Extended abstract

The quality of qualitative data analysis; experiments with grounded theory

Inge Hutter, Ajay Bailey, Monique Hennink

Within demography, more and more qualitative research is conducted (Coast, 2006; LeGrand, Koppenhaver, Mondain, & Randall, 2003; Obermeyer, 2005; Swidler & Watkins, 2007). However, criteria on what is good qualitative research are hardly set, with the exception of some reflective studies (Knodel, 1997; Obermeyer, 1997; Randall & Kopenhaver, 2004). Too often, actually, case studies or quotations are included in the results without any reference to:

- the theoretical framework behind the qualitative data collection;
- how the data were collected; i.e. a reflection on the fieldwork conducted;
- possible biases in the different stages of qualitative research, i.e. the selection of participants, data collection (either in-depth interviews, Focus Group Discussions, visual methods including observation), and analysis;

This makes us, qualitative researchers within a traditional quantitative discipline like demography, vulnerable. Reflection on the quality of qualitative data thus within demography is highly needed. Reflection on the quality of qualitative data have been carried out in the cognate discipline of health sciences (Carter & Little, 2007; Porter, 2007; Rolfe, 2006). We will reflect on their quality check mechanisms and examine the possibility for application in demographic research.

The present paper is the written outcome of a joint workshop on Qualitative research methods provided to Master students, PhD researchers and NGOs during the past 8 years, and existing literature on qualitative research (Berg & Berg, 2007; Hennink, 2007; Liamputtong & Ezzy, 2005; Mack, Woodsong, MacQueen, Guest, & Namey, 2005). The paper will focus on:

- general criteria for good quality qualitative research; the need for, e.g.:
 - o adopting and indicating the theoretical framework behind qualitative data collection;
 - a proper qualitative research question, which fits the qualitative method adopted;
 - reflection on the positionality of the researcher in qualitative research, thus subjectivity, in different stages of the qualitative research; i.e.
 - how participants were selected; how lists of questions or discussion topics were made; how interviews / discussions were conducted; possible biases; etc
 - reflection on how the data were analyzed;

The paper reflects on possible different levels of quality criteria: e.g. are criteria set for PhD research the same as those for qualitative research conducted by NGOs within a specific reproductive health project, or qualitative research by policy makers regarding a certain policy issue? For example, NGOs and policy makers often indicate that using grounded theory for analysis is too time consuming. What are minimum criteria for good quality qualitative research?

More specifically, the paper elaborates on the quality of qualitative data *analysis*. The authors (will) conduct two experiments.

Experiment 1a

An interview, on HIV-AIDS risk perception of migrants in Goa, India, has already been analyzed by the three authors, separately from each other. The question is: do the three researchers, analyzing the text by applying the principles of grounded theory, come to similar themes and codes, and to a similar inductive model? Are there similarities? Are there differences? Do they apply similar steps in the pathways of grounded theory?

The preliminary results (see Figure 1) show that the researchers adopt slightly other pathways in applying the principles of grounded theory. They come to slightly different lists of codes/ themes: especially the number of codes/themes differ and whether in-vivo codes are used or not. The inductive models below show some differences, but also many similarities, the difference being mainly identified in the level of abstraction.

Why the differences and similarities? Is it related to the background of the researchers, i.e. the positionality of the researchers? Some background characteristics of the three researchers, all of them being involved in qualitative research within the discipline of demography / public health:

X is the principal researcher of the project and thus was completely involved in the process of stating the research questions, the embedding in a theoretical framework of the Health Belief Model, collection of the data. The researcher is male, Indian and speaks the language of the respondents.

Y is the supervisor of X and has been involved, at more distance, in the whole research process. She is female, Dutch but knows India and its culture quite well and understands some of the language.

Z is a colleague of X and Y, is female and has been working on qualitative research on reproductive health in many developing countries. She is Australian, having lived in UK and USA.

Experiment 1b a step forward

Based on the first experiment, conducted on one interview transcript only, 10 more interviews will be analyzed. Lessons learnt from the first experiment will be taken into account. This experiment with the larger set of interviews will throw light on how grounded the concepts are and if we can arrive at an inter-coder reliability during our analysis. Applying the similar steps in the pathways of grounded theory, the interviews will be analyzed by the three researchers profiled above. A comparison of the final inductive models with the initial models (of experiment 1-A) will be made.

Experiment 2

In the steps towards data archiving and independent data analysis, an expert qualitative researcher from another discipline will be invited to analyze the 10 interviews. Through this experiment we want to examine what kind of inductive model a person arrives at, given that the person no background of the research on HIV/AIDS, reproductive health and India. A reflection from the expert on the problems faced during analysis will be collected and presented in the paper.

Figure 1 The three different inductive models



Conclusion

Regarding data archiving, the paper deals with the challenge whether researchers would be able to analyze the qualitative information collected by other researchers? Some qualitative researchers doubt whether this can be done: how can others get the 'smell' of the fieldwork in which the data were collected? How can they capture the socio-cultural context in which the information is only valid? The paper wants to indicate what information is needed to provide, additionally to the transcripts itself, in order to make analysis by other researchers possible.

Experiences with data archiving of qualitative research by e.g. the Dutch organization DANS of research organizations N.W.O (Netherlands Organisation for Scientific Research) and KNAW (Royal Dutch Academy of Arts and Sciences) and the Economic and Social Data Service (ESDS) in the UK on data acquisition criteria set forth by 'Qualidata', a data archive, will be referred to.

References

- Berg, B. L., & Berg, B. L. (2007). *Qualitative Research Methods for the Social Sciences* (6/E ed.). USA: Allyn & Bacon.
- Carter, S. M., & Little, M. (2007). Justifying Knowledge, Justifying Method, Taking Action: Epistemologies, Methodologies, and Methods in Qualitative Research. *Qual Health Res, 17*(10), 1316-1328.
- Coast, E. (2006). Local understandings of, and responses to, HIV: Rural-urban migrants in Tanzania. *Social Science & Medicine*, 63(4), 1000-1010.
- Hennink, M. M. (2007). International Focus Group Research: A Handbook for the Health and Social Sciences. UK: Cambridge University Press.
- Knodel, J. (1997). A Case for Nonanthropological Qualitative Methods for Demographers. *Population and Development Review*, 23(4), 847-853.
- LeGrand, T., Koppenhaver, T., Mondain, N., & Randall, S. (2003). Reassessing the Insurance Effect: A Qualitative Analysis of Fertility Behavior in Senegal and Zimbabwe. *Population and Development Review*, 29(3), 375-403.
- Liamputtong, P., & Ezzy, D. (2005). *Focus Groups, Qualitative Research Methods* (2 edition ed.). USA: Oxford University Press, .
- Mack, N., Woodsong, C., MacQueen, K., Guest, G., & Namey, E. (2005). *Qualitative research methods: a data collector's field guide*. Research Triangle Park, North Carolina: Family Health International
- Obermeyer, C. M. (1997). Qualitative methods: a key to a better understanding of demographic behavior? *Population and Development Review*, 23(4), 813-818.
- Obermeyer, C. M. (2005). Reframing Research on Sexual Behavior and HIV. *Studies in Family Planning*, *36*(1), 1-12.
- Porter, S. (2007). Validity, trustworthiness and rigour: reasserting realism in qualitative research. *Journal of Advanced Nursing*, 60(1), 79-86.
- Randall, S., & Kopenhaver, T. (2004). Qualitative Data in Demography: The Sound of Silence and Other Problems. *Demographic Research*, *11*(3), 58-93.
- Rolfe, G. (2006). Validity, trustworthiness and rigour: quality and the idea of qualitative research. *Journal of Advanced Nursing*, *53*(3), 304-310.
- Swidler, A., & Watkins, S. C. (2007). Ties of Dependence: AIDS and Transactional Sex in Rural Malawi. *Studies in Family Planning*, *38*(3), 147-162.