# The language of research (part 20): understanding the quality of a qualitative paper (2)

#### KEY WORDS

#### ➡ Rigour

- ▶ Triangulation
- ➤ Stepwise replication
- Check coding
- ▶ Reflexivity
- ▶ Member checking

In the previous paper in this series, we looked at some of the ways in which the quality of a qualitative paper can be assessed; namely the trustworthiness, credibility, dependability, rigour, confirmability and authenticity of the research (Ellis, 2018a). We identified what these terms mean and that the sorts of rules which apply to the assessment of the quality of quantitative research, do not apply to qualitative studies: they employ very different approaches (methodologies and methods) and seek to explore very different questions.

This paper examines how we can assess the quality of qualitative research, looking at some of the strategies researchers might use to demonstrate to readers that that what they have undertaken is of good quality.

## WHY THE RESEARCHER NEEDS TO DEMONSTRATE QUALITY

Unlike quantitative research, which follow set rules and for which the processes of data collection are well established, qualitative research does not follow methodological blueprints. This is because the nature of the research is such that it must, by necessity, recognise the uniqueness of each research situation and data collection interaction. This means choices have to be made not only as to what data to collect, but also how this data is collected and, ultimately, how the collected data is interpreted.

Because of the number and type of decisions which researchers make, there is a necessity for them to demonstrate not only what these decisions are, but why they have made them. In laying this information bare, readers of qualitative research can both assess the quality of the research process for themselves as well as consider whether its findings might be applicable to their work and people with whom they work.

We identified in the last paper that this overarching level of faith that readers can place in the paper is called trustworthiness (Ellis, 2018a) and that trustworthiness is the headline term applying to the overall quality of qualitative research (Ellis, 2018b).

#### CREDIBILITY

Polit and Beck (2017) suggest credibility refers to the amount of confidence the reader has that the findings as presented are truthful and accurate. This refers to the quality of the paper and not the quantity of the data collected and in essence asks the question 'are the findings as presented really what the researcher found?' This is what Guba and Lincoln (1982) famously refer to as the papers "truth value".

There are broadly two main approaches to improving qualitative research credibility. The first is triangulation and the second member checking. Triangulation can take a number of forms in qualitative research but it essentially seeks to employ multiple methods (e.g. observation and interviews); data sources (e.g. people and written records); data collectors, and theories to create a more comprehensive understanding of the issue, phenomenon or people being researched. Its purpose is to ensure that the research outputs are comprehensive and strongly grounded. There are four broad approaches to triangulation:

**Methods triangulation:** methods are the tools used to collect data (Parahoo, 2014). Using more than one approach to collect data (e.g. interviews, focus groups, observations and interpretation of written records) allows the consistency of the findings to be compared and contrasted and therefore verified, or not.

**Source triangulation:** this approach uses the same method to collect data, but employs different sources. For example, using two different groups of people for the study, or perhaps interviewing the same people at different points in time or in different settings. Ultimately one may seek maximum variation in the data collection by interviewing people known to have very different or perspectives about the phenomenon of interest.

**Analyst/observer triangulation:** in this approach the data may be collected and/or analysed by more than one person independently of each other. This means that the inherent biases of any researcher become less important in the overall interpretation of the study and any 'blind spots' — issues which some researchers would miss – are more likely to be noted.

**Theoretical triangulation:** this is perhaps the hardest of the triangulation methods to understand. Data is analysed in more than one way on the basis that each approach to data analysis is informed by a different theoretical perspective.

### PETER ELLIS

Registered Manager at The Whitepost Health Care Company; Independent Nursing and Health Care Consultant, Writer and Educator

Member checking (also called responder validation or member validation (Lewis-Beck et al, 2004) requires researchers to provide their data, interpretation of the data and conclusions to the participants in the research to ensure that what they have gathered represents what the participant meant to say. It allows participants to comment on any errors in the recording and interpretation of the data collected as well as to provide any additional, perhaps clarifying, information that they may wish to. Thomas (2017) suggests that member checks might be justifiable in qualitative research, but is not convinced that they improve research findings.

#### DEPENDABILITY

Dependability in qualitative research refers to the stability of data over time and over conditions; it is an evaluation of the quality of the data collection, data, and theory generation that has been undertaken in a study. When scrutinising research for its dependability, one looks at the researcher's account of the changes which occurred in the setting being studied and what this meant for changes to the research methodology and methods as the setting became better understood. In this manner, the reader can have faith in how the researchers have both understood and described the context of the research, while having a full understanding of what took place to gather the data.

Guba and Lincoln (1982) identified that a dependable study needs to be both accurate and consistent. One method of evaluating dependability of data is stepwise replication. Stepwise replication might take the form of two researchers or teams collecting and/or analysing the collected data, which has been divided. The results from their individual analyses are then contrasted. Stepwise replication requires good communication and should form part of the research plan before being undertaken.

Miles and Huberman (1994) suggested check coding to demonstrate dependability. Here the researchers demonstrate that the same data has been reviewed by two or more individual researchers who discussed and then agreed what data fits where and which codes need to be expanded.

#### CONFIRMABILITY

The best qualitative papers maintain a trail of how data were collected and what interpretations were made. This audit trail is presented to some extent in the write up of the research, including original quotes and other data which informed the researcher's interpretations. So readers of the research can confirm that, given the same date, they might well have arrived at the same conclusions (Carnevale, 2016).

#### RIGOUR

Lewis-Beck et al (2004) defined rigour in qualitative research as referring to the research process with a more rigorous research process, resulting in more trustworthy findings. Barbour (2001) argued that rigour, rather than following of a set of rules or research checklist, is a "systematic and thorough application of the principles of qualitative research". Rigour, therefore, refers to the completeness of the description of the process involved in the research so readers can follow what researchers have done and make sense of the choices they have made during the research process.

One of the core elements of rigour within qualitative research is the ability to identify the influences of self within the research process — that is to be reflexive. Reflexive researchers are aware of the impact of preconceptions in designing and undertaking research and in analysing and interpreting data. Good-quality papers explain these issues to their readers, so that they can understand the influences on the researchers and gain a better understanding of what may have coloured the undertaking of the research process.

#### **CONCLUSIONS**

We have examined some of the main approaches qualitative researchers can take to ensure that the quality of the research they produce is as good as it might be. Such practices as triangulation, stepwise replication and check coding, practising reflexivity and member checking are all valuable in ensuring a degree of rigour during the research process. When reading qualitative research, informed practitioners can expect to find evidence of these practices in the best papers and where they are missing, they might question their credibility and rigour.

#### REFERENCES

- Barbour RS (2001) Checklists for improving rigour in qualitative research: a case of the tail wagging the dog? *BMJ (Clinical researched*)322(7294):1115–7
- Carnevale FA (2016) Authentic Qualitative Research and the Quest for Methodological Rigour. Available at: http://cjnr.archive. mcgill.ca/article/view/1768/1765. (Accessed: 30th December 2018)
- Ellis P (2018A) Decoding Science: the Language of research (part 19): Understanding the quality of a qualitative paper. *Wounds UK*14(5): 134–35
- Ellis P (2018b) Understanding Research for Nursing Students (4th Edition), London: Sage
- Guba, EG and Lincoln, YS (1982) Epistemological and methodological bases of naturalistic inquiry. Educ Commun Technol. 130:233–52
- Lewis-Beck, MS, Bryman, A, Futing Liao, T (2004) The SAGE encyclopedia of social science research methods. Sage, Thousand Oaks, CA
- Miles MB, Huberman, AM (1994) Qualitative data Analysis (2nd Edition). Sage, London;
- Parahoo K (2014) Nursingresearch: principles, process and issues (3rd Edition). Palgrave Macmillan, London:
- Polit DF, Beck CT (2017) Essentials of Nursing Research: Appraising Evidence for Nursing Practice. 9th Ed. Lippincott Williams and Wilkins, Philadelphia
- Thomas DR (2017) Feedback from research participants: are member checks useful in qualitative research? *Qualitative Research in Psychology* 14(1):23–41