

Form 5.1 12 Steps to Understanding a Quantitative Research Report

Directions: Record notes in only enough detail to support recall in the absence of the original document. Except for Step 1, use abbreviations, diagrams, shorthand, and a careful selection of no more than what is absolutely essential to the study. Work on this sheet alone (except for Step 6), and do not be tempted to run onto additional pages.

1. **CITATION.** What study report is this? Record a complete reference citation.
2. **PURPOSE AND GENERAL RATIONALE.** In broad terms, what was the purpose of the study, and how did the author(s) make a case for its general importance?
3. **FIT AND SPECIFIC RATIONALE.** How does the topic of the study fit into the existing research literature, and how is that provenance used to make a specific case for the investigation?
4. **PARTICIPANTS.** Describe who was studied (give number and characteristics) and how they were selected.
5. **CONTEXT.** Where did the study take place? Describe important characteristics.
6. **STEPS IN SEQUENCE.** In the order performed, what were the main procedural steps in the study? Describe or diagram in a flowchart, showing order and any important relationships among the steps.

Form 5.1 (Continued)

7. **DATA.** What constituted data (e.g., test scores, questionnaire responses, frequency counts), how was it collected, and what was the role of the investigator(s) in that process?
8. **ANALYSIS.** What form of data analysis was used, and what specific questions was it designed to answer? What (if any) statistical operations and computer programs were employed?
9. **RESULTS.** What did the author(s) identify as the primary results (products or findings produced by the analysis of data)?
10. **CONCLUSIONS.** What did the author(s) assert about how the results in Step 9 responded to the purpose(s) established in Step 2, and how did the events and experiences of the entire study contribute to that conclusion?
11. **CAUTIONS.** What cautions does the author(s) raise about the study itself or about interpreting the results? Add here any of your own reservations.
12. **DISCUSSION.** What interesting facts or ideas did you learn from reading the report? Include here anything that was of value, including: results, research designs and methods, references, instruments, history, useful arguments, or personal inspiration.

Table 7.1 Five Basic Questions Answered in Research Reports—Typical Section Headings

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| <i>What Is the Report About?</i> | |
| Title | |
| Abstract | |
| Purpose (also can relate to the following question) | |
| <i>How Does the Study Fit into What Is Already Known?</i> | |
| Introduction, Research Purposes, and Related Literature | |
| References | |
| <i>How Was the Study Done?</i> | |
| Method | |
| Subjects | |
| Research Plan or Design | |
| Instrumentation | |
| Procedures | |
| Analysis | |
| <i>What Was Found?</i> | |
| Results | |
| Description of the Findings | |
| Figures | |
| Tables | |
| <i>What Do the Results Mean?</i> | |
| Discussion and Conclusions (often includes reference to the second question) | |