

analysis (i.e., first quantitative results explained, then qualitative results explained in an explanatory design). Then the researcher reports on the conclusions drawn from answering the mixed methods question. In embedded designs, the focus is in the interpretation of the major findings related to the primary data set, but the author needs as well to comment on how the mixed methods question was answered. In transformative designs, the researcher will interpret how the merged or connected findings address the mixed methods research question and suggest a plan of action for social change. In multiphase designs, some combination of a concurrent, merged summary of findings and a sequential, connected summary of findings will be interpreted in terms of how the findings advance the overall objective of the program of inquiry.

● EVALUATING A MIXED METHODS STUDY

A writing structure that conveys the elements of mixed methods research and is organized to reflect the type of design used adds to the sophistication and credibility of a completed study. For those conducting mixed methods research, it is important to consider how to evaluate the quality of their study and to reflect on the criteria that others, such as graduate committee members, funding agencies, journal editors, and readers in general might use to assess the quality of a mixed methods study.

There are several ways to think about the evaluation of a mixed methods study. Assuming that the study is persuasive and rigorous in both the qualitative and quantitative strands, we can use the standards of both approaches that are available in the literature. In addition, mixed methods studies by themselves should be subject to standards of quality, and we will review several standards that are emerging in the mixed methods area.

Quantitative and Qualitative Evaluation Criteria

The standards for evaluating a quantitative study often reflect the type of research design and the methods of data collection and analysis (Hall, Ward, & Comer, 1988). A rigorous quantitative study phase in mixed methods research must use a type of design that matches the research question, a theory that frames the study, and data collection that will lead to reliable and valid scores. The statistical test must be appropriate and robust. The overall study needs to have accurate measures and be generalizable, valid and reliable, and replicable.

The standards for evaluating a qualitative study depend on how the researcher positions herself or himself in the study. Qualitative researchers differ in the criteria they would use, such as philosophical criteria, participatory and advocacy criteria, or procedural, methodological criteria (see Creswell, 2008b). We stress the importance of procedural or methodological criteria, such as emphasizing rigorous data collection, framing the study within philosophical assumptions of qualitative research, using an accepted approach to inquiry (e.g., ethnography, case study), focusing on a single phenomenon, using validity strategies to confirm the accuracy of the account, conducting multiple levels of data analysis, and writing a study that is persuasive and engages the reader (see Creswell, 2007). To this list we could add that researchers need to disclose their role (i.e., reflexivity) and its impact on the interpretations they make in a study.

Mixed Methods Evaluation Criteria

Our stance is that while mixed methods research must be responsive to both qualitative and quantitative criteria, there is a separate set of expectations for a mixed methods study beyond those needed for quantitative and qualitative research. Bryman (2006) calls this the “bespoke” approach where criteria are developed especially for mixed methods studies. Also, we see mixed methods evaluation criteria reflecting trends that seem to exist within qualitative research. As we discussed earlier, in qualitative research several perspectives exist about evaluation and that one’s viewpoint depends on their orientation. In mixed methods, this orientation may be as a methods person, a methodologist, a philosopher, or as a theoretically oriented scholar. Policy makers who fund research want to know whether the research questions are adequately answered, researchers who engage in mixed methods studies want to know if they can trust the findings and take action on them, research participants want to know if they have had a good experience, and teachers of research need to convey standards by which studies will be judged (O’Cathain, in press). For all of these stakeholders, we need to establish criteria for assessing mixed methods studies. As we introduced in Chapter 1, our selection of a good mixed methods study reflects a methods orientation. To evaluate a mixed methods study, the researcher

- collects both quantitative and qualitative data,
- employs persuasive and rigorous procedures in the methods of data collection and analysis,