

researchers' expertise and from interviewing researchers, and from mapping exercises with researchers. O'Cathain's framework included

- the planning quality of the mixed methods study (e.g., feasibility and transparency),
- design quality (e.g., detailed description of the design, suitability of the design, strength, and rigor),
- data quality (e.g., detailed description, rigor, and adequacy of sampling and analysis),
- interpretive rigor (e.g., relationship of findings to methods, inconsistencies found, credibility, and the likelihood that others reach the same conclusion),
- inference transferability (e.g., conclusions applied to other settings),
- reporting quality (e.g., successful completion of a study, reporting transparency, and yield of the study),
- synthesizability (e.g., whether the study is worthy of inclusion in a synthesis of evidence), and
- utility (e.g., whether results are usable).

O'Cathain ends by stating that there may be too many criteria. We agree that a parsimonious set of criteria will be most useful for those designing a mixed methods study—especially those with limited experience who are beginning their first mixed methods study. We are also mindful that the best criteria perhaps lie within a specific study application and its design. Because mixed methods researchers use specific research designs in their studies, the best criteria would refer to the essential characteristics of the six designs advanced in Chapter 3 and use these characteristics in assessing the quality of a mixed methods study. A contextualized set of criteria would best serve the researcher who wants to assess the quality of a particular study; it may be less valuable, however, for the broader community of mixed methods researchers who are policy makers or editors who need a more general set of criteria.

SUMMARY

General guidelines can help researchers write a mixed methods study. Writers need to consider the writing structure most accommodating to anticipated audiences, how their report and its composition will educate audiences, how their mixed methods study will be understood by audiences because of its complexity, and how it tells a coherent story in a consistent point of view or in a point of view natural to a specific type of design.

Because planning in advance is helpful in all forms of research, we provide examples of structures for designing mixed methods studies. We suggest outlines for writing a dissertation or thesis proposal, a final dissertation, an NIH proposal for funding, and a mixed methods journal article. Using a structure for the type of writing that is consistent with mixed methods research adds to the sophistication and credibility of a study. Most important to recognize with these structures is how the reporting approach changes based on different types of mixed methods designs.

We also suggest several sets of criteria that might be used for evaluating the quality of a mixed methods study, recognizing that various stakeholders, such as graduate committee members, funding agencies, journal editors, and readers, all need some criteria for determining the quality of a mixed methods study. Quality might be assessed for the qualitative and quantitative strands separately, and research methods books detail well these criteria. However, we feel that mixed methods research deserves its own set of criteria, recognizing that no one set of criteria currently exists. We suggest, however, using our "methods" criteria for assessing a good quality study published in journals as a starting point. Another set of criteria draws on recent writings about quality in mixed methods research, and it reflects across the spectrum of planning a study, using a research design, gathering high-quality data, making rigorous interpretations, providing quality reports, and using mixed methods studies for literature syntheses and practice. A final recommendation is to consider the characteristics of the research designs we have advanced in this book and look at the key characteristics of these studies to see whether a particular mixed methods study incorporates those characteristics.

ACTIVITIES

1. Develop an outline for the structure of a graduate student dissertation or thesis proposal that is sensitive to the type of design you plan to use.
2. Locate a published mixed methods journal article in your field. Use the points made in this chapter for selecting and evaluating a good published mixed methods journal article to critique the selected study.
3. Obtain the guidelines for a research proposal from a private foundation or federal agency other than NIH. Take the outline of topics for the NIH proposal as found in Table 8.3. Adapt them to fit the guidelines for the funding agency.
4. For a mixed methods project that you are designing, use the criteria mentioned by O'Cathain (in press) to critique your project.