

A review of observation method in data collection process

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Abstract: This paper describes the approach we take for observation of a social phenomenon through observation method towards data collection. In any qualitative research study, observation is one of the methods through which researchers collect data. The observation method includes researchers' biases, as being a form of qualitative way of the research. Here the various advantages as well as the disadvantages of observation method has been reviewed. The purpose of this paper is to keep researchers aware about the strengths and shortcoming of observation method of a qualitative research. Understanding of such things are important for a researcher before choosing this method. This paper tries to make the readers, researchers, and stakeholders aware about the methodology of observation method in research. A prior information of such may produce better results from a qualitative study of any social construct.

Index Terms: Qualitative research, observation method, data collection, behavior, social phenomenon.

I. INTRODUCTION

Observational research has a long history. In 1911, Charles Parlin, who was working for Curtis Publishing in Pennsylvania, publishers of the Saturday Evening Post, carried out the first recorded observational market research study (Ward 2009) when he demonstrated to the manufacturers of Campbell's Soup that the paper would be a good advertising medium for its product.

Observation is a way of gathering data mostly in qualitative research, by observing the behavior, events, or noting physical characteristics in their natural setting. Observations can be overt (everyone knows that they are being observed) or covert (no one knows that they are being observed and the observer is concealed). The benefit of covert observation is people are more likely to behave naturally when they do not know that they are being observed. However, many a times the researcher needs to conduct an overt observation, because of potential ethical issues related to concealing his or her observation.

It can also be either direct or indirect type of observation. In direct observation, the researcher watches the interactions, processes, or behaviors as they occur. In the indirect observation, the researcher watches the results of interactions, processes, or behaviors.

Learnings from Literature

Observation research can be conducted qualitatively or quantitatively (Girard & Cohn, 2016). Useful observations are sometimes elusive or difficult to find because researchers often do not know what to observe in the first place (Abrams, 2000).

Qualitative observation involves observing, inferring, and speculating in a way that generates inferences or hypotheses (Merriam & Tisdell, 2015). Although it can be quantitative, its results are only correlational, and not causal (Fowler & Montagnes, 2015; Gerber, Green, & Kaplan, 2014). Quantitative observations involve collecting the inferences and hypotheses together into a coding sheet and observing dozens to hundreds of people to confirm or disconfirm the hunch (Brannen, 2017).

II. DEVELOPING A FRAMEWORK

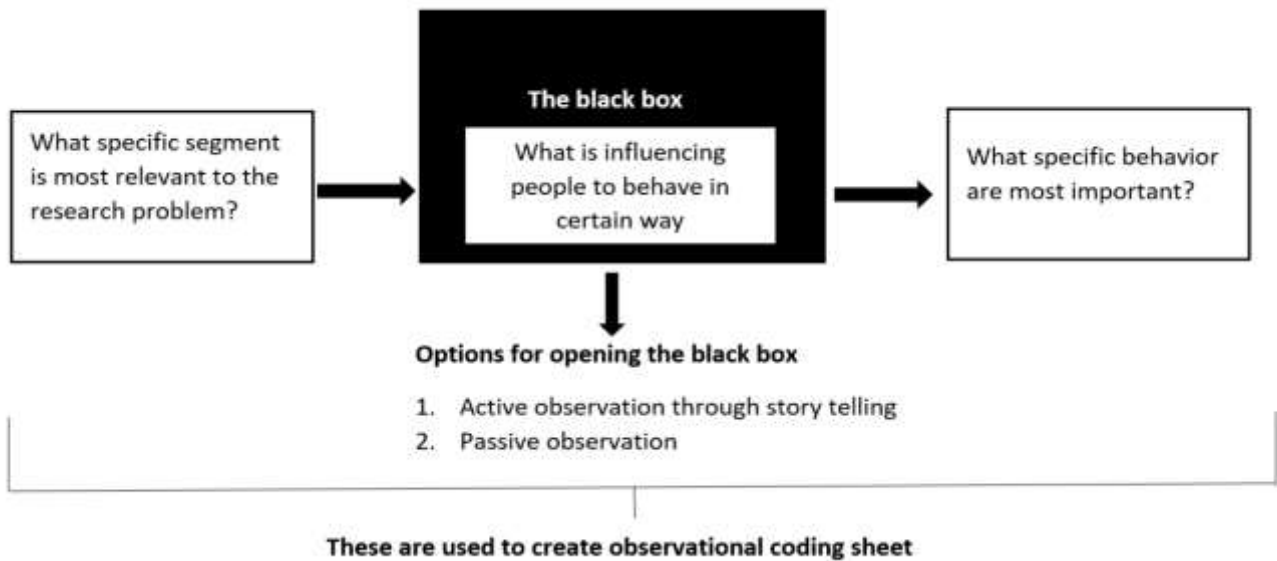
Observational studies are sometimes referred to as natural experiments or as a quasi-experiment. The term quasi-experiment is used to suggest a design in which, certain structural features are added to provide information about researcher's hidden biases.

In a social phenomenon there is a three-step procedure, in observational research that involves answering these questions:

1. What specific behaviors are most important?
2. What specific segment is most relevant to the problem?
3. What is influencing people to behave in a particular manner?

When starting the observational research, the first and second questions are reasonably easy to answer. The difficulty comes in trying to find the answer of third question, it is like a Black Box, which tells some non-obvious gateway behaviors or environmental features that will really help to solve a certain problem. For the second question, there might be multiple segments, and they might be narrowly defined once observations begin, but the important thing is at least it is somewhat clear where to start from.

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(Fig. 1)

III. DEVELOPING A CODING SHEET

The researcher should consider four types of information which needs to be coded:

1. Dependent variables
2. Independent variables
3. Environmental factors
4. Demographic and identification data

Coding sheets are designed in such way that it can make the coding process easy for researchers in as accurately manner as possible. Sometimes researchers try to include only coding variables which can be theoretically justified. Here it only allows for confirmation, but for no new discoveries. Although some researchers indiscriminately list almost everything that they can observe, but such extreme also has some problems. So, researchers often do not know how to analyze the data in an insightful way.

There are three factors that needs to be governed for the layout and design of an efficient coding sheet:

1. The most important variables should always be kept first, whenever possible.
2. The variable needs to be listed in the most likely order of observation.
3. The flow and the design should be convenient to check or complete with little thought.

IV. ADVANTAGES OF OBSERVATION

1. Observation is among the common methods which is used in all sciences, whether physical or social.
2. It has greater universality of practice. And as a common method, it is very easily followed and accepted.
3. It allows the researcher to directly see what people do, rather than just relying on what people say they did.
4. It collects data where and when an event or activity is occurring.
5. It does not rely on people's willingness or their ability to provide information or not.

V. DISADVANTAGES OF OBSERVATION

1. It is susceptible to observers' bias.
2. It is also susceptible to the "Hawthorne Effect". Hawthorne Effect says, people usually perform better when they know that they are being observed.
3. It is usually time-consuming and expensive as compared to other methods of data collection.
4. It fails to explain that why people behave as they do.

VI. CONCLUSION

This paper has tried to show how observational research allows researchers to ask different type of questions. Questions which enable the researcher to use their bodies, senses, and reflexivity as the instrument for getting information and knowing. Although such researchers who are new to the observation methodology, needs to take care that the methods and procedures of data collection are transparent. During the examining of a social phenomenon in any context, provides a range of new topics, issues or ideas about culture, work practices, stakeholder relationships or motivations, as well as more specific investigations of technologies, processes, or events etc. The main concern of this paper has been with choosing the appropriate behavioral parameters for observation, to answer any research question of a qualitative study. This point lies in deciding which behaviors are more relevant to the research question, in which the researcher is interested. And lastly the advantages and disadvantages of observational method of qualitative research has been pointed out.

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