Data Collection & Data Quality Report On Interviews

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Sampling:

Sample is a group of people, objects or items that are taken from a larger population for measurement. The sample should be representative of the population to ensure that we can generalize the findings from the research sample to the population as a whole [1].

Sampling Error:

Sampling error can make a sample unrepresentative of its population. Sampling error comprises the different between the sample and the population that are due solely to the particular participants that have been selected. Sampling Bias: Sampling bias is a tendency to favour the selection of participants that have particular characteristics. Sampling bias is usually the result of a poor sampling.

Selecting the Sample:

The sampling error may be due to either bias or chance. The chance component exits no matter how carefully the selection procedures are implemented, and the one only way to minimize chance-sampling error is to select a sufficiently large sample. Sampling bias on the other hand may be minimized by the wise choice of a sampling procedure.

Types of Probability Samples (Random Samples):

Simple Random Sample:

The simple random sample is the most form of probability sample. With random sampling, each unit of the population has an equal probability of inclusion in the sample. Imagine that we decided that we have enough money to interview 450 people at a company. This means that the probability of inclusion in the sample is 450/9000 i.e 1 in 20. This is known as the sampling fraction and is expressed as n/N. where n is the sample size and N is the population size.

As with all probability sampling methods, simple random sampling allows the sampling error to be calculated and reduces selection bias. A specific advantage is that it is the most straight forward method of probability sampling. A disadvantage of simple random sampling is that you may not select enough individuals with your characteristic of interest, especially if that characteristic is uncommon. It may also be difficult to define a complete sampling frame and inconvenient to contact them, especially if different forms of contact are required and your sample units are scattered over a wide geographical area.

Systematic Sample:
A variation on the simple random sample is the systematic sample. With this kind of sample, you select units directly from the sampling frame-that's is, without resorting to a table of random numbers.

We know that we are to select 1 employee in 20. With a systematic sample, we would make a random start between 1 and 20 inclusive, possibly by using the last two digits in a table of random

numbers. If we did this with the ten random numbers. If we did this with the ten random numbers above, the first relevant one would be 54016, since it is the first one where the last two digits yield a number of 20 or below, in this case 16. This means that the sixteenth employee on our sampling frame is the first to be in our sample. Thereafter we take every twentieth employee on the list. This approach obviates the need to assign numbers to employee's names and then to look up names of the employees whose number have been drawn by the random selection process. However, that there is no inherent ordering of the sampling frame, since this may bias the resulting sample. If there is some ordering to the list, the best solution is to rearrange it.

Stratified Sampling:

Stratified sampling improves the accuracy and representativeness of the result by reducing sampling bias. However, it requires knowledge of the appropriate characteristics of the sampling frame, and it can be difficult to decide which characteristic to stratify by.

Clustered Sampling:

In a clustered sample, subgroups of the population are used as the sampling unit, rather than individuals. The population is divided into subgroups, known as clusters, which are randomly selected to be included in the study. Clusters are usually already defined, for example individual GP practices or towns could be identified as clusters. Cluster sampling can be more efficient that simple random sampling, especially where a study takes place over a wide geographical region. For instance, it is easier to contact lots of individuals in a few GP practices than a few individuals in many different GP practices. Disadvantages include an increased risk of bias, if the chosen clusters are not representative of the population, resulting in an increased sampling error.

Non-Probability Sampling Methods:

The term non-probability sampling is essentially an umbrella term to capture all forms of sampling that are nor conducted according to the canons of probability sampling outlined above.

Snowball Sampling:

Snowball sampling is a form of convenience sample, but it is worth distinguishing because it has attracted quite a lot of attention over the years. With this approach to sampling, the researcher makes initial contact with a small group of people who are relevant to the research topic a then uses these to establish contacts with others. A snowball sample is in no sense random, because there is no way of knowing the precise extent of the population from which it would have to be drawn. In other words, there is no accessible sampling frame for the population from which the sample is to be taken, and the difficulty of creating is the only feasible one. There is a much better fit between snowball sampling and the theoretical sampling strategy of qualitative research than with the statistical sampling approach of quantitative research. This is not to suggest that snowball sampling is entirely irrelevant to quantitative research: when the researcher needs to focus upon or to reflect relationship between people, tracing connections through snowball sampling may be better approach than conventional probability sampling.

Quota Sampling:

Quota sampling is used intensively in commercial research such as market research and political opinion polling. The aim of quota sampling is to produce a sample that refers a population in terms of the relative proportions of people in different categories such as gender, ethnicity, age groups, socio-economic groups, and region of residence, and in combinations of these categories. Once the categories and the number of people to be interviewed within each category have been decided upon, it is then the job of interviewers to select people who fit these categories. The quotas will typically be interrelated.

Quantitative evidence provides a good overall picture of a population or geographical region. It can also often be used to measure trends over time. This type of evidence is valuable for describing who, what, where and when.

Qualitative evidence provides richer, deeper and broader information based on a few individuals or case example. This type of evidence is valuable for describing how and why.

Data Collection:

We must remember that qualitative research is not quantitative research with the numbers missing. The kinds of interviewing carried out in qualitative research are typical also of life history and oral history interviewing. We have carried out a semi-structured interview during our task.

Semi-structured interview: The researcher has a list of question on fairly specific topics to be covered, often referred to as an interview guide, but the interview has a great deal of leeway in how to reply. Questions may not follow on exactly in the way outlined on the schedule. Questions that are not included in the guide may be asked as the interviewer picks up on things said by interviewees. But, by and large, all the questions will be asked and a similar wording will be used from interviewee to interviewee.

The exercise which has been conducted has been formed with some specific types of question about a person and asked us to find two relevant questions and add them to the questions which have been formed. The questions were formed in way that we would be asking about the other person name, schooling and the basic details of the person. And the other questions we formed were some where related to the basic questions. By this we would be building a conversation and find answers for the specific question.

I was playing an interviewer for the first time, from that I have learnt a lot of things. First I learnt how to be formal when we are building a conversation and asking some personal questions. The main thing was learnt how we can take the conversation long and get more and more information in the best medium possible. I was very curios to build the conversation and more keen to know more and more answers.

When I was playing an interviewee, it was not new to me but this time it was different because one of my friend was in the interviewer position. It was quite new, when my friend starting to ask questions but I felt nice and formal after some time and after completing some questions.

By this type, we would be getting the best data we can have and if we felt we need more data or information we have continue with the conversation on the question and we can stop the question when we felt we have got all the information which has been received.

Truthworthiness in Quantitative Research:

For quantitative research it is referred to as validity and reliability.

Reliability: Reliability refers to how consistently a method measures something. If the same result can be consistently achieved by using the same methods under the same circumstances the measurement is considered reliable. You measure the temperature of a liquid sample several times under identical conditions. The thermometer displays the same temperature every time, so the results are reliable.

Validity: Validity refers to how accurately a method measures what it is intended to measure. If research has high validity, that means it produces results that correspond to real properties, characteristics, and variations in the physical or social world. High reliability is one indicator that a measurement is valid. If a method is not reliable, it probably isn't valid.

Truthworthiness in Qualitative Research:

Trustworthiness is made up of four criteria, each of which has an equivalent criterion in quantitative research:
1) Credibility, which parallels internal validity;
2) transferability, which parallels external validity;
3) dependability, which parallels reliability;
4) confirmability, which parallels objectivity.

Credibility: The significance of this stress on multiple accounts of social reality is especially, evident in the trustworthiness criterion of credibility of the account that a researcher arrives at that is going to determine its acceptability to others. The establishment of the credibility of findings entails both ensuring that research is carried out according to the canons of good practice and submitting research findings to the members of the social world who were studied for confirmation that the investigator has correctly understood that social world.

References

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