

## OBSERVATIONAL RESEARCH IN THE SOCIAL SCIENCES: A NEGLECTED QUALITATIVE RESEARCH TECHNIQUE

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### ABSTRACT

*Observational research is a qualitative research technique used for over a century in variety of disciplines in the Social Sciences, particularly in anthropological (ethnographic) studies. The technique involves systematic observation and recording of the behavior of individuals for the purpose of describing such behavior. Thus, observational research is used particularly in studies about people, processes, and cultures and have proven to be the most appropriate approach in probing social life in its natural habitat by providing a deeper and fuller understanding of subtle communications and other events or phenomena than other research techniques. However, in recent times, observational research technique appear to be somewhat discarded, in spite of its comparative advantages. This paper is, therefore aimed at a description of observational research and how it is conducted. The paper also aimed at a critical analysis of the observational research technique. This paper argued that a critical analysis of observational research technique would be better done by identifying the various methods of observation and evaluating each of these methods one after the other. Based on this, three broad classifications of observation were identified and critically evaluated. The classifications are: participant and non-participant observations, structured and unstructured observations and controlled and uncontrolled observations. On the whole, it was argued in the paper that although observational research has the advantage of probing social life in its natural habitat and thus providing a deeper and fuller understanding of social phenomena, the method also has methodological and ethical problems. The methodological problems associated with observation include the possibility of observer bias while the ethical problem has to do with the violation of the norm of informed consent of the respondents being studied.*

**Key Words:** Observation; Research; Data Collection; Social Sciences

### Introduction

The goals of sciences generally is to understand, explain, predict and/or control phenomena of interest. In the Social Sciences attempts to meet those set of goals are arrived at using two broad methods of data

collection – quantitative and qualitative methods. Quantitative method of data collection is that method that expresses data in numerical forms while the quantitative method is that method of data collection

where by the data are not presented in numerical form. Each of these two broad methods of data collection has its own types. One of the major types of qualitative method is observation, which basically involves the conscious act of watching, or paying attention to events, processes, behaviors or physical characteristics usually in their natural settings and providing a description of those events, processes, behaviors and physical attributes under study. Observation is one of the oldest and most fundamental research methods (Given, 2008). A lot of social science disciplines based their origin on studying based on observation method and although the method now seems partially discarded, it is still a very useful method of data collection especially if a researcher is interested in the study and description of people's behaviours, events and social processes. In fact, if properly done, observation can give additional, more accurate information on the behavior of people than interviews or questionnaire. This paper attempts to describe and critically examine the observational research as a technique of qualitative studies. The paper started with a description of observational research technique and how it is conducted. Various types of observational research were identified, described and critically examined, revealing the strengths and weaknesses of each of the methods.

### **What is Observational Research?**

Various definitions of observational research were offered by different scholars. According to Given (2008) observational research is a type of qualitative study that involves collecting impressions of the world using all of one's senses, especially looking and listening, in a systematic and purposeful way to learn about a phenomenon of interest. Similarly, Sadik (2013) sees observational research as a way of gathering data by watching behavior, events, or noting physical characteristics in their natural settings. Observational research

could also be defined as a study technique that involves live witnessing and recording the characteristics of events, occurrences, persons etc. as predefined by the researcher (but without direct questioning). Observational research, therefore, could be seen as a conscious act of watching, or paying attention to events, processes, behaviors or physical characteristics in their natural settings and providing a description of those events, processes, behaviors and physical attributes under study. Observational research is thus an important instrument in an attempt to describe existing situations and providing a "written photograph" of that situation. According to Darlington and Scott (2002) observational research is a very effective way of finding out what people do in particular contexts, the routines and interactional patterns of their everyday lives.

Observational research simply requires accurate description and objective interpretation with but no prior hypotheses. This is because, as Cozby (2007:112) argued, in observation, "if a researcher has some prior reason to criticize people in the setting or give a glowing report of a particular group, the observations will likely be biased and the conclusions will lack objectivity". Observational research therefore is a type of descriptive research that differs from most other forms of data gathering in that the researcher's goal is not to manipulate the variables being observed. Though participants may or may not be aware of the researchers' presence, the researchers do not try to control variables (as in an experiment), or ask participants to respond to direct questions (as in an interview or survey based study).

In observational research, a researcher may be faced with a complex situation of having to observe many different individuals and record many different behaviours simultaneously. The solution here is take a sample of the potential observations rather than attempt to watch and record everything.

Gravetter and Forzano (2009:355) identified the ways through which that sampling could be done as follows:

1. **Time Sampling:** This involves observing for one interval, then pausing during the next interval to record all the observations. This sequence of observe-record-observe-record is continued through the series of intervals.
2. **Event Sampling:** This involves identifying one specific event or behavior to be observed and recorded during the first interval; then the observer shifts to a different event or behavior during the second interval, and so on, for the full series of intervals.
3. **Individual Sampling:** This involves identifying one participant to be observed during the first interval, then shifting attention to a different individual for the second individual, and so on.

In addition to the above sampling procedures in observational research, Cozby (2007) argued that a researcher conducting observation should not attempt to observe everything, rather, the observer should limit the scope of his or her observation to behaviours that are relevant to the central issues under study.

Since the process of observation usually involves the direct observation and systematic recording of behaviours, usually as such behaviours occur in a natural situation, it is therefore essential that the behaviors are not disrupted or influenced by the presence of an observer. According to Gravetter and Forzano (2009) there are two ways to deal with this issue. First is by **concealing** the observer so that the individuals do not know that their behaviours are being observed and recorded. Though this concealment may poses ethical

concern, Gravetter and Forzano (2009) argued that observing public behaviours in public places does not constitute an ethical problem even if the observation is being concealed. The second alternative is **habituation**, which involves repeated exposure of the observer's presence until his presence no longer constitute a novel stimulus to the research subjects.

During the observation period, there is usually only one observer who observes and records observations as they occur. However, to ensure reliability, two or more individuals may observe and record simultaneously for some of the observation periods. The degree of agreement between the two observers is then computed as a measure of "inter-rater reliability" (Gravetter and Forzano, 2009). Such computation is usually done through correlation or proportion of agreement ranging from 1.00 = perfect agreement to 0 = no agreement.

There are generally two most crucial issues faced by observers in the course of observation. First is whether to be a participant or a non-participant observer in the research setting and second is whether or not the observer should conceal the purposes of the study from the people being observed. Observational research has a lot of advantages. First, the method does not rely on people's willingness to provide information; second, the data collected through observation is based on what people actually do and not what they say; and third, data is collected where and when the event or activity is occurring, thus, allowing the researcher access to the context and meanings surrounding what people do. However, in spite of these "good news" observational research has both **methodological** and **ethical** problems. Specifically, the method is susceptible to observer bias especially when the researcher became too much involved in the activities of the group being observed; the presence of an

observer will change, at least to some extent, the context being studied and that may threaten the validity of the data collected (e.g. Hawthorne effect - i.e. changes in the behavior of people being observed arising from having knowledge about the research). The method is also judged to be time consuming (though this may be reduced by the use of controlled setting). Ethically, observational research has been criticized for violating the norm of informed consent in situations where covert observation is employed. For a better understanding of observation and its critical analysis, it is better we further discuss the various methods of observation, discussing their features as well as the strengths and weaknesses of each method.

### **Types of Observation Methods of Data Collection**

There is no universally accepted categorizations of observational research. Scholars identified different types of observational researches from different angles. This paper made an attempt to look at those various types of observation methods and as such our discussion on the types of observations would be done under the following headings:

#### **Participant and Non-Participant Observations**

This is the most common type distinctions about observation as a method of data collection. This distinction is made based on the degree of participation of the observer in the research process i.e. whether the observation is an active or passive observation.

#### **Participant Observation**

Participant observation is also called ethnographic research. According to given (2008) participant observation is a method of data collection in which the researcher takes

part in everyday activities related to an area of social life in order to study an aspect of that life through the observation of events in their natural contexts. Similarly, Marshall (1998) sees participant observation as an observation strategy which aims to gain close and intimate familiarity with a given area of study through intensive involvement with people in their natural environment. Thus, the purpose of participant observation is to gain a deep understanding of a particular topic or situation through the meanings ascribed to it by the individuals who live and experience it. Participant observation is regarded as being especially appropriate for studying social phenomena about which little is known and where the behavior of interest is not readily available to public view.

Participant observation originated in the fieldwork of social anthropology (Marshall, 1998) and especially ethnography and has been used as a data collection method for over a century (Kawulich, 2005). According to DeWalt and DeWalt (2002) one of the first attempt to conduct participant observation was made by Frank Hamilton Cushing, who spent four and a half years as a participant observer, studying the Zuni Pueblo people around 1879. However, the credit for publicizing participant observation as a data collection method was given to a Polish-born social anthropologist, Bronislaw Malinowski. Malinowski conducted several fieldwork visits among the Trobriand Islanders in the Western Pacific from 1915 to 1916 and from 1917 to 1918. In fact, according to Bernard (1998), Malinowski's work is the most cited early discussions of anthropological data collection. Participant observation was also further developed by the Chicago School under the leadership of Robert Park and Howard Becker (Given, 2008).

Participant observation aims to get an in-depth understanding of how individuals in different cultures and subcultures make sense of their lived reality. Participant observation is

usually done in the natural setting of the research subjects rather than a specialized made location for the study. The method in participant observation is characterized by emergent design involving a variety of methods including direct observation of human behavior and the physical features of settings, informal interviewing, and document analysis (Given, 2008).

In participant observation, a fundamental question that always arises and which has received tremendous debates among scholars is that “should the observer remain concealed or be open to the research subjects about the research?” A response to this leads to further categorization of participant observation into **covert** and **overt** participant observation.

**Covert participant observation**, according to Marshall (1998) is a method of participant observation which is carried out without the explicit awareness and agreement of the social unit being studied. In this type of participant observation, the identity of the researcher, the nature of the research project, and the fact that participants are being observed are concealed. Thus, the study is carried out “under cover” and the researcher takes a false identity and role, usually posing as a genuine member of the group (McLeod, 215). Covert participant observation is usually used when access to the social unit would normally be denied, or to ensure that the researcher’s presence does not affect the behaviour of those being studied (Marshall, 2008). This type of participant observation, however, raises serious ethical concerns – the right of the research subject to decide whether to participate or not to participate (informed consent) is violated. Another problem with this method is that researchers cannot take notes openly as this would blow their cover. Therefore field notes are usually prepared after the researcher is alone or has left the field. This may subject the notes to errors of omission and faulty recall and the researcher may not remember direct quotations.

**Overt participant observation**, on the other hand, is that type of participant observation carried out with the agreement of the subject being studied (Marshall, 1998). In other words, under overt participant observation, the researcher reveals his or her true identity and purpose of the research to the group being studied and asks for permission to observe. This disclosure of the research purpose, according to Marshall (1998) may be tacit (where the researcher reveals his identity but states the purpose of the study less clearly, usually in the form of a general statement and no further details are offered) or formally expressed (where the researcher make it clear to the subjects about the purpose of the research and that they are to be observed and they are to give explicit permission for the research to be conducted). This method is considered more ethically sound than the covert observation because the norm of informed consent is not violated. Also, note taking is easier under overt observation. However, the major drawback of this method is that research subjects may alter their behaviour if they know that they are being observed.

Apart from the covert/overt dichotomy, participant observation can also assume other forms based on the role of the observer in the research setting. Gold (1958), in his famous article on “Roles in Sociological Field Observation” identifies four types of participant observation based on the roles of the observer and are stated as follows:

- a. Complete participation (full participation and role – playing)
- b. Participant-as-observer (more participant than observer)
- c. Observer-as-participant (more observer than participant)
- d. Complete observation (no participation)

**Complete participation:** Complete participation is that in which the researcher takes active part (participate fully) in the situation or activity under observation. In this case, the true identity and purpose of the researcher are not known to the people under observation. This method involves role-taking, where the researcher pretends to be a member of the group. This is because of the belief that informing research subjects about the observation may influence their behaviour. The main disadvantage of this method is that to the extent that the researcher participates fully and emotionally, he may lose objectivity and become biased, thus, reducing the validity of the data. This method also involves deception by the observer (pretending to be part of the group being studied) and which is considered ethically wrong.

**Participant-as-observer:** Participant-as-observer also involves full participation in the activities being studied. The only difference between this method and complete participation is that under participant-as-observer, people under observation are aware of the identity and purpose of the researcher. This method, therefore, may not involve role-taking. The main problem with this method is that the mere presence of the observer can cause the people being observed to modify and/or alter their behaviours and actions.

**Observer-as-participant:** Under observer-as-participant, the people being observed are informed about the observation but the observer's participation in the activities being studied is limited; the researcher observes more than he/she participates. This method also has the problem of observer influence in the behaviour of the group being observed.

**Complete observation:** In this case, the researcher does not take part in the activities of the people being observed and the people are not aware that they are being observed.

Thus, the method allows the researcher to study people's behaviour without interfering in their day-to-day-operations, thereby minimizing the observer bias and the influence the presence of the researcher might have on the people being observed. Complete observation is mostly done in the situation where the participation of the researcher in the group's activities is hardly possible and therefore, he or she can only observe. The main problem with this method is that it does not allow the researcher to clarify meanings and answer questions concerning activities that are not fully understood by the researcher.

### **Non-Participant Observation**

Non-participant observation is a research technique whereby the researcher observes the people under study with their knowledge and permission but without taking an active part in their activities (Marshall, 1998). According to Given (2008) non-participant observers sometimes are physically present with research participants in a naturalistic setting, but other times may not be present in the setting. Thus, at times non-participant observation may also involve the use of video recorders to record observations. Researchers mostly engage in non-participant observation either because the researcher has limited or no access to participate in the activities of the group being studied or because it is dangerous or difficult for the researcher to engage in the activity he or she is studying (e.g. riots).

Given (2008) added that the introduction of internet has provided opportunities for new forms of non-participant observation where researchers may have an interest in the interactions among members of an internet community to which they do not belong. Thus a non-participant observer could register with a digital community, reading all the messages posted by community members without ever posting themselves. Data from digital media are often more easily recorded because the

researcher can use screenshots, copy-and-paste functions, and save messages and logs. However, according to Marshall (1998) non-participant observation is criticized on the grounds that, the fact that the people being observed are aware of the observation may lead them to behave differently (e.g. the Hawthorne effect). The use of video camera may also alter the behaviour of the people under observation.

### **Structured and Unstructured Observations**

Discussion on the type of observations can also be done between structured and unstructured observation. This classification is done based on the whether the observer enters the field with a predesigned observation schedule or not.

#### **Structured Observation**

Structured observation, in other words called systematic observation, entails the collection of data according to a set of predefined rules and procedures and the structure of that observation as well as its predefined variables and their values are derived from the purpose of the study (Given, 2008). Structured observation is appropriate for data collection in both laboratory and natural settings but uses observation schedules (checklists) in which data are recorded according to predefined criteria to ensure consistency in data collection. An observation schedule is a form prepared prior to data collection that delineates the behavior and situational features to be observed and recorded during observation and provides space to record notes about new themes that emerge during observation. As observations are collected in real time, they have a temporal dimension and yield information about the duration, frequency, and sequence of events or behaviours.

Structured observation, therefore is very useful for understanding processes and frequencies of behaviors within a given time period. Thus, because of the rigorous quantitative nature of the variables and data collection processes, structured observation is regarded as having the potential to yield results with high validity and making replication and generalization possible. If the same observation schedules and coding schemes are used, it enables comparison across two or more sites. In fact, when combined with interviews, structured observation allows researchers to compare what people say with what they actually do (Given, 2008).

However, there are many limitations in the use of structured observation. Given (2008:838-839) identified four major limitations of structured observation: First, the method is not appropriate for a research topic about which little is known, as the method requires prior knowledge of the setting for the development of observation schedules. Second, Unlike more flexible forms of observation such as participant or unstructured observation, structured observation, with its predefined variables and processes, is not effective in capturing behaviors or other features of a research context that are unexpected. Third, reactivity (observer effect) can be a major problem. Reactivity takes place when the act of doing the research changes the behavior of participants. Fourth, structured observation is difficult to implement in busy, complex settings where it may be hard for observers to focus on particular behaviors (though this challenge can be overcome to some extent through the use of multiple observers, however, the presence of multiple observers may increase reactivity). And fourth, structured observation requires highly skilled, well-trained observers who are familiar with the method and can understand what they are observing.

### **Unstructured Observation**

An unstructured observation is that type of observation where the researcher enters the field with some general ideas of what might be salient, but not of what specifically will be observed. Therefore, the observation is holistic, unstructured, and unfocused, with the investigator attempting to document as much as possible about the setting and its participants in order to discover themes of interest (Given, 2008). Unstructured observation is not constrained by observation schedule or checklists and coding schemes; rather, the researcher reports in narrative style about observations that are relevant to the research questions. This is because the method recognizes that important themes can emerge during the observation. In unstructured observation, data are usually recorded as field notes that include jottings, maps, and diagrams. Thus, unstructured observation is a flexible method that allows for the collection of comprehensive and rich data. Given (2008) argued that unstructured observation usually leads to more structured observation as more is learned about the context.

A major weakness of unstructured observation according to Given (2008) is that it is susceptible to observer bias as investigators choose what to observe and how to process and analyze that information. Therefore, the quality of data collected and the findings of the observation are heavily dependent on the skill and experience of the investigator.

### **Controlled and Uncontrolled Observations**

Observation may also be categorized into controlled and uncontrolled observation. This classification is based on the nature of the setting in which the observation is conducted.

### **Controlled Observation**

Controlled observation is that observation in which the researcher create the environment under which the observation will take place. Thus the research subjects under the controlled observation are observed under an “artificial setting” rather than their “natural settings”. According to McLeod (2015) controlled observations are likely to be carried out in a psychology laboratory. The researcher decides where the observation will take place, at what time, with which participants, in what circumstances and usually uses a standardised procedure. This is why the method is sometimes referred to experimental research. In controlled observation, the researcher code behaviour according to a previously agreed scale using an observation schedule (i.e. conducting a structured observation) rather than writing a detailed description of all behaviours observed. Controlled observations are usually overt as the researcher explains the research aim to the group, so the participants know they are being observed. Controlled observations are also usually non-participant as the researcher avoids much direct contact with the group.

Controlled observation is quick to conduct as the observation may be conducted within a short time. Also the findings from controlled observation can be analyzed more easily and quickly using quantitative method. In addition, controlled can be easily replicated by other researchers by using the same observation schedule.

However, data obtained from controlled observations can lack validity as the participants being observed can alter their behaviour when they know that they are being informed (e.g. the Hawthorne effect).

### **Uncontrolled Observation**

Uncontrolled Observation involves observing human behaviour in their natural setting and the researcher simply records what he or she observes. This method of observation is also

called naturalistic observation, field work or field observation. This research approach, according to Cozby (2007) has roots in anthropology and the study of animal behavior and is now widely used in the social sciences to study many phenomena in all types of social and organizational settings. Compared with the controlled observation, it is like the difference between studying wild animals in a zoo and studying them in their natural habitat. Cozby (2007:110) further added that in social sciences, “a researcher uses naturalistic observation when he or she wants to describe and understand how people in a social or cultural setting live, work, and experience the setting”. Thus, by being able to observe the flow of behaviour in its own setting, uncontrolled observations tend to

have greater ecological validity (McLeod, 2015).

Uncontrolled observation also faces the problem of whether the observer is to be a participant or non-participant in the social setting and whether or not the observer should conceal his or her purposes from the people in the setting. Another problem with the uncontrolled observation is that unlike in the controlled observation, naturalistic research cannot be scheduled at a convenient time and place and the method can be highly time-consuming and at the same time may place the observer in an unfamiliar setting for an extended period of time. However, in spite of these challenges associated with an uncontrolled observation, if properly done, it yields invaluable knowledge (Cozby, 2007).

**Table 1: Classification of Observation Methods**

| Criteria for Classification                                                 |                                                               |                                             |
|-----------------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------|
| Based on the Role of an Observer and the Degree of Observer's Participation | Based on the Existence of a Pre-designed Observation Schedule | Based on the Nature of the Research Setting |
| Participant Observation                                                     | Structured Observation                                        | Controlled Setting                          |
| Non-Participant Observation                                                 | Unstructured Observation                                      | Uncontrolled Setting                        |

## Conclusion

In conclusion, observational research is an old method of data collection used to study social processes over time. The method is mostly used by anthropologists and especially by ethnographers. The method has the advantage of studying natural behaviour as they occur and mostly in natural settings and therefore enables a fuller and deeper description of such behaviour than other methods of data collection. However, the method of observation has both methodological (e.g. observer bias) and ethical

(e.g. intrusion of privacy) problems which pose great limitations regarding its use. In spite of those limitations, however, observation is still a very useful method of data collection which can give more accurate, additional information on the behaviour of people than other methods (such as questionnaire). It is, therefore recommended that observational studies should be encouraged in the Social Sciences especially in the attempts to describe people's behaviours, events and social processes.

## References

- Bernard, H. R. (Ed.) (1998). *Handbook of methods in cultural anthropology*. Walnut Creek: AltaMira Press.
- Boundless (2016) "Observation." *Boundless Psychology*. Retrieved 21/10/2016 from: <https://www.boundless.com/psychology/textbooks/boundless-psychology-textbook/researching-psychology-2/methods-of-collecting-data-28/observation-127-12662/>
- Calhoun, C. et al (1995). *Understanding Sociology*. USA: Glencoe/McGraw-Hill.
- Cozby, P. C. (2007). *Methods in Behavioural Research, (Ninth Edition)*. New York: Mc Graw-Hill.
- Darlington, Y. and Scott, D. (2002). *Qualitative Research in Practice: Stories from the Field*. Singapore: South Wind Productions.
- DeWalt, K. M. and DeWalt, B. R. (2002). *Participant observation: a guide for fieldworkers*. Walnut Creek, CA: AltaMira Press.
- Given, L. M. (Ed.) (2008). *The SAGE Encyclopedia of Qualitative Research Methods*, (Volumes 1 & 2) California: SAGE Publications, Inc.
- Gold, R. G. (1958). Roles in Sociological Field Observation. *Journal of Social Forces*
- Gravetter, F. J. and Forzano, L. B. (2009). *Research Methods for the Behavioural Sciences, (Third Edition)*. USA: Wadsworth
- Kawulich, B. B. (2005). Participant Observation as a Collection Method. *Qualitative Social Research*, Vol 6, No. 2, Art. 43
- Marshall, G. (1998). *Oxford Dictionary of Sociology, (Second Edition)*. New York: Oxford University Press.
- McLeod, S. (2015) Observation Methods. Retrieved 20/10/2016 from: <http://www.simplypsychology.org/observation.html>.
- Sadik, S. (2013). Observation: Advantages and Disadvantages. Retrieved 20/10/2016 from: <http://shadmansadik.blogspot.com.ng/2013/11/observation-advantages-and-disadvantages.html?m=1>.