

QUALITATIVE SAMPLING TECHNIQUES

Training course in research
methodology and research
protocol development

Geneva 2018



Dr Khalifa Elmusharaf MBBS, PgDip, FRSPH, PHD

Senior Lecturer in Public Health

Graduate Entry Medical School. University of Limerick, Ireland



UNIVERSITY
of
LIMERICK
OLLSCOIL LUIMNIGH

LEARNING OUTCOMES

By the end of the presentation you should be able to:

1. Describe the justification of qualitative Sampling Techniques
2. Understand different types of Sampling Techniques

SAMPLING FOR QUALITATIVE RESEARCH


The aim of the qualitative research is to understand, from within, the subjective reality of the study participants.

This will not be achieved through superficial knowledge about a large, representative sample of individuals.

Rather we want to reach people within the study area who can share their unique slice of reality, so that all slices together illustrate the range of variation within the study area.

SATURATION

The general rule in qualitative research is that you continue to sample until you are not getting any new information or are no longer gaining new insights.



With careful sampling and equally careful collection techniques, a surprisingly small number of interviews, narratives or focus groups can yield the data to answer your research question.



TYPES OF SAMPLING

1. CONVENIENCE SAMPLING (EASE OF ACCESS)

Convenience sampling defined as individuals believed to be representative of the population from which they are selected, but chosen because they are close at hand and easy to get access to them rather than being randomly selected.

e.g. when you simply ask any patient in your clinic who is willing to participate.

Convenience sampling saves time, money, and effort, but it is the least rigorous technique and may result in poor quality data and lacks intellectual credibility.

There is an element of convenience sampling in many qualitative studies, but a more thoughtful approach to selection of a sample is usually justified.

2. THEORETICAL SAMPLE

The process of data collection for generating theory whereby the analyst *jointly collects, codes, and* analyzes his data and decides what data to collect next and where to find them, in order to develop the theory as it emerges.

(Glaser and Strauss, 1967)

This method is best used when the research focuses on theory and concept development and the research team's goal is to develop theory and concepts that are connect to, grounded in or emergent from real life events and circumstances.

3. PURPOSIVE SAMPLING (JUDGEMENTAL)

The researchers purposely handpick individuals from the population that appears to them to be representative of that population based on the researcher's knowledge and judgment.

4. SNOWBALL SAMPLING (FRIEND OF FRIEND)

The researchers initially contact a few potential respondents and then ask them whether they know of anybody with the same characteristics that they are looking for in their research.

For example, if you wanted to interview a sample of vegetarians / cyclists / people with a particular disability / people who support a particular political party etc.

5. EXTREME OR DEVIANT CASE SAMPLING

Learning from highly unusual manifestations of the phenomenon of interest, such as outstanding success, notable failures, top of the class, dropouts, exotic events, crises etc. It is used to obtain information on unusual cases, which can be especially 'problematic' or especially 'good'.

A good example is the positive deviance sampling. Positive deviance is based on the observation that in every community there are certain individuals or groups whose uncommon behaviors and strategies enable them to find better solutions to problems than their peers, while having access to the same resources and facing similar or worse challenges. The Positive Deviance approach is an asset-based, problem-solving, and community-driven approach that enables the community to discover these successful behaviors and strategies and develop a plan of action to promote their adoption by all concerned.

6. INTENSITY SAMPLING

Information-rich cases that manifest the phenomenon intensely, but not extremely, such as good students, poor students, above average, below average.

Intensity sampling can allow the researcher to select a small number of rich cases that provide in depth information and knowledge of a phenomenon of interest.

One might use intensity sampling in conjunction with other sampling methods. For example, one may collect 50 cases and then select a subset of intense cases for more in depth analysis.

7. MAXIMUM VARIATION SAMPLING

Purposefully picking a wide range of variation on dimensions of interest to obtain information about the significance of various circumstances.

(e.g. three to four cases that are very different on one dimension: e.g. largest, median and smallest size; government, aided, not-for-profit and commercial funding patterns; city, town and rural area).

Often, researchers want to understand how a phenomenon is seen and understood among different people, in different settings and at different times. When using a maximum variation sampling method the researcher selects a small number of units or cases that maximize the diversity relevant to the research question.

8. HOMOGENEOUS SAMPLING

The process of selecting a small homogeneous group of subjects or units for examination and analysis.

Homogeneous sampling is used when the goal of the research is to understand and describe a particular group in depth.

9. TYPICAL CASE SAMPLING

It is a type of purposive sampling useful when a researcher wants to study a phenomenon or trend as it relates to what are considered "typical" or "average" members of the effected population.

If a researcher wants to study how a type of educational curriculum affects the average student, then the researcher chooses to focus on average members of a student population.

This strategy is often used when the units of analysis are large, as for example in studies of villages in developing countries. Selecting a typical village allows the research to illustrate the general process that occurs.

This strategy is particularly useful if the research report will predominantly be read by people who are unfamiliar with the area of research.

10. STRATIFIED PURPOSEFUL SAMPLING

Illustrates characteristics of particular subgroups of interest and facilitates comparisons.

The technique is a kind of 'statistically non representative stratified sampling' because, while it is similar to its quantitative counterpart, it must not be seen as a sampling strategy that allows statistical generalisation to the large population.

11. CRITICAL CASE SAMPLING

The process of selecting a small number of important cases that are likely to yield the most information and have the greatest impact on the development of knowledge.

To identify critical cases, the research team needs to be able to identify the dimensions that make a case critical.

It is also used to test a hypothesis by choosing the case that permits logical deductions of the type, “If this is valid for this case, then it should apply to all cases.” Or “If it is not valid for this case, it is unlikely to be valid for any other cases”. So it permits logical generalization and maximum application of information to other cases because if it's true of this once case it's likely to be true of all other cases.

12. KEY INFORMANT SAMPLING

Key informants, as a result of their personal skills, or position within a society, are able to provide more information and a deeper insight into what is going on around them.

Characteristics of an "ideal" key informant:

1. *Role in community*
2. *Knowledge*
3. *Willingness*
4. *Communicability*
5. *Unbiased.*

13. CRITERION SAMPLING

All cases that meet a set of criteria are selected. In criterion sampling it is important to select the criteria carefully, so as to define cases that will provide detailed and rich data relevant to the particular research problem.

For example, all former clients of an intensive care unit who return to intensive care with the same complaint within three weeks may constitute a sample for in-depth, qualitative study.

These criteria would facilitate a study of the effectiveness of after-care programs attached to intensive care units.

14. CONFIRMING OR DISCONFIRMING SAMPLING

Identification of confirming and disconfirming case occurs after some portion of data collection and analysis has already been completed.

This is the process of selecting cases that either:

1. Serve as additional examples that lend further support, richness and depth to patterns emerging from data analysis (confirming cases)
2. Serve as examples that do not fit emergent patterns and allow the research team to evaluate rival explanations (disconfirming cases).

This can help the research team understand and define the limitations of research findings.

15. OPPORTUNISTIC OR EMERGENT SAMPLING

New opportunities to recruit participants or to gain access to a new site may develop after the fieldwork has begun.

For example a researcher studying heart attacks may, for example, meet a cardiologist while interviewing one of his or her patients. The cardiologist may suggest how the researcher can contact other cardiologists who would be willing to refer clients to the researcher.

16. RANDOM PURPOSEFUL SAMPLING

The process of identifying a population of interest and developing a systematic way of selecting cases that is not based on advanced knowledge of how the outcomes would appear.

The purpose is to increase credibility not to foster representativeness.

17. VOLUNTEER SAMPLING

Samples are often drawn through advertising, requesting people to volunteer to participate in the study.

This can be particularly useful when potential participants are dispersed throughout the community or difficult to contact directly.

However, volunteer samples are typically biased in particular ways.

For example, a volunteer sample of people living with HIV/AIDS will systematically be biased to exclude people who are denying or ignoring their HIV status.

CONCLUSION

FLEXIBILITY IN QUALITATIVE SAMPLING

A flexible research and sampling design is an important feature of qualitative research, particularly when the research being conducted is exploratory in nature.

When little is known about a phenomenon or setting, a priori sampling decisions can be difficult.

In such circumstances, creating a research design that is flexible enough to foster reflection and preliminary analysis may be a good idea.