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 COLLEGE OF HUMANITIES AND SOCIAL SCIENCES
 Te Kōwhirihi Māori o Te Kaitiaki

Interviewing for research and analysing qualitative data: An overview

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“The interview method is a conversation with a purpose”

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Interview methods – for what purpose?

- Large amounts of relevant information about the experiences of others may be collected by directly questioning or talking to people.
- Some research questions are better answered in such a fashion.
- Interviews, especially unstructured or semi-structured ones, offer considerable researcher flexibility.
- A great deal of research within at least the social sciences depends on them!

The interview method

...is non-experimental in design.

The interview is used widely to supplement and extend our knowledge about individual(s) thoughts, feelings and behaviours, meanings, interpretations, etc.

One of the best ways to achieve this...

The interviewer collects detailed personal information from individuals usually in one to one situations using oral questions.

Types of interviews for research

- 1) Brief survey
- 2) Extensive survey
- 3) In-depth interviews
- 4) Monologue, narrative, etc
- 5) Case study...

Uses of interview materials

Interview material may provide either quantitative or qualitative data.

Some argue that quantitative data is considered to be easier to analyse and more ‘reliable’ than qualitative data.

Others argue that qualitative data is less structured, more difficult to analyse but the results are as valid as those in quantitative research.

However, qualitative data may help to explain some very difficult questions or issues...

this presentation covers mainly this aspect.

Categories of interviews

1. The structured interview
 - The key feature of the structured interview is in the pre-planning of all the questions asked.
 - Structured interviews also allow for exact replication of the interview with others.
 - To an extent, it is possible to generalise what you find out about the population from which your interview sample came.
 - Structured interviews are conducted in various modes: face-to-face, by telephone, videophone and the Internet.
 - Questionnaires and surveys are common examples of structured interview tools.

2. the semi-structured interview

- A key feature of the semi-structured interview is in the partial pre-planning of the questions.
- Semi-structured interviews still allow for replication of the interview with others, but are less controlled.
- Semi-structured interviews may be conducted in various modes: face-to-face, by telephone, videophone... but face-to face is probably best.
- A great deal of qualitative research (grounded theory, thematic analysis, etc) uses semi-structured interview material).

The semi-structured interview: benefits and disadvantages

The primary advantage of in-depth interviews is that they provide much more detailed information than what is available through other data collection methods, such as surveys.

- Standardisation of at least some of the questions increases data reliability.
- Replication possible.
- Ability to ask some spontaneous questions is sensitive to participants need to express themselves.

They also may provide a more relaxed atmosphere in which to collect information—people may feel more comfortable having a conversation with you as opposed to filling out a survey.

Limitations of in-depth interviews

- The use of an occasional spontaneous question makes the answers difficult to quantify and analyse.
- Spontaneous questions asked of some and not of others can be seen as unfair, or possibly misleading.
- Can be time-intensive
- The interviewer must be capable of performing reliable interviews
- Not generalisable
- Prone to possible bias

Pre-interview preparation

Planning

Identify likely participants to be interviewed.

Determine an adequate sample size if necessary.

Ensure research will follow international and national ethical research standards, including review by ethical research committees.

Pre-interview II

Developing

- What to say to interviewees when setting up the interview;
- What to say to interviewees when beginning the interview - including ensuring informed consent and confidentiality of the interviewee – and what to say to interviewees in concluding the interview;
- What to do during the interview (e.g. take notes, audiotape, etc);
- What to do following the interview (e.g. more notes and/or check audiotape for clarity; perhaps summarize key thoughts).

Stages of an interview

There are at least five stages:

1. Arrival process... Introductions, background noise checks, getting to know each other, Setting up audiotape/ recording equipment, settling down, etc.



2. Introducing the research

Explain:

- the purpose of the interview,
- why the participant has been chosen, and
- the expected duration of the interview.

Seek informed consent of the interviewee:

- Use the information sheet,
- explanation of how the information is confidential, etc.,
- the use of note taking and/or the tape recorder,
- written or documented oral consent.

If the interviewee has consented, conduct the interview.

3. Starting the interview

Gradually, unhurried, relaxing...using open-ended questions.

- Semi-structured format...
- Although you should have some pre-planned questions to ask during the interview, you must also allow questions to flow naturally, based on information provided by the respondent.
- Do not insist upon asking specific questions in a specific order.
- In fact, the flow of the conversation dictates the questions asked, and those omitted, as well as the order of the questions.

Issues to remember when interviewing

The interviewer:

- must make the interviewee comfortable.
- appear interested in what they are saying.
- avoid 'yes/no' and leading questions.
- Use appropriate body language.
- Keep personal opinions in check.

Questions to avoid when interviewing

- Biased questions:
- Questions that assume what they ask:
- Double-barrelled questions:
- Questions that do not directly relate to what you want to find out:
- Confusing or complicated questions:



4. Keeping focussed: More interview tips

Questions should be open-ended rather than closed-ended.

You should usually ask a factual question before an opinion question.

Use probing questions as needed...

These include:

- Would you give me an example?
- Can you elaborate on that idea?
- Would you explain that further?
- I'm not sure I understand what you're saying...
- Is there anything else?

Keeping focussed II

Seek understanding and interpretation...

Try to interpret what you are hearing, as well as seek clarity and a deeper understanding from the respondent throughout the interview.

Remain conversational but remember your role is primarily that of a listener.

Do not force or push the pace unnecessarily, or 'put words into the participant's mouth'.

There should be smooth transitions from one topic to the next.

5. Ending the interview

Finish on time if possible, but try to make sure everything has been covered sufficiently.

Make sure that you have made a suitable arrangement with the participant concerning the reviewing of the transcript material.

Thank the participant for their valuable time.

Interviewing... some basic things to remember

1. Background noises can really affect the quality of any recording.
2. Faulty recording equipment can be disastrous.
3. People often say some very interesting things after the recording device has been turned off.
4. Not every session will last the full amount of time.
5. What is not said may sometimes be of considerable interest in an interview.
6. Participant body and facial gestures, pauses, silence, laughter, etc can be of interest.
7. Transcribing is a lot of hard work.
8. Good transcribers are worth their weight in gold.

Tips on the preliminary analysis of interview data

- Read through the interview responses and look for patterns or themes among the data.
 - You should be able to discover a variety of themes, codes, or even possible categories that will provide the beginnings of analysis, and/or ideas for future interviews.
- You may, for example, find that younger participants tend to think and feel differently from older ones, or that men and women respond differently to the same questions, etc.
- You can also get some useful ideas for how to improve the next interviews, or which areas to pursue, etc.

What to do with all that data?

Qualitative research results in large amounts of richly detailed data that is contextually laden and subjective.

This data usually originates from interview transcripts and/or observation notes and must be reworked or "reduced" to represent major themes or categories that describe the phenomenon being studied.

Data reduction facilitates the revealing of findings simply and efficiently. This process depends upon the nature of the research, and especially on the chosen analytical approach.



Qualitative data analysis; a few possible approaches

1. Thematic analysis
2. Grounded theory
3. Discourse analysis
4. Others...



Qualitative data analysis- Potential issues/pitfalls

1. Data shock!
2. The problem of methodology.
3. What to do about available literature.
4. The 'wandering in the desert' syndrome; i.e. issues surrounding the identification of relevant data (includes data coding concerns).
5. The need for adequate reflection to allow the "aha!" moments to filter through.
6. Managing all the various elements... 'mind mapping'.
7. Writing it all up.

Qualitative data analysis

Qualitative data analysis consists of identifying, coding, and categorizing patterns or themes found in the data.

The clarity and applicability of the findings heavily depend on the analytic abilities of the researcher.

This dependence on the abilities of the analyst can be the greatest strength or the greatest weakness of a qualitative research study.

It is crucial that the researcher reports and documents his or her analytic processes and procedures fully and truthfully so others may evaluate the credibility of the researcher and his or her findings.

The use of literature in data management/analysis

The use of literature in qualitative analysis may vary considerably:

i.e. In thematic analysis it may be extensive before data analysis commences in earnest...

But it may also be contraindicated, as in grounded theory...

As Glaser (1992, p. 31) notes:

It is hard enough to generate one's own concepts, without the added burden of contending with the "rich" derailments provided by the relative literature in the form of conscious or unrecognised assumptions of what ought to be found in data.

The possible use of qualitative data software

Many types of software programs (such as CAQDAS - Computer Assisted Qualitative Data Analysis) can assist the researcher with data coding, management, and analysis.

Currently, there are at least two main types of qualitative data management software programs available:

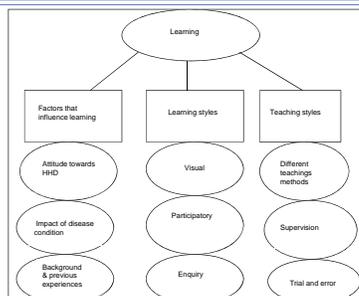
- One is a coding and retrieval program that facilitates a more complex coding schema than the researcher may be able to perform manually. It allows the researcher to retrieve text segments throughout the data set.
- The second is a theory-generating program that facilitates exploring relationships between coded categories in one file and theoretical explanations in another file.

Data coding – the overall idea

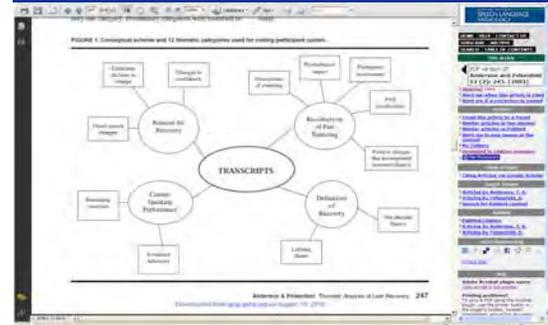
Boyatzis (1998, p. x-xi); the five elements of a good coding system:

- labels;
- definitions of what each theme concerns (i.e., the characteristics or issues constituting each theme);
- descriptions of how to know when each theme occurs (i.e., how to "flag" themes);
- descriptions of any qualifications or exclusions to identifying themes; and
- examples, both positive and negative, to eliminate possible confusion when looking for themes.

An example of code development (source: Robinson, 2009, p.28)



Thematic analysis: 'themes' and categories



Reporting the findings ("writing up.")

After the categories or themes have been coded, the researcher must decide how to report the findings.

To do this, one suggestion may be to relate information about chronology, key events, various settings, people, and processes or issues related to the study.

Using a schematic drawing or developing a conceptual framework is another strategy that may be used to facilitate reporting the findings.

There are other possibilities....(see additional notes)



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THE END

References

- Boyatzis, R.E. (1998). *Transforming Qualitative Information*. Thousand Oaks, CA: Sage Publications.
- Braun, V. and Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in Psychology*, 3, 77-101.
- Cheek, J. & Rudge, T. (1994). The Panopticon Revisited - An Exploration Of The Social And Political Dimensions Of Contemporary Health-Care and Nursing Practice. *International Journal of Nursing Studies*, 31, 583-591.
- Glaser, B. (1992). *Basics of grounded theory analysis*. CA: Sociology Press.
- Glaser, B. & Strauss, A. (1967). *The discovery of grounded theory*. Chicago: Aldine.
- Parker, I. (1992). *Discourse dynamics: Critical analysis for social and individual psychology*. London: Routledge.
- Robinson, A. (2009). *A study on the experiences of patients when training for Home-haemodialysis*. Unpublished research report, Massey University.

Additional notes

Time did not permit a full discussion about all aspects of this presentation, however the following notes may be of value.

The structured interview: benefits and disadvantages

- Standardisation of all questions can give quantifiable data.
- Replication possibilities.
- Data is considered to be more reliable because of internal consistency.
- Allows a degree of generalisation of results to the population from which the sample was taken.

HOWEVER

- Restrictive questioning leads to restrictive answers.
- It can be insensitive to participants' need to express themselves.
- There are issues with the validity of questions asked...
I.e. Are they the right ones?

Unstructured interviews: benefits and disadvantages

- Flexible, responsive and more thoughtful for the participants.
- More relaxed, natural and conversational for those taking part.
- Highly detailed and valid qualitative data (deep, or 'thick' material).

HOWEVER

- More difficult to replicate.
- Not particularly generalisable to a wider population.
- Possible interviewer bias in 'selective' use of leading, and spontaneous questions.

Thematic analysis

Thematic analysis is a way of seeing, as well as a process for coding qualitative information.

The researcher must make many decisions about the process of identifying themes, and he or she must inform others why specific categories were chosen.

The researcher must decide how he or she will code the data to enable categorisation – themes to emerge.

Another decision the researcher must make when analysing data is whether to analyse the interview data obtained from each participant independently or whether to use cross-case analysis.

Phases of thematic analysis (Braun & Clarke, 2006)

Phase	Description of the process
1. Familiarizing yourself with your data:	Transcribing data, reading and re-reading the data, noting down initial ideas.
2. Generating initial codes:	Coding interesting features of the data in a systemic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes:	Checking if themes work in relation to the coded extracts (Level 1), and the entire data set (Level 2), generating a thematic 'map' of the analysis.
5. Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6. Producing the report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to their search question and literature, producing a scholarly report of the analysis.

Coding in a thematic analysis approach

1. 'Open and relational coding' is used in the creation of categories.

Some ways in which categories can be related include:

- Cause – Code A *causes* Code B
- Aspect – Code A is an *Aspect* of Code B
- Associate – Code A is *Associated* with Code B
- Contrast – Code A *contrasts* with Code B

2. 'Merging' and 'splitting' codes is used to realign codes – e.g.

Codes 'A' or 'B' now just become 'A' (merging): OR
Code 'A' becomes 'A1' and 'A2' (splitting)

3. Creating a new code (sometimes called a 'main code') from two existing codes -anything that has been coded as 'A' AND 'B' is coded as 'C' – Codes 'A' and 'B' are still maintained as distinctive codes though.

4. Creating a Code Family – placing a group of codes into a code grouping (without actually using that grouping as a new code, as with 'main codes').

Grounded theory

Glaser and Strauss (1967) and Glaser (1992):

1. The researcher identifies and begins to gather data from an area chosen for investigation, mindful of the overall aim of building a theoretical analysis from these data.
2. Because the grounded theory method refrains from the standard or traditional method of beginning with a preconceived framework or hypotheses, these data provide the necessary abstract concepts and propositions upon which the researcher builds 'theory' or a conceptual theoretical framework.
3. Data continue to be collected and simultaneously examined 'line by line' and coded according to the similarity of the material to other gathered material ('coding').
4. The aim is to assemble all of the necessary codes to enable the construction of a 'conceptual unit' that when combined with others may be useful in the eventual construction of a conceptual framework.
5. Analytical memos are produced by the researcher at the same time to summarise the emerging theoretical explanations.

Grounded theory II

5. Data collection stops when the researcher decides that no new material, or new codes, are being generated.
6. At the same time, each code is gradually merged into bigger codes or conceptual units until main codes, or categories, emerge.
7. Every incident within each new category is compared with the 'dimensions' or properties of that category to allow integration into a unified whole.
8. The categories and their properties are examined for 'underlying uniformities' that may eliminate extraneous material and subsequently reduce the number of categories to a sufficiently representational level. This process is part of the process of 'theoretical saturation'.
9. From the detailed examination of codes by means of constant comparative analysis, and their conversion into bigger codes, a 'core integrating category', or a 'core variable' eventually emerges.

Grounded theory: Examples of theoretical propositions (Woods, 1997)

- Nurses develop an understanding of professional moral values within the socio-political and health care contexts by focusing and refining their moral perceptions through a variety of experiences in training and in beginning practice.
- Nurses refine and attempt to maintain a nursing ethic throughout their careers by a process of constant refocusing on the nurse-patient relationship in specific contexts.
- Morally competent and experienced nurses commit themselves to specific ethical problems in their practice by adopting focused and effective levels of involvement.
- Morally competent and experienced nurses provide skilled and professional care that is guided by a nursing ethic.

Discourse analysis

As an analytical method, discourse analysis is based on two central ideas:

- The first idea is that language has meaning that is both historically and socially situated (Cheek & Rudge, 1994). That is, the ways of communicating through a variety of *texts* (such as newspapers, books, journals, interviews, recorded observations, drawings and film) are also ways of supplying meaning at a given time and within a given group or population.
- Secondly, discourse analysis remains firmly fixed within [con]texts; that is, within social, cultural, political and historical realms, and not, as is commonly seen in generally modernist scientific approaches, by disengaging from or minimising the effect of context.

DA; the general analytical approach

Parker's (1992) four main stages of discourse analysis were used as a guide for the organisation and analysis of the research material. The four stages are:

Introduction: The study is positioned with respect to its relationship with other substantive works drawn from a 'traditional' search of literature. Other discursive studies may be included in this composition. Also, the types of texts to be analysed and the types of questions and issues that drive the research are discussed to supply a contextual basis for the research.

Methodology: Detail is given about specific texts to be analysed, i.e. why these texts were chosen, why other texts were dismissed, and how these texts were obtained.

Analysis: Texts are examined using intuition, particular attention being paid to the absence of possible discursive frames and other emerging themes.

Discussion: The analyses are linked to other material in the area in order to draw out points for consideration of the substantive area under consideration. This stage involves reflection on the issues raised by the method, including the position of the researcher.

Discourse analysis: a rough analytical model

The parents' response	The doctor's response	The nurse's response
<ul style="list-style-type: none"> Loss of faith Loss of trust Loss of hope, altruism and/or respect Using the system against itself Playing the part Standing ground Taking back and maintaining control 	<ul style="list-style-type: none"> Maintain the relationship • <i>Improve communication</i> • <i>Change the language</i> • <i>Negotiate</i> • <i>Attempt compromise</i> Revert to paternalism • <i>Reattempt all previous negotiations/compromises</i> • <i>"Allow" harmless alternative therapies</i> • <i>Send in the troops - get support</i> • <i>Redefine the meaning of 'normal' treatments</i> Use the law as an ally 	<ul style="list-style-type: none"> The nurse as the parents' supporter The nurse as a medical collaborator The nurse as in-between parents, physicians and the institute • <i>Being a team player</i> • <i>Being always ready to contribute</i> • <i>Being a supportive bystander</i> • <i>Being a member of the team</i> • <i>Being the expert "in-between"</i>

Analysing focus group data: brief notes

- Analysis of focus group data follows the same processes as for qualitative data from other sources (e.g., documents, narratives).
- An inductive approach based on content analysis is used. Some issues inherent in analysing focus group data relate to the analysis of qualitative data generally.
- Other issues, however, such as consensus and dissent, strength of opinion, and generalisation pertain specifically to the analysis of focus group data. For example, focus groups explore collective phenomenology and may indicate attitudinal consensus poorly.
- In addition, although focus groups reveal the nature and range of participants' views, they are less able to reveal the strength of these views.