NON-REACTIVE RESEARCH

Reactive Research

- People being studied are aware of that fact.
- Experiments and surveys are both reactive.

Non-reactive Research

- Those being studied are not aware that they are part of research project.
- Largely based on positivist principles. Quantitative.

The logic of Non-Reactive Research

- Uses measures that are not obtrusive or intrusive i.e.

- People being studied are not aware of it but leave evidence of their behavior or actions "naturally."

- Researcher infers from evidence to behavior or attitudes without disrupting those being studied.

- Unnoticed observation is also a type of non-reactive measure.

Varieties of Non-Reactive Observations

- ▶ Researchers have been creative in inventing indirect ways to measure behavior. Examples:

- ▶ *Physical traces:*

- ▶ a. Erosion. Wear suggests greater use.

- ▶ b. Accretion. Accumulation of physical evidence suggests behavior. Beverage cans/bottles in garbage collection.

- ▶ *Archives*: Running records. Marriage records.

- ▶ *Observations*: External appearance. Counting behaviors. Time duration

Content Analysis

- A technique for gathering and analyzing the content of text.
- The *content* refers to words, meanings, pictures, symbols, ideas, themes, or any message that can be communicated.
- The *text* is anything written, visual, or spoken that serves as medium of communication.

It is also called a study of communication:

- Who says what, to whom, why, how, and with what effect.

Possible artifacts for study:

- Books, magazines, speeches, poems, newspapers, songs, paintings, letters, laws, constitutions, dramas, films, advertisements, billboards, musical lyrics, photographs, articles of clothing, or works of arts.

- All these may be called as documents.

Documents can be:

- Personal
- Non-personal
- Mass media.

The researcher uses objective and systematic counting and recording procedures to produce quantitative description of symbolic content in a text.

May also be called as "textual coding"

Content analysis is non-reactive

▶ **Because the placing of words, messages, or symbols in a text to communicate to a reader occurs without the influence of researcher.**

▶ **No interaction between the researcher and the creator of text.**

▶ **The researcher reveals the content (messages, meanings, symbols) in a source of communication. May be something not clear to an ordinary reader/listener/viewer.**

Measurement and Coding

- Careful measurement is crucial.
- <u>Procedure to measure spelled out.</u> e.g. Negative stereotypes about women (give list). Violence on TV.
- Constructs are operationalized with a set of instructions or rules on how to systematically observe and record text. Leadership role. Written rules to classify people. Social class.

Observations can be structured:

- Rule how to categorize and classify observations in terms of:
- *Frequency*. Counting as how many.
- *Direction*: noting the direction of messages along some continuum like: positive-negative. Favorable-unfavorable. Friendly –unfriendly.
- *Intensity*: strength or power of message in a direction.
- *Space*: size of the text message – amount of space. It could be counting of words, sentences, paragraphs. For video/audio – amount of time.

Unit of analysis:

- Can be a word, a phrase, an article, a character

Coding:

- Categories/classification and giving labels to each category.
- *Manifest coding*: coding the visible → just counting the number of times a word, sentence, character appears. It is highly reliable. Same word could have different meanings. Limits the validity.
- *Latent coding*: (semantic analysis) Look for implicit meaning in the context of the text. Read the whole paragraph → romantic or vulgar. Censor Board decisions. It is less reliable. Check inter-coder reliability.

How to conduct content analysis?

1. Question Formulation

- Begin with a question. Should involve variables that are messages or symbols. How the women are portrayed in advertisements?

2. Unit of analysis

- Researcher decides on the unit of analysis. Each ad may be a unit of analysis.

3. Sampling

▶ **Researchers often use random sampling in content analysis.**

▶ **Define the population and sampling elements. Population could be all the words, all sentences, all paragraphs in certain documents over a period of time. E.g. we want to know how women are portrayed in weekly news magazines? Unit of analysis is the article. Population – all articles published in magazines Define what is an article. Decide on the number of magazines, period, sample size. Sampling frame shall be all the articles published in the selected magazine in a specified period. Do random selection.**

4. Variables and constructing code categories

▶ Women portrayal: leadership role. Make categories. Positive role. Inspiring role. Give written rules to classify role of women as portrayed in articles.

▶ Can have the coding sheets.

5. Inferences

- Content analysis describes what is in the text. It cannot reveal the intentions of those who created the text or the effects that messages in the text have on those who receive them.

- Describe the sex stereotypes in children's books. It influence on children's beliefs and behavior cannot be inferred.

Use of secondary data

Advantages:

- **1. <u>Access to inaccessible subjects</u>.**
- **2. <u>Non-Reactivity</u> → unobtrusive research. Observations are unnoticed. Indirect observations. One way mirror. Subjects are not living. Creator may be dead.**
- **3. <u>Can do longitudinal analysis</u>. Trend. Study over time.**
- **4. <u>Use sampling</u>. Use random sampling – population sample. How women are portrayed in weekly news magazines?**

- **5. <u>Can use large sample size</u>. More trust in generalization.**

- **6. <u>Spontaneity</u>. Spontaneous actions or feelings recorded when they occurred. Diary records. Letters. Speeches.**

- **7. <u>Confessions</u>. Persons more likely to confess in documents which are read after the death than in questionnaires. Diaries.**

- **8. <u>Relatively low cost.</u> Travel costs .**

- **9. <u>High quality.</u> Many documents (newspaper columns) written by skilled social commentators compared to respondents to a questionnaires.**

Disadvantages

- **1. Bias. Documents written for purposes other than research. Goals may bias the information presented. Money making. Present only positive/negatives.**

- **2. Selective survival. Preservation selective.**

- **3. Incompleteness. Letters/diaries include references only. Private background only known to the author.**

- **4. <u>Lack of availability of documents.</u> Documents remain classified.**

- **5. <u>Sampling bias.</u> Only well educated people will write. Views of poorly educated people are not there.**

- **6. <u>Limited to verbal behavior.</u>**

- **7. <u>Lack of standardized format.</u> Newspapers may have it, not for personal documents.**

- **8. <u>Coding difficulties.</u> Difficult to quantify.**

- **9. <u>Data must be adjusted for comparability over time.</u> Unit/value may change.**

USE OF SECONDARY DATA: EXISTINGSTATISTICS/ DOCUMENTS
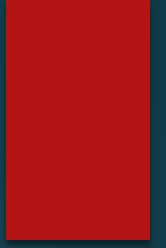
Secondary Data

▶ **Variety of data collected by others and available to researchers for further analysis.**

▶ **Data available in the form of statistical documents (books, reports). Also computerized records.**

▶ **Data collected by large bureaucratic organizations. Data gathered for policy decisions or as a public service.**

▶ **Time bound collection of information (pop. Census) as well as over long periods (unemployment, crime rates)**

▶ **Comparisons over time, across the countries.**

Selecting Topic for Secondary Analysis

▶ Formulate research question, reassemble the data in new ways to address the research question.

▶ Research question has to be in line with the available data. So first find what is available, then frame the question.

▶ Look into trends. Develop social indicators.

▶ Secondary analysis may not fit neatly into a deductive model of research design.

Locating Data

- Main sources are government or international agencies and private sources.

- Many existing documents are "free" and available at libraries. Laborious job.

- UN publications. UNESCO Statistical Yearbook. United Nations Statistical Yearbook, Demographic Yearbook, Labor force survey of Pakistan, Population Census Data.

Secondary Survey data

- Secondary analysis is a special case of existing statistics; it is reanalysis of previously collected data by others.

- Focus is on analyzing rather than on collecting data.

- Relatively inexpensive. Collecting such huge data by a single researcher may be prohibitive.

- Permits comparisons across groups, nations or time;

- Facilitates replication;

- Permits asking about issues not thought by original researchers.

Reliability and Validity

▶ **Existing statistics and secondary data are not trouble free. Researchers must be concerned about validity and reliability .**

▶ **A common error is the fallacy of misplaced concreteness. Someone gives a false impression of accuracy by quoting statistics in greater detail than warranted by how the statistics were collected.**

Validity problems

- Researcher's theoretical definition may not match with government agency or organization that collected the data. *Unemployed.*

- Researcher lack control over how the data were collected. Data collection as part of job. No quality control – systematic errors. Typographical errors.

Reliability

- Stability reliability problems develop when official definition or method of collecting data changes over time.

- Definition of literacy changed many times. Definition of unemployment. Poverty.

- Equivalence reliability. Decimal system. Problems of comparability nationally and internationally.

Inferences from non-reactive data

- To infer causality and to test a theory on the basis of non-reactive data is limited.

- Cannot establish temporal order of variables. Cannot eliminate the interference of confounding factors.

- Not possible to generalize from content to its effects on those who read the text. Only logical correlation.