## QUALITATIVE APPROACH IN POPULATION STUDY RESEARCH

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### Abstract

This article addresses the assessment of data quality in qualitative research. The analysis shows that the use of the qualitative approach in demographic research has a selective approach in terms of topics. It is used to increase the information about a certain problem or to clarify the existing knowledge obtained from the quantitative approach. The criteria for evaluating the quality of qualitative data are in the context of the methodological aspects in the research, but still there is no agreement regarding the framework for evaluating the quality of the data. In perspectives, aspects suggested for assessing data quality are data collection method, sample, selection and training of interviewers, field work and data analysis.

Keywords: demography; qualitative; methodology; population.

# 1. Introduction

Three scientific paradigms are used in social research methodology<sup>77</sup>. The first is positivism, the second is interpretive, and the third is critical paradigm<sup>78</sup>(Crotty, 1998). If we distinguish them according to the reason for research<sup>79</sup> positivism tends to reveal patterns so that people can predict and control events, and good evidence counts as precise, repeatable data. This approach is used in the quantitative research strategy, where reality is objective.

The reason for interpretive approach research is to understand and describe a meaningful social action, and the evidence is embedded in the context of fluid social interactions. For the critical paradigm,

<sup>&</sup>lt;sup>77</sup> Paradigm refers to the progress achieved in scientific knowledge based on philosophy and man's assumptions about the world and the nature of knowledge.

<sup>&</sup>lt;sup>78</sup> There are other divisions. Examples: Positivism, post-positivism, critical theory and constructivism: Lincoln, S. S. & Guba, E. G. (2000)..

<sup>&</sup>lt;sup>79</sup> These approaches differ on eight topics, namely: reasons for research, nature of social reality, nature of human beings, role of common sense, appearance of theory, type of explanations, evidence of values.

dispelling myths and empowering people to radically change society is the reason to start research, and theory that dispels illusions is the source of evidence. The positivist approach in research, that is, quantitative research, is "number one" in the domain of social research, including population research. This is due to the nature of the data and indicators. Namely, the nature of demographic phenomena and variables allows easy quantification of the phenomenon, but also quantification of the relations between the phenomena - quantitative documentation, synthesizing and summarizing of the data. According to the existing analyses, more than half of the research uses the quantitative method whose methodology is in accordance with the positivist approach in research (Lindlof&Taylor, 2002).

Since the eighties of the XX century, the qualitative approach has been used in social research as well as in demography more and more often. This approach corresponds to the interpretive paradigm (Schwandt, 1989).

The specificity of the qualitative approach is that it studies the event in its natural environment, but also tries to interpret the meaning as objectively as possible. Such research seeks to preserve and analyze the form, content and experience of a particular event in its original form as much as possible. They are much less or not at all interested in mathematical or any other transformation of the data. These surveys document the facts in detail. The need to explain the phenomenon, to understand the specific situation and understand the relationships between the phenomena, and not only its description and forecast of the expected results, are the arguments why the qualitative approach to data collection is more often applied in population studies.

The frequency of the use of qualitative approaches in research raises the questions of assessing the quality of the data that are collected as well as their analysis (Randal&Koppenhaver 2004). One of the essential questions on this occasion is how the demographer, the one who studies the population, can assess the qualitative results, but also how to present the qualitative data. This issue is reinforced by the fact that population researchers, demographers, in relation to the rest have little or no experience in applying the qualitative research approach. In that sense, they more often than others face the dilemmas of which research is good, that is, if the quality of the data is good.

In addition to this introductory part, the following parts will present the representation of the qualitative approach in the study of the population and the perspectives for determining the quality from a demographic point of view.

### 2. The qualitative approach in demographic research

Based on certain analyses, 24 articles were recorded in the period from 1991 to 1995, 43 from 1996 to 2000, and 54 articles for the period from 2001 to 2005 (Coast, 2003; Randall&Koppenhaver, 2004) in which the qualitative research strategy is used<sup>80</sup>.

It should be mentioned that the application of qualitative research in demographic research has a selective approach, first and foremost in relation to the topics being researched. The most common researches are topics related to the family, fertility behavior, sexual behavior or topics related to HIV/AIDS due to its nature of manifestation, it is possible to apply qualitative methods.

The qualitative approach in demographic research is used to increase information on a certain demographic topic or to enrich and clarify the existing knowledge obtained from the quantitative approach in research. Also, the qualitative strategy is a function of designing and testing the survey questionnaire for the needs of the quantitative approach. Furthermore, it is used to better understand unexpected research results, but also to understand sensitive topics, perceptions as well as certain elements of the social world that cannot be measured using a quantitative research strategy (Bozon, 2006).

<sup>&</sup>lt;sup>80</sup> The selection of the articles was made based on the key words (anthropology, ethnography, qualitative, focus group, in-depth semi-structured interview, observation with participation) in the abstracts of the following journals available based on JSTOR Demographs, Perspectives in Sexual and Reproductive Health, International Families Planning Perspectives, International Migration Review, Population - English edition, Population Studies, Population and Development Review, Studies in Family Planning.

Methods of data collection for the needs of population research are variable. From the ethnographic approach, to the application of focus groups (Barker & Rich, 1992; Calves, 2000; Guese, M. et al, 2001; Castle et al, 1999), and in-depth interviews, semi-structured interviews (LeGrand et al., 2003; Randall & LeGrand, 2003; Mondain&Delaunays, 2006; Mondain et al., 2007) and the historiographical method (Randall and Koppenhaver, 2004).

Regarding the qualitative strategy or approach in research, there are many papers that deal with the topics of how to collect, analyze and present qualitative data in the social sciences, but also specifically for demographic research. However, the assessment of data quality is less often debated.

More and more frequently, the question is whether the criteria for determining the quality of data that are also used in quantitative research, such as reliability, validity and replicability, can be used in qualitative research? (Poppas, 2006, Rolfe, 2006).

There are considerations that when it comes to the qualitative approach, the scientific approach should not be used to such an extent in terms of rigor when determining the quality of the research approach. For example, Sandelowski explains and says that trust, that is, the criterion of believing can be replaced by the term of validity, which is used in quantitative research. This author's explanations are in the context of quality assessment criteria. He explains that the data obtained from qualitative research depends on the context. The wider environment is a particularly significant element in determining whether empirical evidence is good or bad, even when using an identical method for the same methodological approach.

Other considerations are contained in the fact that the process of conducting qualitative research is dominated by diversity, which is explained by the fact that there is 'anarchy' in the process of data collection (Didgeon-Newwoods et al, 2004). Such ratings complicate the process of reaching consensus on how to assess quality in qualitative research. In that sense, dilemmas arise to think about whether the quality of data in qualitative research can be measured according to some other criteria, different from those in quantitative research.

The analysis of about a hundred proposals regarding quality in qualitative research indicates that there is no agreement as to whether the quality of the data can be checked at all, even when it is desired to evaluate it. (Didgeon-Newwoods, et al, 2004) Dixon-Woods believes that it is more appropriate in the process of developing assessment criteria to think in a more flexible way and what he recommends is to make distinctions between 'fatal gaps', and 'minor errors'.

Recently, in certain scientific journals, there are also guides regarding how to evaluate qualitative data in a clear way.

In addition to the doubts expressed above by some authors regarding the possibility of evaluating the quality of research and research records, there are attempts to define the criteria for quality evaluation.

The analysis focus on the quality assessment of qualitative data were performed on data from research conducted in the field of medicine and similar research in the domain of human health (Spencer et al. 2003). Based on available records for Spencer and her colleagues identified 29 research frameworks, and they differed in terms of purpose (is it a journal or a project proposal) use of different methods, their length, form and coverage.

The available data have been analyzed with respect to the following aspects. The first is in terms of the contribution of the particular research to the extension and understanding of policy, practice, theory or some other specific interest. The second concerns the research design. The third aspect refers to the rigor in the process of conducting the research. The assessment refer to whether thedata were collected, analyzed and interpreted in a systematic and transparent manner. The last aspect concerns the reliability of the data. It is evaluated whether the arguments are offered and how strong they are in relation to the significance of the collected data. These aspects were assessed through 18 questions and a concept of indicators for each question separately. The evaluation approach was applied in the domain of research design, results, sample, method of data collection, analysis, report, degree of reflexivity and neutrality.

The Walsh and Down (2006) model is a continuation of the previous model, the model of Spencer and his group of collaborators. Walsh and Down's analysis has 12 quality assessment criteria, and 53 specific questions have been identified.

The evaluation criteria are: 1) a clearly defined research subject that includes a research question, set objectives; 2) investigation of the subject in the context of the existing literature; 3) compliance of the method or research design with the intentions of the researcher; 4) a clear and appropriate strategy for data collection; 5) appropriate research sample; 6) appropriate analytical approach; 7) that the context is taken into account and is clearly shown in the interpretation of the results; 8) given a clear overview of the steps in the research; 9) data to be visible and used to support interpretation; 10) to perceive the reflections of the researcher; 11) that the ethical components in the research are visible; 12) relevant data and the same can continue to be used.

As can be seen, the criteria for evaluating the quality of qualitative data are in the context of methodological aspects in research, but there is still no agreement regarding the framework for evaluating the quality of data. In that sense, it can be said that the question still remains whether it is possible to determine the criteria for evaluating the quality of the data similar to the data obtained from quantitative research, or whether this topic should be considered in a more flexible way.

## 3. Certain aspects for determining the quality of data during population surveys

In qualitative research, the researcher has a special place in obtaining quality empirical evidence. More specifically, the researcher, in addition to having a good knowledge of the problematic situation, should also have a good knowledge of the reality and the context in which the research is conducted. Furthermore, the researcher should set aside all preconceptions regarding the problem under investigation and seek to discover new perspectives for understanding reality.

The specifics of the qualitative approach are that in the process of collecting the experiential records from the field, the researcher does not have an exact figure for how many people should be included in the conversation. The researcher expands the number of respondents until he judges that he has obtained a solid fund of empirical evidence.

In qualitative research, speech and words are analyzed. In that sense, it is especially important when using the qualitative approach to talk about the motive of the researcher, but also what is the motive of the respondent to agree to the conversation. This moment is considered particularly significant because it affects the quality of the information received from the interlocutors, but it is also a significant part or is unavoidable from the analysis itself.

Based on the mentioned specifics of qualitative research, certain aspects that can determine the quality of qualitative data will be suggested below. On this occasion we consider the following: data collection method, number of respondents and sample design, selection and training of interviewers, field work and data collection and analysis.

#### **3.1 Research Methods Selection**

In general, the collection method is conditioned by the tasks set in the research, by the nature of the variables, that is, the nature of the research object. In addition, for qualitative research in the study of the population, it is of particular importance to know the context in which the appropriate technique is applied.

For example, researching the process of deciding the number of children born in Senegal and Zimbabwe, both countries use the same methodological approach and identical research methods for data collection, field experiences, but the quality of the data differs. LeGrand L., T. Koppenhaver, N. Mondain and S. Randall (2003). In both countries, the methods of data collection are informal conversations (free discussions), in-depth interviews, photo stories and focus groups. Researches were carried out both in villages and in urban areas.

As a result of the specific research, it was established that the focus group gave good data for the group of women in urban areas, but not in rural areas. Possible explanations are that in rural areas people know each other well and did not feel free enough to express their thinking, practice, etc. regarding the topic. The informal conversations conducted by the researcher at the end of the day in his office with the younger people in the rural areas have been evaluated as highly valuable and usable in further analyses.

Focus groups in urban areas did not give the expected result. It was assessed that men did not want to talk in an informal situation in which they debated about certain private experiences. Men have been shown to be more willing to talk, but when the interviewer calls them to give their opinion on a certain topic.

In Zimbabwe the surveys were more open and ready for discussion in the focus groups, and in Senegal they gave more honest answers when the interviews were conducted.

These examples indicate that the degree of successful application of each method is individually influenced by the social environment, tradition in cultural norms and attitudes, gender differences and as such have an impact on the quality of the collected data.

### 3.2 Sample size

In general, qualitative research does not use large samples, and drawing generalizations about the underlying mass is not a primary goal. In qualitative research, the units for analysis are chosen purposefully, and representativeness is not a key element, but it is still good that the groups are heterogeneous according to certain characteristics of the examinations. Most often, these are the characteristics of gender, age and education or some other characteristics that are significant for the research itself.

The fact that the respondents are not randomly selected indicates that the research participants may not be typical representatives of the category they belong to or that there is a bias in the selection of the respondents. But that shouldn't be a problem. In such a situation, the researcher should be skilled enough to recognize that bias, isolate it if possible or give explanations for it in order to be able to control the responses from the selected research participants.

What affects the quality of the data is the behavior of the respondents. That is, for qualitative research it is less important that they are typical representatives of their category. However, it is especially important that respondents want to participate in the research and give honest answers.

Establishing a successful social interaction between the researcher and the respondents is a primary success factor in qualitative research. Sample size doesn't matter much in that context.

## **3.3 Selection and training of interviewers**

Understanding, interpreting and constructing reality based on the collected data inevitably leads to opening the topic of who should lead the conversation. This topic is particularly significant, as the principal investigator will not be able to be present at all stages of data collection. So who should lead the talks? A person who recognizes well the behavior and language of the local community and where the research is carried out, but is less trained or a person who has solid qualifications in conducting a conversation, but does not come from the environment in which the research is carried out and thus there is a possibility of not knows well enough the context in which the conversation takes place.

These dilemmas are particularly significant when research is conducted in environments that are characteristic according to certain specifics in terms of lifestyle, behavior, speech, and the like.

For example, if a certain research is carried out in rural areas or in poor areas and in areas where the educational level of the population is at a lower level in relation to the environment from which the researcher comes, the question is: what education should the person conducting the conversation have? Should you choose the person who does not have a secondary education, but can carry out a good conversation with the person and extract good information, because they belong to the same economic and social status and thus the respondent feels close and open, or should he be a doctoral student who is intellectually stronger , but it may not be able to collect higher quality respondent data. However, the principal investigator should pay attention to these components in the part of data collection, which as a problem can be overcome with appropriate training and coaching.

In order to ensure good quality of the data, it is necessary during the training that the trained interviewers understand the purpose of the research being conducted. In addition to the fact that the person conducting the conversation should have the appropriate skills to be able to collect the necessary

data, but at the same time the interviewer should have certain skills to be able to collect information and data from the respondents that are not required of him, but the one who leads the conversation, he should sense some other problems, that is, potential problems or ways of explanations. These data can only be known by the one who is directly involved in the field.

## 3.4 Field work

The data obtained in qualitative research largely depend on the field work, that is, on the way the research itself is carried out.

The way of conducting the conversation, the way of asking the questions in qualitative research are flexible, but it must be ensured that the answers obtained from the field are not general, but provide certain specific insights. Such specific knowledge should be presented with examples. It is not desirable that general feelings prevail in the received answers. It is especially important in demographic research that the data and answers are based on the personal experience of the respondents.

During the conversation, the interviewers should encourage the respondents to illustrate their attitudes, opinions with concrete, specific situations with personal experiences. In this part, the one who leads the conversations makes a special contribution, both with his approach during the collection of data, and in the part of arranging the data. Namely, the method of recording the answers should be done in a systematic way and it should be done after every interview. In this way, the contextual information, the parts of the non-verbal communication that are present during the conversation, and which are considered relevant in the process of data interpretation, in terms of what was said and how it was said, are easier to enter. Non-verbal communication should be noted in addition to responses, as it indicates the intensity of the claim. And, it can be noticed only while the interviewer remembers and therefore it is necessary to do it as soon as he finishes the interview. Namely, the contextual information, that is, the way in which the answer is given, for example, whether something is said with a serious tone, with a strong facial expression, quickly giving an answer, etc. are contextual information that contribute to the quality of interpretation.

Since the principal investigator cannot always be present in the field, during the data collection phase the principal investigator must be in constant contact with the interviewer. (Mathemess, 2005).

### **3.5 Presentation of the results**

How to present the data? The data should be presented in a way that will allow the one who reads the research report or reads the text to be able to assess the quality of the conducted research, that is, the quality of the data.

Citations are the main form of data representation. They should be presented in such a way that they represent a record of knowledge, not that they represent an example. The selection of the quotes is made by the researcher, and the selection criteria may be different. It can be something that usually happens or something that deviates from the usual. Of course, the quote should express a rare occurrence of an attitude, opinion, perception or experience.

In addition to the criterion for the selection of the quotations, the following topics are opened that need to be clarified in this section. These are: should the qualitative data be quantified? In relation to citations, questions are raised regarding length, scope and form of presentation.

Basically, it is not desirable to quantify the data obtained in qualitative research. For example, the precise answer: "4 out of 6 interlocutors answered that they do not talk to their spouses about family planning" is better to replace with the more flexible style, "more than a part of the interlocutors mentioned that they do not talk to their spouses about planning." of the family".

This approach is justified by the fact that when conducting the interview, it is not mandatory to ask the questions in the same way, in the same order with each interlocutor. In that sense, giving the answers depends a lot on the way the question is asked, in what context. In such a flexible situation of asking questions, it is considered wrong to use statistics when analyzing the answers. In addition, silence is not necessarily a sign that something is not important, that something is not accepted or practiced... (Randall & Koppenhaver, 2004).

There is no established rule when determining the optimal length of citations. Each citation should elaborate the results, and the length should not burden the text. Ideally, larger citations can be

provided in an appendix at the end of the text. (Brand, 2001) Depending on the obtained results, it is possible to elaborate a specific topic through discourse analysis. However, to assess the quality, for the systematicity in the presentation of the answers, it is desirable to cite the question that leads to the answers obtained. This is considered significant because the reader should have knowledge of the context in which the conversation took place. However, there is a danger of not over-contextualizing information, which can lose the essence. The place of quotations in the text is a matter of discretion. They may be part of the text, but it is quite correct to additionally present the quotations in a separate section outside the text. The use of additional data, so-called additional information that may be useful for solving the problem being analyzed, should preferably be presented.

## **Concluding observations**

The specificity of the qualitative approach is that it studies the event in its natural environment, but also tries to interpret the meaning as objectively as possible. In this sense, the question of the possibility to evaluate the qualitative data is rightly raised. And, this question is asked much more often among demographers, population researchers, because these scientists used this approach in "company" with the quantitative one, which has clear criteria for assessing the quality of the data. But it is a fact that demographers, compared to other researchers, have less experience in conducting qualitative research and thus are less skilled in assessing the quality of data in qualitative research.

In general, the qualitative approach makes it possible to clarify the research situation, to understand how people understand the problem being investigated, but also to assess how their experience, perceptions and attitudes affect the specific activity.

Regarding the data collection methods, it can be said that all those that identify the qualitative research are used, namely the ethnographic approach, to the application of focus groups and in-depth interviews, semi-structured interviews and the historiographic method.

As can be determined the criteria for evaluating the quality of qualitative data are in the context of methodological aspects in the research, but still there is no agreement regarding the framework for evaluating the quality of the data. In that sense, it can be said that the question still remains whether it is possible to determine criteria for evaluating the quality of data similar to the data obtained from quantitative research, or whether this topic should be considered in a more flexible way.

However, in order to preserve the basic principles of scientific research, among which repeatability is considered significant, it is especially important that qualitative studies have as comprehensive a presentation of methodological explanations as possible. In this way, a greater insight into the methodological standards of qualitative research is possible.

As an aspect that should be taken care of in order to be able to evaluate the quality of the data, it is that the interaction between the interviewer and the interviewee has been described.

In qualitative research, citations are the main form of data presentation, in a way that they should be a record of knowledge, not an example. The need for longer citations exists, precisely for the purpose of improving the so-called data quality checklist, but they should be presented in a systematic way. In addition to citations that serve to verify the validity of the data, it is necessary to add additional sources, additional explanations that can capture the context when the empirical evidence was collected, a primary success factor in qualitative research.

The primary factor for success in qualitative research is the establishment of successful social interaction between the researcher and the respondents. In addition, the person leading the conversation needs to be skilled at eliciting answers, opening topics that are significant and that will help shed light on the problem.

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