

HOW DO YOU EVALUATE THE QUALITY OF YOUR RESEARCH?

Both during the process of conducting a study and at its conclusion, you need to be mindful of the quality of the research. The improvement of practice, the quality of policy debates, and the advancement of knowledge all call for high-quality educational research. It becomes important, then, to consider the evaluation of research by asking, "What criteria should I use?"

Employ Appropriate Standards

Because the quantitative and qualitative approaches to research are different, each merits its own criteria for evaluation. However, both approaches reflect the broader research process (i.e., the six steps in the research process), and some common elements should play into the evaluative criteria as well. In addition, the audiences for research, mentioned earlier in this chapter, will employ criteria such as the following:

- Does the research meet the standards for publication?
- Will the research be useful in our school?
- Will the research advance policy discussions in our region?
- Will the research add to our scholarly knowledge about a topic or research problem?
- Will the research help address some pressing educational problem?

These are important questions, and the answers will shape how we evaluate a research report. Because of the various audiences involved, we have no single standard for research. Moreover, standards for quantitative and qualitative research tend to differ because the two approaches to research differ.

Quantitative Standards

In a study by Hall, Ward, and Comer (1988), the authors asked a panel of judges to rate 128 educational *quantitative* articles. The specific shortcomings of these articles, in order of their importance, were the following:

- Lack of validity and reliability in data-gathering procedures
- Weaknesses in the research designs
- Limitations of the study were not stated
- Research design not appropriate for the problem
- Inappropriate sampling
- Results of analysis not clearly reported
- Inappropriate methods used to analyze data
- Unclear writing
- Assumptions not clearly stated
- Data-gathering methods not clearly described

As you can see, quantitative evaluators were most concerned about aspects related to the data collection, the analysis, and the reporting of results of a study—the research design phase of the projects.

Another perspective on evaluating the quality of quantitative research is available from Tuckman and Harper (2012). As shown in Table 9.2, the standards follow the research process with an emphasis on the quality of the hypotheses and variables, the control of extraneous variables, and the importance of the discussion and its implications for research and practice.

TABLE 9.2
Quantitative Criteria for Evaluating Quantitative Research

Research Problem:

- Is it stated?
- Is it clear?
- Is it complete and accurate?
- Does it offer theoretical and practical value?

The Literature Review:

- Is it clear, relevant, recent, and based on studies reporting numbers?
- Are the citations and references accurate?

Hypotheses and Variables:

- What are the hypotheses, and what types are they?
- Does the study indicate the independent, dependent, intervening, moderating, and control variables?
- Were operational definitions given for the variables?
- Were extraneous effects controlled in the study so that bias did not have an effect on the participants, their experiences, or the generalization of the results?
- Were certain variables manipulated?

Design:

- Was the study design identified?
- Were the scores from the measures valid and reliable?
- Were the statistics the right choice?

Findings and Discussion:

- Did the findings fit the problem?
- How significant and important were the findings?
- Did the discussion section report conclusions, and were they consistent with the study's results?
- Did the discussion section offer reasonable interpretations of why results did and did not match expectations?
- Did the discussion section suggest reasonable implications about what readers should do with the results?

Source: Adapted from Tuckman and Harper (2012).

Qualitative Standards

Turning to qualitative research, the criteria for a good research report vary depending on your emphasis as a researcher. When we examine current perspectives about judging qualitative research, ideas within each of the three themes—philosophy, procedures, and participation/advocacy—combine to form our evaluation criteria. For example, as one interested in the philosophical ideas behind qualitative research, you might draw from perspectives about what constitutes knowledge (e.g., an evolving design) or reality (e.g., subjective experiences). As a procedural researcher, you might emphasize the importance of rigorous data collection (e.g., multiple forms of data) and analysis (e.g., multiple levels of analysis). As a participatory/advocacy writer, you might stress the importance of collaboration (e.g., researcher collaborates on equal terms with participants) and persuasive writing (e.g., does it seem true to participants?).

Let's examine three sets of criteria for evaluating qualitative research developed by different scholars. As seen in Table 9.3, the standards reflect both overlap and differences. All the standards speak to the importance of the participant in the research study as well as standards set within research communities. Writing persuasively and with respect for participants is also paramount in all three standards. Writing from a point of self-awareness and being sensitive to reciprocity and the impact of the study (e.g., emotionally and intellectually) on readers differs. In combination, all of them