ANALYZING COLLECTED DATA AND PRESENTING FINDINGS IN CHAPTER 4

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In this lecture...

1. Presentation
2. Analysis
3. Interpretation
HOW DATA CAN BE MISUNDERSTOOD

https://www.youtube.com/watch?v=hVimVzgtD6w
Is the process of organizing data into logical, sequential and meaningful categories and classifications to make them amenable to study and interpretation.
Three ways of presenting data

1. **Textual** - (statements with numerals or numbers that serve as supplements to tabular presentation)

2. **Tabular** - (a systematic arrangement of related idea in which classes of numerical facts or data are given each row and their subclasses are given each a column in order to present the relationships of the sets or numerical facts or data in a definite, compact and understandable form)
3. **Graphical** – (a chart representing the quantitative variations or changes of variables in pictorial or diagrammatic form)
Two general rules regarding the independence of tables and text

1. The table should be so constructed that it enables the reader to comprehend the data presented without referring to the text;

2. The text should be so written that it allows the reader to understand the argument presented without referring to the table. (Campbell, Ballou and Slade, 1990)
Types of graphs and charts

1. Bar graphs
2. Linear graphs
3. Pie graphs
4. Pictograms
5. Statistical maps
6. Ratio charts
* A separation of a whole into its constituent parts (Merriam-Webster, 2012)

* The process of breaking up the whole study into its constituent parts of categories according to the specific questions under the statement of the problem. (Calderon, 1993)
1. **Qualitative Analysis** – is not based on precise measurement and quantitative claims. (PSSC: 2001: 51)

2. **Quantitative Analysis** – is employed on data that have been assigned some numerical value. (PSSC: 2001: 51)

**MIXED METHODS**
Examples of Qual. Analysis:

1. Social analysis;
2. From the biggest to the smallest class;
3. Most important to the least important;
4. Ranking of students according to brightness;
This section answers the question, “So what?” in relation to the results of the study. *What do the results of the study mean?* This part is, perhaps, the *most* critical aspect of the research report.
It is often the most difficult to write because it is the least structured.

This section demands perceptiveness and creativity from the researcher.
How do we interpret the result(s) of our study?
INTERPRETATION GOALS

1. Tie up the results of the study in both theory and application by pulling together the:
   a. conceptual/theoretical framework;
   b. the review of literature; and
   c. the study’s potential significance for application.
2. Examine, summarize, interpret and justify the results; then, draw **inferences**. Consider the following:
a. Conclude or summarize

This technique enables the reader to get the total picture of the findings in summarized form, and helps orient the reader to the discussion that follows.
b. Interpret

Questions on the meaning of the findings, the methodology, the unexpected results and the limitations and shortcomings of the study should be answered and interpreted.
c. Integrate

- This is an attempt to *put the pieces together*.
- Often, the results of a study are disparate and do not seem to “hang together.” In the discussion, attempt to bring the findings together to extract meaning and principles.
d. Theorize

- When the study includes a number of related findings, it occasionally becomes possible to theorize.

e. Recommend or apply alternatives
1. Integrate your findings into a principle;
2. Integrate a theory into your findings; and
3. Use these findings to formulate an original theory