

Introduction

This assignment is based on research methods and how they are employed in health care settings. It also explains the reasons for research and examples of different ways people have used it. I will discuss different types of research and how they affect the research that they will collect.

Qualitative and Quantitative

Qualitative methods are increasingly being used in health services research. Qualitative research looks at how to study people and their organisations in their natural settings. Qualitative researchers tend to look at problems and questions rather than produce and test hypotheses. Qualitative research describes in words rather than numbers and draws from a range of methods. It is particularly useful in areas where there is little pre-existing knowledge, where it is difficult or inappropriate to produce a hypothesis and where issues are complex and require in-depth exploration.

Quantitative research looks more towards the study of people and their organisations in their natural and social settings as they believe that there is no difference between the natural and social world. Quantitative researchers tend to produce and test hypothesis rather than look at problems and questions. They tend to describe their work statistically in the representation of numbers. These researchers would tend to argue that their technique is more scientific, reliable and open to checking by other researchers.
(Lecturer notes 2002)

Primary and secondary data

The data used in a statistical survey, can be either primary data or secondary data.

Primary data is data that has been found by you and so you know where it came from and that it has never been used. Primary data costs more to produce and conduct. It has to be collected from a source. The source can be **(A)** personal investigator **(B)** a team of investigators or **(C)** questionnaires.

- (A)** Personal investigator is when you collect the information and data yourself and so you know it is reliable. You can do this by conducting interviews. The disadvantage of a personal investigator is that it takes time and money to produce the results.
- (B)** Team of investigators is mainly like the personal investigator but you work in a team. If you do this then it could be faster and easier and you may be able to collect more results in the same amount of time that you would conduct doing it on your own.
- (C)** A questionnaire can be done by approaching people on the street or sending out questionnaires through post. This is called a pilot survey. A questionnaire is quick and cheap but can also have its disadvantages, as people may not complete the forms and return them if they are posted or the information that they may have written may be false or have the wrong idea.

In difference with secondary data to primary:

- If anything is wrong with the data you will know if you produced it and so the results are reliable, whereas if somebody else produced it then there may have been problems that you don't know about that may have

affected the results of the data and so this means that the results may not be reliable

- The data may not be totally suitable for its purpose

Secondary data is data that has already been found and used. Others may have used this information. Secondary data is more widely used. The reason for this is that it is cheaper to use as it is already produced and conducted.

Secondary data is **(A)** published statistics and **(B)** historical records.

(A) Published statistics are results to things such as crime and how much it has increased or decreased. This is published from the government.

(B) Historical records are pieces of data that have been kept to be looked at to maybe compare.

(BPP Publishing, Business Basics, 1995 pp23 -24)

Observational Methods

Non-Participant Observation

This is when the researcher keeps a distant relationship with his subject and does not involve himself in any way.

Participant Observation

The researcher tries to maintain a close and trustworthy relationship with his subject. They do this by becoming involved physically and mentally in the subject's life and the surroundings.

Covert Participation

This is a dangerous method to employ. The researcher will maintain a very close relationship with his subject but it will be based on lies. They will pretend to be someone else so they are not aware of the researcher being present, as this may change how the subject may act naturally. A researcher in appendix 1 used this.

Covert participation observation

The researcher will maintain a distant relationship with the subject and the subject may not be aware that they are being observed. This way they can get a natural view of what is happening.

Covert non-participation observation

This is when the researcher is not involved in the group's activities and he maintains a distant relationship or keeps his identity a secret.

Survey Methods (used by a researcher in appendix 2)

Longitudinal Surveys

These surveys are done more than once to see if they are compatible. They are analytic. The people chosen for this are randomly picked.

Descriptive and Analytical Surveys

You cannot draw conclusions from doing these surveys. These are created by observing and often used by social scientists.

Panel Surveys

This is done by choosing people and giving them the same questionnaire through different periods of their life and recording the changes.

Sampling methods (typical sampling methods)

Random sampling is where people complete a questionnaire and only a certain number will be picked out. But they will do this fairly so everyone will have an equal chance of being picked.

Systematic random sampling is similar to random sampling. Only a certain amount of applicants are selected according to a ratio.

Stratified sampling is aimed towards a certain gender or age of population. This increases the precision of the sample.

Cluster Sampling is placed in certain categories and each category is then random sampled. So then they can get answers for each gender or age of the population.

Non-Random Sampling (non- probability sampling methods)

Market researchers mainly use **quota Sampling** as it is convenient.

Opportunity Sampling is when anybody can answer. E.g. can walk into a room and choose the first 20 people the researcher sees.

Snowball sampling is when the researcher will ask a person if they may have an illness or disability etc. If they don't then they may be able to ask someone who they know who may have a problem.

Experimental Methods will be talked about in greater detail in task 2

Epidemiology is research that focuses on the distribution of diseases. It also tries to find the cause. A doctor named John Snow was the first person to conduct an investigation. He looked at age being associated with respiratory problems, sex and heart attacks, the higher rate of birth defects among Irish couples and tuberculosis among the poor.

(Microsoft Encarta 2000)

Types of **Epidemiological Research** are;

- Local (teenage pregnancies)
- National (cancer)
- International
- Pandemic (AIDS & Tuberculosis)

Appendix 1 & 2

In Erving Goffman's study on "Asylums" (1964) he approaches it from the view of an interpretivist that is he used a qualitative technique to gather data for his study. Having analysed his study there is no structure or method to his piece of writing, he actually does state this. Because of the nature of his project there were many ethical issues to be addressed mainly those of confidentiality and anonymity. This is due to the method that he employed, covert participant

observation. It follows then that due to his operating method deception and deceit was inevitable.

To quote Goffman "to be a student of recreation and community life" (Goffman 1964)

He was acting as a patient in the asylum to try to see life in the institution from an inmate's standpoint. He did this because if they knew what he was doing they may have changed the way that they acted around him and others. He tells us exactly where he is going and the date that he joined, which means that it would be easy for someone to find out who the manager was at that present time because he has enclosed this information he has broke anonymity and confidentiality. He used an ideographic approach to his writing in the form of a case study to present his findings.

It is clear when examining Goffman's study that he employed an interpretivist stance in the form of a qualitative research approach. He maintained a close relationship with the asylum inmates in order to gain a first hand experience of the inmate's lives. Because of his approach he needed to become an insider, all the data that he recorded was emergent and by his own admission his work was unstructured. However, the data he did present was that of a rich, deep nature. This is typical of the qualitative form of research.

In L Mctighe's study on "A Health and Lifestyle Survey for East Riding Health" (1995) he approaches it from the view of a positivist, as he used a quantitative technique to gather data for his study. Although, he did also use information from surveys that had been previously undertaken, so this is classed as secondary data. Having read and analysed his study there is a definite structure and method to his piece of writing. His structure consists of

1. Introduction
2. Aim and Objectives
3. Method
4. Piloted Questionnaires
5. Random Sampling

Because of the information he needed for his project, he needed to address the ethical issues, Which Mctighe addressed thoroughly.

Mctighe was trying to gain information for a project on the relationship between demographic factors, lifestyle and health.

To quote Mctighe "the postal questionnaire was piloted of a random sample of 200 adults during November 1993" (Mctighe 1995)

It is clear when examining Mctighe's study that he employed a positivist's stance in the form of a quantitative research approach. He was an outsider and so he kept a distant relationship. All data that he recorded was confirmation and was efficiently structured. Although the data that he presented was that of a hard and reliable source.

It is clear to investigate which researcher has used a qualitative or a quantitative approach by looking at Alan Bryman's (1993) Quantity & Quality in Social Research.

The purpose and Role of Research

The purpose and role of research in health care is to examine the needs and provisions and get a better understanding of the society that we live in. The reasons that we comply with these procedures is to:

- Extend scientific understanding
- Develop new technologies
- Carry out clinical trials
- Health screening
- Evaluating services

We observed a video in which a group of researchers studied a particular area and realised that the area was overloaded with people who had cancer or who had died of cancer, and a large majority of these people had nasal cancer. They decided they would research the area and try to find an explanation for these happenings. They discovered from looking at peoples medical records and background that they all had once worked in a wood shaving factory. They decided that this explained the situation. Because they found this through research using medical records and background records they were able to promote the dangers and risks of working in such factors and so this is a health development.

(Lecturer Notes 2002)

Conclusion

I think that research is a positive way at looking at the future. We can then examine problems that we have overcome to see why they were taking place and try to prevent them for the future. I believe that the best way to do research is from the positivists, as their way of collecting data is hard and reliable. You can also keep a distant relationship so there is no interference to the subject's natural way of life and so the subject will not be acting falsely. I believe that the interpretivist way of collecting data is very risky and may be reliable data but the risks they take for this data is remarkable.