Is the published qualitative research in demographic journals fit for purpose?

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Context

The use of qualitative research methods (either alone or with quantitative methods) in the broad disciplinary field of demography has increased substantially post-2000 (Randall and Koppenhaver 2004; Coast, Mondain et al. 2009). The contributions of qualitative research to substantive and theoretical debates are longstanding in demography. Whilst debates about what constitutes high quality qualitative research are well-established in the social sciences more broadly, they have yet to be clearly articulated within demography (Coast, Mondain et al. 2009), with a couple of exceptions MATHEWS, 2008.

In this review we take as our departure point a statement made by Obermeyer in 1997 in an article that asked whether qualitative methods are key to better understanding demographic behaviour. Obermeyer makes the point that "the extent to which this is true will depend less on the methods themselves than on the ability of the researchers to formulate questions and define the right blend of method to address them" [p.185]

A systematic mapping is essential in order to accurately reflect all the state of the art of qualitative research in demography journals, no matter what the topic of the research is. The objective of this paper is to systematically and transparently describe the extent of qualitative research in demography journals. We set out to shed light on how quality is (or is not) manifested and to systematically map the research strengths and gaps. By focusing only on peer-reviewed output we focus on what has been deemed (by journal editors and reviewers) as being suitable to publish in demography/population studies journals. In this respect, editorial decision, and that of peer reviewers, may be perceived to act as gate keepers to what is established and accepted / acceptable new knowledge (McKay, 2003; Casanave & Vandrick, 2003). Of course, editors and reviewers can only accept work that is sent to them. Research related to demography is not only published in demographic journals, and we do not consider work produced by demographers in non-demographic journals.

Guiding our review is the over-arching research question "Is the published qualitative demographic research fit for purpose?". This broad question is addressed by considering range of sub-questions:

- i. how does the demographic community use qualitative methods?
- ii. In what ways (if at all) has published research in demography changed since 1997 in terms of use of qualitative methods?
- iii. What are the strengths and weaknesses of what is being published?
- iv. What innovations in published qualitative methodology can we find?
- v. Where are the gaps in published qualitative research practice? (for example, this is where we highlight issues around quality, author reflexivity, ethics etc.)

Much published qualitative research in demography is presented as part of a mixed methods methodology, that is, using both quantitative and qualitative approaches in order to address the research question(s) (Tashakkori & Teddie, 1998). In our review we define mixed methods as using one or more of both quantitative and qualitative methods. Where research uses several qualitative methodologies, but no quantitative method, we refer to this as "multi-method". The changing methodologies used in demography must be set against the background of changes within the social sciences in general, with the rise of multi-, inter- and trans-disciplinary approaches, including anthropological demography (Basu & Aaby, 1998; Coast, Hampshire & Randall, 2007)

The manifestations of the changing perspectives within demography with regards to qualitative methodologies can be seen in developments by professional organisations. For example, amongst others,

- The Obermeyer 1997 paper was part of a special collection in PDR, based on contributions to a special session at PAA in 1997
- EAPS working group on Anthropological Demography, which resulted in a social collection of *Demographic Research*. (see Bernardi & Hutter, 2007)

- IUSSP conferences in Marrakech (2009) and Busan (2013), have had / will have sessions devoted to the issue of the quality of qualitative approaches, organised by Susan Watkins and Inge Hutter, respectively.
- IUSSP panel on qualitative methods in demography (2010-2013) (constituting the authors of this paper)

By examining in detail what is published in the demography journals, we highlight the strengths and gaps in demographic research that uses qualitative and mixed methods.

Methods

We defined our sample of journals to search based on the top 10 highest citation scores in demography for 2009/10, based on the ISI citation index (ref) (as of 27/06/11):

- Demography
- o Perspectives in Sexual and Reproductive Health
- Studies in Family Planning
- Population Studies
- Population & development Review
- International Family Planning Perspectives
- o International Migration Review
- Population, Space and Place
- o Demographic Research
- o European Journal of Population

We excluded articles: without an abstract; not written in English; and, not published between 1998-2010. We used a series of search terms, which were pilot-tested for reliability, and searched using "Qualitative", "Mixed method", "Mixed-method", "Ethnog*", "Interview", "Observation", "Focus", "Discourse", "Text", and "content analysis". The search terms were designed to be as broad as possible, for example "focus" in order to capture multiple spellings of focus group discussions (focus-groups, focus group, focus group discussion(s) etc.).

Our coding frame (Appendix A) was developed by drawing upon established qualitative coding checklists, including:

- Social Science and Medicine (2011)
- BMJ (year)
- Boaz & Ashby (2003)
- Bryman, Becker et al (2008)
- Dixon-Woods et al (2004)
- Spencer et al (2003)
- Walsh & Downe (2006)

We tested our framework on 2 randomly selected articles, by coding as a group, and discussing in detail the issues that arose as a result of this test coding. The framework was revised and finalised as a result of this test coding exercise. We checked for inter-coder variability by double-coding a selection of ten articles (2 per author), and resolved issues that arose from this exercise prior to beginning the coding proper. We framed our coding from the perspective of Dixon-Woods et al (2007), who noted that they are most useful for sensitising readers and reviewers to methodological issues, but that they will not necessarily produce high levels of agreement.

Results

Our initial search yielded 3381 articles of which 120 were duplicates, leaving 3261 articles to screen for inclusion. They were reviewed on the basis of their abstracts, and a total of 186 articles were identified for inclusion in our review. The reduction in the number of article from the initial search to those included in the final review was due to the fact that our deliberately inclusive search strategy yielded spurious items. For example, use of the term "focus" yielded many items where "focus" referred to the subject of the article, which was entirely quantitative, and not to focus group discussions.

Mission statements

As part of our review we considered the missions statements / editorial statements made by each journal. These are the public statements of the journal's intent, and for many authors considering where to publish their research, they are the first port of call for deciding which journal might be appropriate to approach. There are many other considerations

taken into account, including impact factor, reputation, pre-existing knowledge of the journal and its review system, etc. However, we feel that a description of journal mission statements is important if we are to understand where qualitative research in demography is being published.

Table 1: Mission statement/instructions to authors for Top 10 ISI-rated demography journals (June 2011)

Journal	Mission Statement / Instruction to Authors
Demography	The editors welcome submissions that contribute to the scientific literature and that are of general interest to population scientists. <i>Demography</i> publishes research drawing on several disciplines including the social sciences, geography, history, biology, statistics, epidemiology, and public health. The journal gives priority to the publication of articles reporting on original research, including theoretical developments, improvements in models or methods, policy evaluations, applications of demographic principles or techniques, assessments of demographic data, comparative studies, and historical studies; the editors will also consider review articles on appropriate topics. Studies of developed and developing countries are welcome. Such research papers should not exceed 8,000 words, excluding references; tables and figures should not exceed a combined total of 10. The editors will also consider the following types of submissions, not to exceed 2,000 words: research notes, and brief commentaries on articles previously published in <i>Demography</i> , presenting reanalyses that generate new substantive conclusions. Revisions of papers published in proceedings not under copyright will also be considered; the volume of the proceedings should be noted in the submission letter.
	Manuscripts submitted to <i>Demography</i> will be judged, in part, by whether they have reconciled their results with already-published research on the same topic. Authors of accepted manuscripts will be asked to preserve the data used in their analyses and to make the data available to others at reasonable cost from a date six months after the publication date for the paper and for a period of three years thereafter. Authors wishing to request an exemption from this requirement (e.g., because the analysis is based on a proprietary data set) should notify the editors at the time of manuscript submission or after receiving this notice; otherwise, authors will be assumed to accept the requirement.
Perspectives in Sexual and Reproductive Health	Perspectives on Sexual and Reproductive Health is a peer-reviewed research journal serving researchers, policymakers, program administrators and service providers in the United States and other developed countries. The journal invites submissions based on qualitative or quantitative research on such topics as contraceptive practice and research; fertility levels, trends and determinants; adolescent pregnancy; abortion; sexual behavior; HIV and other sexually transmitted diseases; public policies and legal issues affecting family planning and childbearing; program operation, development and evaluation; information, education and communication activities; and reproductive, maternal and child health. We receive manuscripts with the understanding that they are not under consideration elsewhere and that the substance of the data or analysis has not been published previously. Submissions undergo a two-tiered review. They are screened initially by the editorial staff for overall quality and interest; about 40% are rejected at this stage, and the author is notified within about two months of submission. The surviving submissions undergo double-blind peer review by at least three experts in the field. Authors of articles sent for review can expect to receive critiques of their manuscript about four months after submission, with guidance from the editors as to whether to proceed with a revision.
Studies in family planning	Studies in Family Planning publishes public health, social science, and biomedical research concerning sexual and reproductive health, fertility, and family planning, with a primary focus on developing countries. Each issue contains original research articles, reports, a commentary, book reviews, and a data section with findings for individual countries from the Demographic and Health Surveys.
Population studies	Aims & Scope: For over half a century, <i>Population Studies</i> has reported significant advances in methods of demographic analysis, conceptual and mathematical theories of demographic dynamics and behaviour, and the use of these theories and methods to extend scientific knowledge and to inform policy and practice. The Journal's coverage of this field is comprehensive: applications in developed and developing countries; historical and contemporary studies; quantitative and qualitative studies; analytical essays and reviews. The subjects of papers range from classical concerns, such as the determinants and consequences of population change, to such topics as family demography and evolutionary and genetic influences on demographic behaviour. Often the Journal's papers have had the effect of extending the boundaries of its field.
Population development review	Population and Development Review is essential reading to keep abreast of population studies, research on the interrelationships between population and socioeconomic change, and related thinking on public policy. Its interests span both developed and developing countries, theoretical advances as well as empirical analyses and case studies, a broad range of disciplinary approaches, and concern with historical as well as present-day problems.
International perspectives on sexual and reproductive health	formerly International Family Planning Perspectives International Perspectives on Sexual and Reproductive Health is a peer-reviewed research journal serving researchers, policymakers, program administrators and service providers in developing countries. The journal invites submissions based on qualitative or quantitative research on such topics as contraceptive practice and research; fertility levels, trends and determinants; adolescent pregnancy; sexual behavior; HIV and other sexually transmitted diseases; public policies and legal issues affecting family planning and childbearing; program operation, development and evaluation; information, education and communication activities; reproductive, maternal and child health; and abortion. We receive manuscripts with the understanding that they are not under consideration elsewhere and that the substance of the data or analysis has not been published previously. Submissions undergo a two-tiered review. They are screened initially by the editorial staff for overall quality and interest; about 70% are rejected at this stage, and the author is notified within eight weeks of submission. The surviving submissions undergo double-blind peer review by at least two experts in the field. Authors of articles sent for review can expect to receive critiques of their manuscript four months after submission, with guidance from the editors as to whether to proceed with a
International migration review	revision. International Migration Review is an interdisciplinary peer-reviewed journal created to encourage and facilitate the study of all aspects of socio demographic, historical, economic, political, legislative and international migration. It is internationally regarded as the principal journal in the field facilitating study of international migration, ethnic group relations, and refugee movements. Through an interdisciplinary approach and from an international perspective, IMR provides the single most comprehensive forum devoted exclusively to the analysis and review of international population movements.
Population space and	Population, Space and Place aims to be the leading English-language research journal in the field of geographical population studies. It

place	intends to:
	O Inform population researchers of the best theoretical and empirical research on topics related to population, space and place
	 Promote and further enhance the international standing of population research through the exchange of views on what constitutes best research practice
	 Facilitate debate on issues of policy relevance and encourage the widest possible discussion and dissemination of the applications of research on populations
	 Review and evaluate the significance of recent research findings and provide an international platform where researchers can discuss the future course of population research
	 Provide a forum for population researchers to assess and apply philosophical and methodological developments in the social and behavioural sciences
	 Encourage quantitative, qualitative and mixed methods approaches to population research
	The scope of the journal is international, covering developed and less developed countries and embracing all the main fields of interest in population studies, including:
Demographic research	Demographic Research is a free, online, open access, peer-reviewed journal of the population sciences published by the Max Planck Institute for Demographic Research in Rostock, Germany. Contributions are generally published within one month of final acceptance. Demographic Research aims to:
	 publish top-quality demographic research and related material from the full range of disciplines that bear on demography, including the social sciences, the life sciences, mathematics and statistics, policy research, and research on the discipline itself;
	 harness the potential of the Internet. Articles may include data files, computer programs, and other supporting material, as well as hypertext links to other Internet resources; and
	 encourage the development of an international community of people concerned with demographic research, including researchers, teachers, students, data producers; and users of demographic knowledge in government, non-governmental organizations, and the private sector.
European journal of population	The European Journal of Population addresses a broad public of researchers, policy makers and others concerned with population, their determinants and their consequences. Its aim is to improve the understanding of population phenomena by giving priority to work that contributes to the development of theory and methods, and which spans the boundaries between demography and such disciplines as sociology, anthropology, economics, geography, history, political science, epidemiology and other sciences contributing to public health.
	Published under the auspices of the European Association for Population Studies, the journal is open to authors from all over the world, and its articles cover European and non-European (specifically including developing) countries alike.

Preliminary review of instructions to authors suggests that demography journals do not, by and large, make any allowances for longer word length for qualitative research. This is an approach that has been adopted by journals from other disciplines, recognising that where the data are words, for example quotes, the word length is likely to be affected compared to an article that relies instead on statistical tables or charts.

Reviewed articles

Key themes that emerge from our review of 186 articles include:

- little discussion of the justification or rationale for the choice of research method(s) used
- very low levels of author reflexivity / positionality even when the author has been involved in primary qualitative data collection
- distinct journal differences in the approaches to dealing with the limitations of the research and/or its ethical implications
- research using qualitative or mixed methods is dominated by research relating to SRH

Limitations

There are several limitations to our review approach:

- Our sample excludes researched published in books, which, with the exception of self-publishing, are also subject to editorial control. We acknowledge that, for some qualitative research, books can be an important outlet, rather than journals, particularly for researchers from a more anthropological disciplinary background where publication of a monograph is likely.
- The information we report about journal / editorial mission statements and goals is the most recently available, to match the date of our review. But it is likely that such statements (and journal instructions to authors) might have changed substantially since 1997
- We apply a coding criteria to what was published in the journal. This might not, necessarily, reflect what authors wanted to include in their article. Journal word limits may have precluded the inclusion of more detailed, reflexive information on the part of the author, for example. Out approach cannot uncover what happened in the writing, submission, review and revision process we can only research what has been published.

Our approach reveals nothing about papers / research that has been submitted and rejected. We do not know whether the distribution of rejections (for example, by research methodology) mirror the papers that are published in demography journals.

Future directions

Based on our review we develop practical suggestions for improving both the quality and the quantity of qualitative and mixed methods research published in demography journals. We argue that the demographic community does need to engage more critically with issues of quality in qualitative research, and consider how this might be achieved.

Basu A. M. And P. Aaby (1998). The methods and uses of anthropological demography. Oxford: Clarendon Press.

Bernardi L. and I. Hutter (2007). "Anthropological Demography", Demographic Research 17(18): 541-566.

Boaz, A. and D. Ashby (2003). Fit for purpose? Assessing research quality for evidence-based policy and practice. ESRC UK Centre for evidence based policy and practice Working Paper: 18.

Bryman, A., S. Becker, et al. (2008). Quality Criteria for Quantitative, Qualitative and Mixed Methods Research: A View from Social Policy. 11: 261-276.

Coast, E., N. Mondain, et al. (2009). Qualitative research in demography: quality, presentation and assessment. IUSSP. Marrakech.

Dixon-Woods, M., R. L. Shaw, et al. (2004). "The problem of appraising qualitative research." Qualitative Health Care 13: 223-225.

Dixon-Woods M, Sutton A, Shaw R, Miller T, Smith J, Young B, Bonas S, Booth A and Jones D (2007) 'Appraising qualitative research for inclusion in systematic reviews: a quantitative and qualitative comparison of three methods' in JHealth Serv Res Policy vol 12 no 1 Jan 2007

Kertzer, David I & Tom Fricke, 1997, Anthropological Demography. Toward a New Synthesis, The University of Chicago Press

Randall, S. and T. Koppenhaver (2004). "Qualitative data in demography: The sound of silence and other problems." Demographic Research 11(3): 57-94.

Rolfe, G. (2006). "Validity, trustworthiness and rigour: quality and the idea of qualitative research." Methodological Issues in Nursing Research: 304-310.

McKay, S. L. (2003). Reflections on being a gatekeeper. writing for scholarly publication: behind the scenes in language education. C. P. Casanave and S. Vandrick, Taylor & Francis.

Randall, S. and T. Koppenhaver (2004). "Qualitative data in demography: The sound of silence and other problems." Demographic Research 11(3): 57-94.

Social Science and Medicine (2011) http://journals.elsevier.com/02779536/social-science-and-medicine/1/40-journal-policies-and-guidelines/57-guidelines-for-qualitative-papers/ (accessed June 2011)

Spencer, L., R. J., et al. (2003). Quality in qualitative evidence: a framework for assessing research evidence: a quality framework. London, Cabinet Office Government Chief Social Researcher's Office.

Tashakkori, A., Teddlie, C., (1998) Mixed Methodology: Combining Qualitative and Quantitative Approaches, London, Sage, 1998.

Walsh D and Downe S (2006) 'Appraising the quality of qualitative research' in Midwifery vol 22

Appendix A: Coding frame

Bibliographic info:

Journal

Asuhtor(s)

Year

Topic: Fertility, Mortality, Migration, SRH, Other (specify)

Region: Europe / Africa / LAC etc.

Qualitative method(s)

Ethnography / Interview (of any kind, including KII, IDI etc.) / FGD / Observation / Content/discourse / text / document

Qwuantitative method(s)

Primary / secondary analyses

Mixed methods

Has the item used mixed methods? Y/N (we are defining mixed methods as quant-qual)

What is the reason question(s) / aim / hypothesis (write out in detail or note where unclear/missing)

is the paper setting out do to interpretive work? Y/N

Are the methods of the research appropriate to the nature of the question(s) being asked ? Yes/No/Partial

Is it clear how respondents were selected? Yes / no / partial

Is there a rationale for the sources of the data (e.g.: respondents/participants, settings, documents)? Y/ N/ Partial

Were the sources of data unusual in some important way? y/ n

Are the limitations of the data discussed (such as non-response, refusal to take part)? Yes / No

Is the process of accessing the respondents / data / source well described? Yes / no / partial

Is it clear how data were collected and recorded? Y/ N/ P

Is it clear who collected the data? Y/ N/ P

Is it clear when the data were collected? Y/ N/ P

Is it clear how the research was explained to respondents/participants? Y/ N/ P

Got formal ethical approval? Y/N

Is it clear how informed consent was achieved? Y/ N/ P

If there were any ethical concerns during the research, were they discussed?

Is it clear how themes, concepts and categories were generated from the data?

Was analysis computer-assisted? Y/N

Is it clear who was involved in the analysis and in what manner? Y/N/P

what steps were taken to guard against selectivity in the use of data?

Was triangulation used? Y/N (ir yes, how?)

Any evidence of inter-researcher reliability (if more than one researcher)? Y/N

is the researcher's own position clearly stated e.g.: have they examined their own role, possible bias and influence on the research (reflexivity)? Y/N

Is the distinction between data and their interpretation clear?

Is the research theory-driven? y/n

Is the iteration between the data and explanations of the data (theory generation) clear?

Is sufficient original evidence presented to satisfy the reader of the validity of thwe data / results?

Is there adequet consideration of cases or evidence which might refute the conclusions

Ire the conclusions of the study ckearly groudne din the data presented?

Is info provided about the setting and respondent(s)?

Has the issue under study been set in the social context (or has it been abstracted or decontextualised)?

Are any paricular contextal influences identified and discussed

Are quotations / field notes / other data identified in a way which enables the reader to judge the range of evidence being used?