Data Analysis of Interviews

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Abstract:

This research investigation presents and studies a procedure that can be adopted in the analysis of data, which emanate from interviews. Indeed, the procedure consists of two main phases, the first obeys to the technical, rigorous and mathematical parameters which can be utilized in the process of examining the data collected with the help of an interview as a research tool. The second phase is evidently less empirical with regard to the provision of countable and testable information; however, it would be quite useful in the first steps of the study of the data originating from an interview, especially in terms of time management, dismissal of unnecessary details and focus on the core corpus of the data. Within this context, the researchers hypothesize that such a binary-stage procedure is inter-complementary because a technical analysis associated with a number of socio-psychological tips of data management would represent a very useful combination of a credible data analysis procedure which would help particularly students and novice researchers in their scientific inquiries.

Keywords:

interview; data analysis; technical parameters; socio-psychological tips; novice researchers.

1. INTRODUCTION

Researchers often investigate as members of specific communities. In fact, the members of a community share goals, values, concerns, background information, and expectations, and this fact in turn affects how they interpret the data. Because such analysis is closely tied to the interests of the community; professional interpretation of information often starts with a section linking their content to previous research projects. Consequently, custom dictates what information must be included, the pattern of organization, and the style the interviewer should follow.

Throughout the investigation, the researcher will discover that the information provided by the interviewee is often embedded in the values and customs of different discourse communities. Within this context, the interviewer should always ask himself these questions with regard to the nature of the issue and the social background of the interviewees:

*What are the major concerns and questions of the respondents?
* What seems to be common knowledge?
* To what knowledge do interviewees regularly refer?
* How do those in relation to the issue go about answering questions?
*What methods do we follow?
*Which kinds of knowledge are acceptable? Which are not?
*What values seem to guide the interviewees?
*What kind of information must researchers include in the   analysis?
*What conventions should researchers follow?

On the whole, a community can involve competing groups, conflicting values, differing kinds of views, and varying approaches to the issue. But as part of our efficiency as professional researchers, we will need to understand the goals and rules of the interviewees' community.

2. General overview on interviews

In the first section of this work, a general overview of interviews is provided.

2.1 - Brief Definitions of interviews

Interviews can be defined as a qualitative research technique which involves "*conducting intensive individual interviews with a small number of respondents to explore their perspectives on a particular idea, program or situation*". Besides, the interview is seen as "*the gold standard of qualitative research*" (Silverman, 2000, p. 51). Furthermore, the interview is described as a '*conversation with a purpose*'(Burgess, 1984, p.102) that "offers different ways of exploring people's experience and views' and allows the researcher to probe beneath the surface of issues in order to see them from each participant's perspective " (Richards, 2009,p.183).

2.2- Types of Interview

There are three different formats of interviews: structured, semi-structured and unstructured.

2.2.1- Structured interviews

* consist of a series of pre-determined questions that all interviewees answer in the same order.

*Data analysis usually tends to be more straightforward because researchers can compare and contrast different answers given to the same questions.

2.2.2- Unstructured interviews

* It is considered to be the least reliable from research viewpoint, because no questions are prepared prior to the interview and data collection is conducted in an informal manner.

* The unstructured interviews can be associated with a high level of bias and comparison of answers given by different respondents tends to be difficult due to the differences in formulation of questions.

2.2.3- Semi-structured interviews

* It contains the components of both, structured and unstructured interviews.

* The interviewer prepares a set of same questions to be answered by all interviewees. At the same time, additional questions might be asked during interviews to clarify and/or further expand certain issues.

2.3- Main advantages and drawbacks of interviews

Qualitative interviews are considered to be one of the most effective tools of gathering detailed information. However, They are not advantagous all the time due to their limitations. The main strengths and weaknesses of interviews are summarized briefly as follows :

2.3.1- Advantages of the Interview

* Possibilities of collecting detailed information about research questions.

* The researcher has direct control over the flow of process and s/he has the chance to clarify certain issues during the process if needed.

2.3.2- Drawbacks of the Interview

*Longer time requirements and difficulties associated with arranging an appropriate time with perspective to the sample group members to conduct interviews.

* Interviewer may influence responses. Either inadvertently or on purpose the interviewer may guide the subject to respond in the way they want.

2.4- Procedures of conducting interviews

* You should have an open mind and refrain from displaying   disagreements in any forms when viewpoints expressed by interviewees contradict your own ideas.

* Timing and environment for interviews need to be scheduled effectively.

* Interviews need to be conducted in a relaxed environment, free of any forms of pressure for interviewees whatsoever. Respected scholars warn that in conducting an interview the interviewer should attempt to create a friendly, non-threatening atmosphere.

* The interviewer should give a brief, casual introduction to the study; stress the importance of the person's participation; and assure anonymity, or at least confidentiality, when possible."

3. Organizing the Information

The management of an interview often requires you to listen to a rambling speaker spill out ideas in no particular order, you probably find it hard to pay attention to the speech, let alone makes sense of it. Therefore, a garbled listing of ideas serves no one; an orderly presentation highlights your ideas and helps communication succeed. On the other hand, the issue determines the approach the interviewer should take:

* In requiring the interviewee to talk about a personal experience, you would probably trace the events in the order they occurred.

* In describing a process, you would take the respondent step by step through the procedure.

In general, the interviewer can adopt a simple but effective strategy either during the interview or, eventually listening to recorded data. The procedure is called the Flexible Notes System.

3.1- Flexible Notes System

* To create a set of flexible notes, write each of the key points at   the top of a separate sheet of paper.

* If you have a focus-issue, refer to it for the key points.

* Next, list under each heading the supporting details provided by the interviewee that go with that heading.

* Drop any details that do not fit and expand any questions or   opinions that need more clarification.

* When the interview is finished, arrange your notes in the order you expect to follow in your data analysis.

*A paramount and effective utilization of the notes in relation to the information provided by the interviewee requires the organization of such data with regard to **conditioning**: the organization and arrangement of the information which is laid out in the noted key points. **Concentration**: keeping the interviewer's mind (researcher) only on the most significant focus points, and dismissing any superfluous details or unfruitful digressions. **Consistency**: it implies reliability or uniformity of data. The credible and useful information should be free from contradiction; in other words, the state of a system of axioms such that none of the information deduced from the data is mutually contradictory. (Reinking et al, 2001, pp.23-24)

*The interviewer should elaborate a revision checklist of the answers obtained during the interview, especially with respect to the following parameters:

 - What utterances are not clearly expressed or logically constructed?

  -What utterances seem awkward, excessively convoluted, intricate or complicated or   lacking in conviction?

- What words require explanation or substitution because they may lead to misinterpretation or misunderstanding?

- What answers seem to be vague or incoherent?

 * Good questions permit elaboration, for example the interviewer   should not:

 - Call for simple 'yes' or 'no' answers.

- Ask overly broad questions that cannot be answered in a relatively brief interview.

- Pose questions that are biased and may insult the interviewee.

- Use questions that restrict the interviewee's options for answering. (Ibid, p. 44)

3.2- Types of Questions to Ask

* Information-gathering the 'What' questions.

 The 'what' questions are very important, they require the following:

- Careful definition of terms.

- Unbiased collection of information.

- Meticulous statistical treatment.

 - Careful summarizing.

*Research- the 'Why' questions.

 It is commonly agreed that research goes beyond description and necessitates analysis, therefore, the 'why' questions look for:

- Explanations.

- Relationships.

- Comparisons.

- Predictions.

- Generalizations.

- Theories.

Within this perspective, the information is used for the purpose of developing understanding- by comparison, by relating to other factors, by theorizing and testing the theories. The research questions in an interview should have comparisons in them, and they should also involve generalization. Consequently, to be useful, explanations should be applicable in all appropriate situations. (Phillips and Pugh, 2005, pp. 47-48)

3.3- Types of Question Not to Ask

As the interviewer draws up his/her questions, he/she should take care to avoid some common errors. Here are some samples of Master students that have been extracted from their interviews within the context of their research work.

3.3.1- Don't ask two questions in the same sentence. Their answers may be different.

Sample A: 'Do you rely on the official manual prepared by the Ministry of Education when developing tests or do you create your own texts for the test?'

Asking about reliance on 'Ministry of Education' and asking about 'Self-reliance'.

Sample B: 'Do you take into consideration your students' proficiency in English and in Linguistics when preparing tests?'

Asking about 'proficiency in English' or 'proficiency in Linguistics' or in both of them?

3.3.2- Don't include vague or ambiguous questions.Simple people won't understand your intent their answers may not reflect their beliefs.

Sample A: 'As far as your students' level is concerned, do you notice problems in their level of motivation, concentration, understanding, participation, etc?'

Asking about many elements at the same time, has the listing been elaborated by order of priority or at hazard?

Sample B: 'As far your first year students are concerned, what do you think about linguistics?'

Asking about an evaluation of the first year Linguistics course programme or the students' level or performance in Linguistics course?

Sample C: 'Do you think your students feel better when the course is limited in terms of content?'

Does the expression 'feel better' refer to the students' motivation, ability to store information or just time allotment?

Sample D: 'Have you got any theoretical knowledge about group work?'

What does the expression 'theoretical knowledge' exactly imply?

3.3.3- Don't ask biased questions. They might antagonize those who don't share your views and cause them not to answer your question.

Sample A: 'Is your relation with your students strict, permissive or authoritative?'

Bias question because all the options bear a negative connotation.

Sample B: 'In your module have you been using effective audio-visual aids like video-films, audio-recording, etc?'

Bias question because the interviewer already assumes that the interviewee uses audio-visual aids and these are 'effective'.

3.3.4- Don't ask leading questions. In fact, a leading question is phrased in such a manner that it seems to the respondent that the researcher expects a certain answer. (Nachmias, C. &Nachmias, D., 2005: 263-264)

Sample A: 'You wouldn't say that you were in favour of legal abortion, would you?'

This form of questioning makes it easier for respondents to agree with the interviewer than a straight Yes/No question.

Sample B: 'Would you favour sending food overseas to feed the starving people of Kenya?'

Obviously, the expression 'starving people' would clearly encourage a positive answer.

3.3.5- Don't ask threatening questions. This type of questions is usually related to topics that the respondent may find embarrassing and thus difficult to answer. They normally deal with issues that are 'illegal' or 'contra-normative' or 'socially deviant'.

Sample A: 'Did you become intoxicated?'

Sample B: 'Have you favoured the candidate?'

It is clear that such questions try to reveal the negative or 'deviant' behavior of the interviewee. Consequently, respondents either deny the behaviour in question or underreport it.

3.3.6- Don't ask questions that do not permit detailed responses and just call for simple Yes/No answers.

Sample A; 'Is it difficult to work with adult illiterates?'

The obvious answer is 'yes'. A better (good question) formulation would be: 'What have you found most challenging about working with adult illiterates?'

3.3.7- Don't ask overly broad questions that cannot be answered in a relatively brief interview.

Sample A: 'What's wrong with primary-school education?'

The interviewer can improve such question in this manner;

'Why do you think so many children have trouble learning to read?'

3.3.8- Don't ask questions that restrict the interviewee's options for answering.

Sample A: 'What do you think accounts for the poor academic performance of secondary-school students: too much TV watching or overly large classes?'

A better wording would allow the interviewee to elaborate his/her answer like:

'People often blame the poor academic performance of so many secondary-school students on too much TV watching or overly large classes. What importance do you attach to these factors? Do you think other factors contribute to the problem?' (Reinking Hart von der Osten., 2001: 407-408).

In addition, the conception of questions requires a careful reflection about certain primordial parameters that can be summarized as follows:

* Time: there is usually a step forward in time (in relation to certain phenomena or issues) but the interviewer may sometimes wish to refer to past events.

* Place: the interviewer may wish to inquire about happenings in another place. The researcher may wish to understand, for example, how a given problem is tackled in different countries.

* The Topic or the Emphasis: the interviewer may move from one person or a group of people (population) to another, he may also ask about the description of a method instead of another. However, the different topics or focus points should be linked to each other.

* The Similarity between People Actions or Topics: this similarity should be used by the interviewer to introduce a new topic (in the following questions).

* The Modification of an Idea Already Expressed: it is noticeable that some questions may induce the respondent to change his/her answer, this takes sometimes the form of contrast, sometimes it is merely a total change in the line of thought.

* The Interviewee's Views and Experiences: if possible formulate the questions in a manner that would encourage the interviewee to give his/her views or to answer from his/her own experiences. Compare these two questions:

'What are the advantages and disadvantages of speed in present-day life?'

'How your life may change in the next ten years?'

Obviously, the second question will enable the interviewee to provide his/her own opinions whereas in the first question he/she will have to be more impersonal and thus less interesting. Indeed, in recent reports the examiners complained that 'in all these interviews one saw far too little of the respondents' own feelings, thoughts and experiences, most interviews were far too general in treatment'.

Therefore, the interviewer whenever possible should ask about the respondent's feelings and experiences. However, the researcher should also remember that an interview might reveal the personality of the interviewee which might be arrogant or unpleasant and this may provoke the hostility of the reader. Thus, the interviewer should always try to be courteous to the respondent and fair in his/her arguments. The researcher should also avoid dogmatic questions (or statements), wild claims and exaggeration in the elaboration of the interview, the ultimate aim being not to express through the questions one's personal attitudes and judgements but rather to simply seek valuable information. (Etherton, A R B.,1972:27).

3.4- Types of Answers to Avoid

 * The answers that are based entirely on personal experience or opinion or partisan. However, it would be possible to include personal judgements and conclusions and proceed with a comparative analysis.

* The answers that are fully explained in a single source. In fact, the interviewee may provide many answers on certain topics; however, he/she will basically repeat the same information.

* The answers that are considered to be brand new on the part of the respondent. Often, it is very difficult to find sufficient source material to cross-examine or correlate such answers.

* The answers which are overly broad. It is time-consuming and hard to study this type of answers. The interviewer should not try to tackle elephant-sized answers, instead he/she can slim them down to something more manageable.

* The answers which are obviously bias, stereotypes, clichés, or present prejudices or the kind of reactions that have been worked over and over. It is unnecessary and not useful to spend precious time to analyse information and arguments that are too familiar already or can undermine the credibility or objectivity of the research investigation. (Wallace, 2010, pp.127-128)

3. RESULTS AND DISCUSSION

The outcomes of the present research investigation can be briefly summarized in the following:

* Research is based on an open system of thought: the continual testing, review and criticism of the work is an important way in which thinking develops.

* Researchers examine data critically: this is a significant element in distinguishing a research approach from others and researchers from practitioners and laypeople. The analysis requires the researchers to continually ask questions like: Have we got the facts right? Can we get better data? Can the results be interpreted differently?

* Researchers generalize and specify the limits on their generalizations: the principal objective of a researcher is to obtain valid generalizations. Indeed, the way generalizations can best be established is through the development of explanatory theory, and it is certainly the application of theory that turns information-gathering into research. (Phillips and Pugh, 2005, pp. 48-49).

In addition, we should point out that all the steps which have been cited earlier and those that follow should be preceded by a procedure of editing and cleaning the data:

* Data Editing: the researcher should perform some editing by checking for errors and omissions and by making sure that all interview schedules have been completed as required. The recording or script of the interview should be reviewed to evaluate the interview's reliability and check for inconsistencies in responses.

* Data Cleaning: it represents the proofreading of the data to catch and correct errors and inconsistent answers. For example, though many questions are answered independently, others are interconnected and must be internally consistent. (Nachmias and Nachmias, 2005,p. 333)

On the whole, the process of data analysis (results) and interpretation (discussion) can be framed through the following simple tips:

- Report what you did and list the steps that you have followed.

- Document the analysis and show how you carried it out.

- Report what you found.

- Prioritize sections for the thesis or for an appendix.

- Interpret what you found.

- Justify your interpretation.

-Synthesize results in illustrations, tables, graphs, etc.(Murray, 2007, p.123)

5. CONCLUSION

In sum, the nature of the issue the researcher is working on determines how to handle the interview information. In general, with any scientific investigation, the researcher is required to organize and present the material (data) in an effective order. Obviously, the topic, purpose, and audience will condition the arrangement that should be selected. Besides, one may note the growth in the present days of the Internet and focus group interviews. For example, through e-mail, the Internet offers a relatively efficient way of conducting interviews at a distance. Focus groups provide the opportunity to interview a number of people at the same time, and to use the interaction between a group as a source of further insight. In any event, the researcher should establish the context for the data analysis, clearly identify the interviewee and his/her position, and present the information accurately.

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