

Standards for Qualitative Research

Guidance for Authors and Peer Reviewers

Narrative Inquiry in Bioethics (NIB) publishes research articles that use many different approaches to qualitative research, such as in-depth interviews, ethnographies, and focus groups. These articles incorporate frameworks for data collection and analysis, reflecting diverse traditions such as phenomenology, grounded theory, or narrative methods. Each tradition seeks to ensure quality in different ways. In what follows, we address a few basic elements of rigorous qualitative research that NIB's peer reviewers are asked to consider when evaluating manuscripts from diverse research traditions.

Authors submitting to NIB should explain how they have ensured the quality of each of the following elements of their qualitative research study:

1. Sampling. Authors are expected to justify their sample and, when appropriate, cite literature to support their practices. Two elements of sampling require special attention.

- Selection of participants or archival resources.
 - Study participants should have knowledge or experience that is directly relevant to answering the study questions; archival resources must be appropriate for the research questions under investigation.
 - The sampling approach (e.g., purposive or random) should be justified.
- Sample size. It is not possible to state a minimum sample size appropriate for a qualitative research study. A case study might involve one participant; grounded theory frequently advocates for sampling until saturation is reached. A common rule of thumb for grounded theory is to study at least 30 participants within relatively homogeneous groups; 25 is the most common number of interviews conducted in grounded theory projects.¹ At least one empirical study of saturation indicated that a high level of saturation may occur with samples as small as 12.² However, saturation is only one consideration when evaluating a sample. Roller and Lavrakas' "Total Quality Framework" for qualitative research points to other considerations when deciding upon an appropriate sample size, such as:³
 - Did all interviewees provide thorough and clear answers?
 - Did all interviewees answer all questions?
 - Can the researchers explain why data sometimes vary or contradict each other?

In general, larger sample sizes are needed when groups are heterogeneous, when the authors wish to compare and contrast subgroups, or when findings appear to contradict prior research and theory.

2. Data collection. Authors should justify their approach to collecting data. High-quality research requires that attention is given to the following matters:

- How interviews are conducted (e.g., face-to-face, by phone, or online)
- Interview guides and the development and refinement of questions
- Interviewer training and skills
- The accuracy of transcriptions

NIB strongly encourages authors to share data collection materials such as interview guides. These may be published as an appendix to the article or as online supplemental material.

3. Data analysis. Most studies involving in-depth interviews, focus groups, or archival data involve coding data. Data may be coded in many different ways: Saldaña's book on qualitative data coding identifies more than 25 different approaches to first-round coding, and many additional approaches to second round coding.⁴ Authors should state:

- Whether their coding was deductive, inductive, or mixed, and what framework was adopted for coding.
- What approach they adopted to ensuring the trustworthiness of their coding approach, such as:
 - Using multiple coders and establishing inter-rater reliability or using a consensus process to resolve disagreements
 - Member checking (reporting data interpretation to participants to elicit their feedback)
 - Triangulation with other data sources
- Whether (and which) software was used to support data analysis.

4. Reporting. Several articles systematically review and compile criteria for reporting qualitative research studies.^{5,6}

- Authors should follow a standard framework for reporting elements of their studies, adapting the framework only when an element is not applicable to the approach taken. NIB's author guidelines provide a link to the [COREQ reporting framework](#).
- When reporting findings (e.g., key themes), NIB strongly prefers articles that use illustrative quotes to support themes. NIB provides generous word limits to enable such reporting of findings.

5. Appropriate Caveats. Some qualitative research projects involve large, representative samples; most do not. Some studies engage in theory development; others remain at the level of description. Some studies are supported by large budgets and use robust approaches to ensuring the trustworthiness of the data and analyses; other studies have very limited budgets and use modest approaches to ensuring quality.

- All qualitative research articles should discuss the limitations of the study.
- Studies with notable limitations that nevertheless merit publication are frequently encouraged to incorporate words such as “pilot” or “exploratory” in their titles, abstracts, and discussions.

In particular, NIB appreciates that doctoral dissertation projects or quality improvement studies within institutions often have small budgets that can affect decisions about the sample size, study approach, or number of coders. Under such circumstances, NIB encourages authors to be transparent, to acknowledge study limitations, and to use alternative approaches to ensuring quality; e.g., when using only one coder, it is possible to code at different timepoints and establish split-half reliability, to member check, and to triangulate using existing literature.

References

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2. Guest G, Bunce A, Johnson L. How many interviews are enough? An experiment with data saturation and variability. *Field methods*. 2006;18(1):59-82.
3. Roller MR, Lavrakas PJ. A Total Quality Framework Approach to Sharing Qualitative Research Data: Comment on DuBois et al. (2017). *Qualitative Psychology*. 2017.
4. Saldaña J. *The Coding Manual for Qualitative Researchers*. 3 ed. Thousand Oaks, CA: Sage Publications Ltd.; 2016.
5. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007;19(6):349-357.
6. O'Brien B, Harris I, Beckman T, Reed D, Cook D. Standards for reporting qualitative research: A synthesis of recommendations. *Academic Medicine*. 2014;89(9):1245-1251.