiting for behavior to occur naturally
- Often conducted in lab
- Also set up in natural settings
  - E.g. bird feeder
  - Piaget

Strengths and Weaknesses of Observational Research Designs

- Pros:
  - Actual behavior vs. reports of it
  - High external validity
  - Flexibility

- Cons:
  - Ethical concerns
  - Descriptive only

Survey Research

Interviews and Questionnaires

- Can ask questions at any time
- Don’t have to observe directly
- Structured Questions
- Examples:
  - Eating Behaviour
  - Political Attitudes
  - Demographic info of customers
Question Content

- Memory Questions
  - Hemenway – false positives for rare events
  - Poor memory for common events
  - Different strategies to recall events from recent and distant past
    - Last week – minor irritations
    - Last year – major irritations
  - Telescoping – events from distant past are remembered as having occurred more recently than they actually did

Question Content cont.

- Attitude Questions
  - Biasing effects of words
    - Raskinski (1989) – less support for “welfare” than for “assistance” for the poor
  - Earlier questions can influence responding on later questions – chronically vs. temporarily accessible info.
  - Biasing effects of interviewer

Demographic Questions

Question Types: Open-ended

- Greatest flexibility
- but
- Range of answers may be problematic
- Difficult to analyze
- Limited by participants’ expressiveness

- Describe your typical dating experience
- What is your favorite flavor of ice-cream?
- Where do you think a 3 million dollar donation to the university is most needed?

Question Types: Restricted

- Closed questions
- Select from answers already provided
- Limited number of response alternatives
- Easy to analyze and summarize
  - “How do you typically meet someone to date?”
    - [ ] Introduced by someone
    - [ ] Social event
    - [ ] In a university class or place of work
    - [ ] At a bar
    - [ ] Through sports or other athletic events
      Can include blank category:
      - [ ] Other describe _____________________
Question Types: Rating Scale

- Select numerical value on predetermined scale
- Easy to analyze
- Range of alternatives from positive to negative, not at all descriptive to describes perfectly or strongly agree to disagree (Likert scale)
- Equal spacing between response alternatives

Question Types: Rating Scale

- Anchors = verbal labels that establish the end points of the scale
- Middle often labeled esp. if denotes neutral response
- Labeling other points is optional
- Response set = participants’ tendency to answer all questions in same way
  - Use alternative phrasing – positive and negative wording

Survey Construction

- Demographic questions at end
- Sensitive questions in middle
- Grouping by topic and question type
- Uncluttered format
- Accessible language

Participant Selection

- Those for whom questions have relevance (volunteer bias)
- Broad cross-section
Administering Survey

- Mail
- Telephone
- Internet
- Touch-screen Kiosks
- In person

Cover Letter for Mailed Surveys

- Nonresponse bias
- Topic’s importance
- Usefulness of results
- Importance of each individual response
- Contact person for questions or comments
- Signature of recognized, respected researcher
- Include gift
- Advance warning
- Follow-up letter

Telephone Surveys

- Time-consuming
- Keep questions short and small # of response alternatives
- Practice reading survey aloud
- Interviewer bias
  - Consistent, neutral tone
  - Don’t change questions
  - Begin by identifying yourself and topic

In-Person Interviews & Surveys

- Interviews usually reserved for key informants or those who can’t read and answer written questions
- Experimenter bias – adopt consistently mildly positive response
Social Desirability

- Impression management
  - Active deception to keep interviewer from forming negative impression
- Self-deception positivity
  - Overly positive self report, not consciously
- Conform to pre-existing stereotypes
- Acquiescence
  - Tendency to agree with assertion of question no matter what it is
- Satisficing
  - Choose first acceptable response even if it's not the best

Cautionary Notes

- Results show that XX % REPORT that….
  - NOT that……
  - E.g. 14% of girls under the age of 16 report having engaged in sexual activities
  - NOT
  - 14% of girls under the age of 16 have engaged in sexual activities

Case Studies

- In depth record of an individual's experience
- No manipulation
- Idiographic approach = intensive study of individuals
- Often used in clinical research
- Demonstrate exception to a rule
- Rare phenomena
  - E.g. woman found alive after being buried under rubble for 60 days in Pakistan earthquake (Naqsha Bibi)
  - H.M.
  - Sybil

Case Study Strengths and Weaknesses

- More vivid and personal
- Exaggerated sense of credibility
- Lack both internal and external validity
- Selective bias – report most successful or dramatic case