

Psychology 2020 Introduction to Psychological Methods

Unit 3 Data Collection through Observation or Survey

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General Observational Approaches

- Quantitative approaches
 - Emphasize numerical properties of the thing being observed.
 - Observational results can be statistically analyzed.
 - Examples
 - Hours spent studying
 - Ranking of task difficulty
 - Percentage of on-task behavior

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General Observational Approaches

- Qualitative approaches
 - Emphasizes the nonnumerical aspects of the thing being observed.
 - Usually consists of descriptive paragraphs.
 - Statistical analysis of data in this form is not possible.
 - Examples
 - Diaries
 - Film documentaries
 - Written summaries of main themes and/or styles observed

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Naturalistic Observation

- The researcher observes and records behavior in its natural setting over a period of time in a descriptive format.
 - A qualitative research method if the data is not converted to numbers, if numbers are recorded it can become a quantitative method.
- Observations are interpreted and these interpretations are confirmed or disconfirmed by multiple observations.

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Issues in Naturalistic Observation

- Participation
 - Does the observer participate in the setting that is being observed and will participation disrupt the setting making the observations less accurate?
- Concealment
 - The purpose of the observation and/or the observer is hidden making observations more accurate but potentially unethical.
- Scope of observation
 - Not everything can be observed so the scope of observation is limited by the experimenter and this could bias the results.

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Systematic Observation

- Careful observation of specific behaviors in specific settings using structured, quantifiable methods.
- Observations are not described in paragraph form but numerically coded on specially designed data sheets.
- Systematic observation results can be analyzed statistically.

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Methodological Issues

- Systematic observations can be aided with the use of technical equipment (video tape, computers, clocks, etc.)
- The use of systematic observational methods may influence what is being recorded (reactivity problem).
- Reliability of observations can be measured by using more than one observer or recording method.
- When all behavior cannot be measured, sampling methods are used to get accurate estimates of total behavior.

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Case Studies

- Case studies are usually extensive descriptions of one individual or organization over a period of time.
- Case studies are one form of *naturalistic observation* research
- Case studies are conducted when an individual is unusual, has a rare disorder or noteworthy condition.
- Case studies provide valuable information that is not available in other forms of research.

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Archival Research

- Archival research uses data that was previously collected and compiled (usually for other reasons) to answer new questions.
- Two problems exist for doing archival research
 - The necessary records or documents may be difficult to obtain
 - The accuracy of information collected by someone else is always suspect

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Examples of archival research data

- **Statistical Records:** using US census records to study immigration trends.
- **Survey Archives:** using college survey results to predict employment trends
- **Written and Mass Communication Records:** using soldiers war letters to study the impact of combat
 - A **Content Analysis** is the systematic analysis of existing documents to answer a research question

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