An Assessment of Observational Technique as a Suitable Data Collection Technique for Research Services

By

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ABSTRACT

The study sought to assess observation technique as a suitable data collection technique for research services. Data collection is one of the most important stages in conducting a research. It is a very demanding job which needs thorough planning, hard work, patience, perseverance and more to be able to complete the task successfully. Regardless of the field of study or preference for defining data (quantitative, qualitative), accurate data collection is essential to maintaining the integrity of research. Observation is a systematic data collection approach. Researchers use all of their senses to examine people in natural settings or naturally occurring situations. The above assertions explain that observational technique of data collection for qualitative research purposes is crucial in social sciences as human behavior cannot be quantified but it was observed that, data derived from human observers also play an important role in some laboratory settings. The study concluded that observation is an effective method because it is straightforward and efficient: Gathering firsthand information in the field gives the observer a holistic perspective that helps them to understand the context in which the item being studied operates or exists. The study therefore recommended that the researcher must be fully trained on the proper use of the observation technique to maintain the pretense of a participatory role, and to evade cases of bias and subjectivity which might affect the accuracy and reliability of the data.

KEY WORDS: Observational Technique Suitable Data Collection Technique, Buying Behavior, Accuracy, Reliability

Introduction

Man has often found the need to explore into the depth and intricacies of issues in his immediate and natural environment, to either discover new facts, verify and test important facts, analyse an event or process or phenomenon, identify the cause and effect or relationship, develop new scientific tools, concepts and theories, solve and understand scientific and nonscientific problems, find solutions to scientific, nonscientific and social problems and to overcome or solve the problems occurring in our everyday life (Rajasekar, Philominathan and Chinnathambi 2014). There must always be a motivating factor for a research to be conducted. Over the ages, scholars, technologists, managers, scientists and others have been spending huge investable funds on research works, students undertake research to get a research degree like PhD, MSc, BSc, and the rest. Others take to research due to such benefits as better employment, promotion, increment in salary, etc. there are many factors that prompt people to go into research findings.

Research methods are the various procedures, schemes and algorithms used in research. All the methods used by a researcher during a research study are termed as research methods. They

are essentially planned, scientific and value-neutral. They include theoretical procedures, experimental studies, numerical schemes, statistical approaches, etc. Research methods help us collect samples, data and find a solution to a problem. Particularly, scientific research methods call for explanations based on collected facts, measurements and observations and not on reasoning alone. They accept only those explanations which can be verified by experiments. Research methodology on the other hand is a systematic way to solve a problem. It is a science of studying how research is to be carried out (Gorman & Clayton, (2005). Essentially, the procedures by which researchers go about their work of describing, explaining and predicting phenomena are called research methodology. It is also defined as the study of methods by which knowledge is gained. Its aim is to give the work plan of research.

Data collection is one of the most important stages in conducting a research. It is a very demanding job which needs thorough planning, hard work, patience, perseverance and more to be able to complete the task successfully. Data collection starts with determining what kind of data is required followed by the selection of a sample from a certain population. Data collection is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes (Rajasekar, 2014). The data collection component of research is common to all fields of study including physical and social sciences, humanities, business, etc. While methods vary by discipline, the emphasis on ensuring accurate and honest collection remains the same. The goal for all data collection is to capture quality evidence that then translates to rich data analysis and allows the building of a convincing and credible answer to questions that have been posed. Regardless of the field of study or preference for defining data (quantitative, qualitative), accurate data collection is essential to maintaining the integrity of research (Gorman & Clayton, 2005).

Observational research technique is one of the qualitative data collection methods used in research findings. It is a fundamental way of finding out about the world around us. As human beings, we are very well equipped to pick up detailed information about our environment through our senses. However, as a method of data collection for research purposes, observation is more than just looking or listening. Firstly, in order to become systematic as required in research, observation must in some way be selective. We are constantly bombarded by huge amounts of sensory information. Syed (2018) observed that, human beings are good at selectively attending to what is perceived as most useful to us. Observation harnesses this ability; systematic observation entails careful planning of what we want to observe. Secondly, in order to make observation 'public', what we see or hear has to be recorded in some way to allow the information to be analysed and interpreted. Observation is a systematic data collection approach. Researchers use all of their senses to examine people in natural settings or naturally occurring situations. The above assertions explain that observational technique of data collection for qualitative research purposes is crucial in social sciences as human behavior cannot be quantified but it was observed that, data derived from human observers also play an important role in some laboratory settings (Rajasekar, et al., 2014). As you know, the interests of psychologists are extremely varied. They often record laboratory observations in addition to the behavior that is automatically recorded. On the whole, observers must be able to make fine distinctions between behaviors that are closer and more distant approximations to the criterion behavior.

Observation spans research paradigms, from structured observations that count instances of events, to highly unstructured participant observation. It is argued that 'questions of method

should be secondary to questions of paradigm, which can be defined as the belief system or world view that guides the investigation, not only in choices of method but in ontologically and epistemologically fundamental ways'. Guba and Lincoln (2014) noted that paradigms that tend to favour qualitative methods frequently describe actions in context, and draw from philosophical traditions that believe in the social and cultural meanings of actions and how they are shaped by the interpretation and construction of stimuli and situations. Observation as a methodology clearly contributes to these understandings, as it can be employed in 'natural' settings, rather than those set up for research purposes such as interviews (Hammersley and Atkinson, 2007). Observational methods are useful for understanding what people do – their roles, actions and behaviour – and how these can alter in response to situations and over time. It provides information on the natural settings of man as humans tend to exhibit a more moderate behavior when examined or under investigation. Observation of a field setting involves - prolonged engagement in a setting or social situation; clearly expressed, self-conscious notations of how observation is done; methodological and tactical improvisation in order to develop a full understanding of the setting of interest; imparting attention in ways that is in some sense 'standardized'; and recording one's observations (Labaree, 2002).

Observation is a complex research method because it often requires the researcher to play a number of roles and to use a number of techniques, including his/her five senses, to collect data (Baker, 2004). Observation data collection method is classified as a participatory study, because the researcher has to immerse him/herself in the setting where their respondents are, while taking notes and/or recording. Carey, McKechnie & McKenzie, (2001) noted that, despite the level of involvement with the study group, the researcher must always remember his primary role as a researcher and remain detached enough to collect and analyze data relevant to the problem under investigation.

Observational research techniques have advantages over other qualitative data collection methods when the focus of research is on understanding actions, roles and behaviour. Interviews are commonly used to facilitate discussion for example about healthcare and the experience of health or illness, but they are limited when the aims of the research include understanding structures and processes that underpin health or healthcare (Davis, 2004). Put simply, an interview allows someone to say what they do; an observation allows you to see directly what someone does. Observation as a data collection method can be structured or unstructured. In structured or systematic observation, data collection is conducted using specific variables and according to a pre-defined schedule. Unstructured observation, on the other hand, is conducted in an open and free manner in a sense that there would be no pre-determined variables or objectives. Advantages of observation data collection method include direct access to research phenomena, high levels of flexibility in terms of application and generating a permanent record of phenomena to be referred to later.

Concept of observational technique of data collection

Observation, as the name implies, is a way of collecting data through observing. While some researchers found indications of its use in ancient times, others have pointed to the late nineteenth and early twentieth centuries, when anthropologists started "collecting data firsthand". Describing it as the "bedrock source of human knowledge" about the "social and natural world," Adler and Adler (2004) stated that Aristotle used observational techniques in his botanical studies on the island of Lesbos and that Auguste Comte, the father of sociology, listed observation as one of the

"four core research methods" (p. 377). In some research methods textbooks and articles, observation has been described as a research method as well as a data collection method (Powell & Connaway, 2004; Williamson, 2010). The researcher however prefers to categorize observation as a data collection technique because it can be used in a variety of research methods.

The definitions of observational technique of data collection has been stated variously, Gorman and Clayton (2005), defined observation studies as those that involve the systematic recording of observable phenomena or behaviour in a natural setting. Marshall and Rossman (2009) define observation as "the systematic description of events, behaviors, and artifacts in the social setting chosen for study". Erlandson, Harris, Skipper, & Allen, (2003) submitted that observations enable the researcher to describe existing situations using the five senses, providing a "written photograph" of the situation under study. DeMunck and Sobo (2008) describe observation as the primary method used by anthropologists doing fieldwork, where fieldwork involves "active looking, improving memory, informal interviewing, writing detailed field notes, and perhaps most importantly, patience". It provides the context for development of sampling guidelines and interview guides. Other authors define observation within the broader context of ethnography or the narrower one of participation observation. Becker and Geer (2010), defined participant observation as either a covert or overt activity "in which the observer participates in the daily life of the people under study; observing things that happen, listening to what is said, and questioning people, over some length of time". While Schensul, Schensul, and Lecompte (2009) view observation as "the process of learning through exposure to or involvement in the day-to-day or routine activities of participants in the researcher setting" What is consistent in the definitions, however, is the need to study and understand people within their natural environment.

Bernard (2014) defines observation as the process of establishing rapport within a community and learning to act in such a way as to blend into the community so that its members will act naturally, then removing oneself from the setting or community to immerse oneself in the data to understand what is going on and be able to write about it. He adds to this understanding, indicating that observation requires a certain amount of deception and impression management. Most anthropologists, he noted, need to maintain a sense of objectivity through distance. He noted that it takes more than just observation in the process of being an observer, but it includes observation, natural conversations, interview of various sorts, checklists, questionnaires, and unobtrusive methods. Observation is characterized by such actions as having an open, nonjudgmental attitude, being interested in learning more about others, being aware of the propensity for feeling culture shock and for making mistakes, the majority of which can be overcome, being a careful observer and a good listener, and being open to the unexpected in what is learned (Dewalt & Dewalt, 2008).

Importance of observation techniques

Observation techniques are useful to researchers in a variety of ways. They provide researchers with ways to check for nonverbal expression of feelings, determine who interacts with whom, grasp how participants communicate with each other, and check for how much time is spent on various activities (Schmuck, 2007). There are a variety of reasons for collecting observational data. Some of these reasons include but not limited to: when the nature of the research question to be answered is focused on answering a 'how'- or 'what' type of question. When the topic is relatively unexplored and little is known to explain the behavior of people in a particular setting, understanding the meaning of a setting in a detailed way is valuable. Lofland (2005) note that the use of observation method is imperative when it is important to study a phenomenon in its natural

setting; when self-report data (asking people what they do) is likely to be different from actual behavior (what people actually do). When implementing an intervention in a natural setting, observation may be used in conjunction with other quantitative data collection techniques. Observational data can help researchers evaluate the fidelity of an intervention across settings and identify when the aim has been achieved (Borbasi, Jackson and Wilkes 2005).

Observation methods are useful to researchers in a variety of ways. Observation allows researchers to check definitions of terms that participants use in interviews, observe events that informants may be unable or unwilling to share when doing so would be impolitic, impolite, or insensitive, and observe situations informants have described in interviews, thereby making them aware of distortions or inaccuracies in description provided by those informants.

Dewalt and Dewalt (2002) believe that "the goal for design of research using observation as a method is to develop a holistic understanding of the phenomena under study that is as objective and accurate as possible given the limitations of the method". They suggest that participant observation could be used as a way to increase the validity of the study, as observations may help the researcher have a better understanding of the context and phenomenon under study. Validity is stronger with the use of additional strategies used with observation, such as interviewing, document analysis, or surveys, questionnaires, or other more quantitative methods. Participant observation can be used to help answer descriptive research questions, to build theory, or to generate or test hypotheses among others.

Classification of observational method

Observational methods can be classified as follows:

Casual and Scientific Observation*:* An observation can sometimes be casual in nature or sometimes may act scientifically. An observation with a casual approach involves observing the right thing at the right place and also at the right time by a matter of chance or by luck whereas a scientific observation involves the use of the tools of the measurement. It is of great importance to note that all observations are not scientific in nature (Agar, 2010).

Natural Observation*:* Natural observation involves observing the behaviour in a normal setting and in this type of observation, no efforts are made to bring any type of change in the behavior of the observed. Improvement in the collection of the information and improvement in the environment of making an observation can be done with the help of natural observations.

Subjective and Objective Observation*:* All the observations consist of the two main components, the subject and the object. The subject refers to the observer whereas the object refers to the activity or any type of operation that is being observed. Subjective observation involves the observation of the one's own immediate experience whereas the observations involving observer as an entity apart from the thing being observed, are referred to as the objective observation. Objective observation is also called as the retrospection.

Direct and Indirect Observation: With the help of the direct method of observation, one comes to know how the observer is physically present; in which type of situation he is present and then this type of observation monitors what takes place. Indirect method of observation involves studies of mechanical recording or recording by some other means like photographic or electronic. Direct observation is relatively more straight forward as compared to the indirect observation.

Participant and Non Participant Observation*:* Participation by the observers with the various types of operations of the group under study refers to the participant type of observation. Breuer, Franz & Roth, Wolff-Michael (2003) noted that, in participant observation, the degree of the participation is largely affected by the nature of the study and it also depends on the type of the situation and on its demands. But in the non-participant type of observation, no participation of the observer in the activities of the group takes place and also there occurs no relationship between the researcher and the group. The researchers, drawing a distinction between the two surmised that undisguised participant observation is often used to understand the culture and behavior of groups of individuals, whereas disguised participant observation is used when researchers believe individuals would change their behavior if they knew it was being recorded. Participant observation allows researchers to observe behaviors and situations that are not usually open to scientific observation (DeWalt, et al. (2008). Participant observers may sometimes lose their objectivity or may unduly influence the individuals whose behavior they are recording.

Structured and Unstructured Observation*:* Structured observation works according to a plan and involves specific information of the units that are to be observed and also about the information that is to be recorded. The operations that are to be observed and the various features that are to be noted or recorded are decided well in advance. (Erlandson, Harris, Skipper, & Allen 2003) obliged that such observations involve the use of especial instruments for the purpose of data collection that are also structured in nature. But in the case of the unstructured observation, its basics are diametrically against the structured observation. In such observation, observer has the freedom to note down what he/she feels is correct and relevant to the point of study and also this approach of observation is very suitable in the case of exploratory research.

Structured observations are set up to record behaviors that may be difficult to observe using naturalistic observation and its often used by Clinical and developmental psychologists (DeMunck, Victor & Sobo, Elisa 2008). Problems in interpreting structured observations can occur when the same observation procedures are not followed across observations or observers, or when important variables are not controlled. Structured observation is more likely to be carried out by those operating from a 'positivist' perspective, or who at least believe it is possible to clearly define and quantify behaviors. Unstructured observation on the other hand, is more likely to be carried out by those operating from an 'interpretive' or 'critical' perspective where the focus is on understanding the meanings participants, in the contexts observed, attribute to events and actions. Positivist and critical researchers are likely to be operating from a 'realist' perspective, namely that there is a 'real world' with 'real impact' on people's lives and this can best be studied by looking at social settings directly.

Controlled and Un-Controlled Observation: Controlled observations are the observations made under the influence of some of the external forces and such observations rarely lead to improvement in the precision of the research results. According to Fine (2003), these observations can be very effective in the working if they are made to work in coordination with mechanical synchronizing devices, film recording etc. Un-controlled observations are made in the natural environment and reverse to the controlled observation these observations involve no influence or guidance of any type of external force.

Covert and Overt Observation: Covert observations are when the researcher pretends to be an ordinary member of the group and observes in secret. There could be ethical problems or deception and consent with this particular method of observation. Overt observations are when the researcher

tells the group that he/she is conducting research i.e. they know they are being observed, this too have been proved to be important because in some settings, they enhance corporation.

The roles of an observer

An important consideration is where to place oneself on the continuum of observer to participant, and why. To observe people in their natural settings, Gold (2008) described a variety of roles researchers can adopt. They include: complete observer, observer-as-participant, participant-as-observer, and complete participant. The adopted role depends on the problem to be studied, on the insiders' willingness to be studied, and on the researcher's prior knowledge of or involvement in the insiders' world.

1. Complete Observer: Here, the observer is a member of the group being studied and who conceals his/her researcher role from the group to avoid disrupting normal activity. In this role, the researcher is present on the scene but only listens and observes, taking records as the scene unfolds. He is a non-participant. In addition to eavesdropping, a complete observer can collect data through videotaping, audio-taping, or photographing insiders (Adler & Adler, 2007), all of which have ethical implications. One advantage of this role is that the researcher can remain completely detached from the group. Detachment, however, is also a major disadvantage because it could prevent the researcher from hearing entire conversations or grasping the full significance of an information exchange. Although this role may not seem ideal in one's quest to understand insiders, it has its value and is often used in conjunction with other data collection techniques.

2. The second role is observer-as- participant: This role contains more observation than participating. It enables the researcher to participate in the group activities as desired, yet the main role of the researcher is to collect data, and the group being studied is aware of the researcher's observation activities. While still mostly involved in observing, he/she may conduct short interviews. The researcher as an observer is not a member of the group and is interested in participating as a means for conducting better observation and, hence, generating more complete understanding of the group's activities. Merriam (2018) points out that, while the researcher may have access to many different people in this situation from whom he/she may obtain information, the group members control the level of information given. As Adler and Adler (2007) noted, this "peripheral membership role" enables the researcher to "observe and interact closely enough with members to establish an insider's identity without participating in those activities constituting the core of group membership." Hence, the researcher, however, should remain "strongly research oriented" and "not cross into the friendship domain. The advantage of this role is that the insiders may be more willing to talk to the attentive strangers than they would to people with whom they are more familiar. Also, there is less "temptation either for the observer to go native or for the natives to try to include him permanently in their lives" Pearsall (2007). The disadvantage however is that the brief encounters with the observant limits the opportunity of getting more knowledge of the total situation. Gold (2008), saw this role as a source of frustration to the researcher who "cannot take time to master" the insiders' "universes of discourse". In other words, the brief interviews can contribute to misunderstandings or misconceptions of which the researcher may not be aware until it is too late to correct or address them.

3. The third role is the participant -as- observer: In the participant as observer, the researcher is a member of the group being studied, and the group is aware of the researcher's activity. In this scenario, the researcher is a participant in the group who is observing others and who is interested

more in observing than in participating, as his/her participation is a given, since he/she is a member of the group. It is in this role that the researcher becomes more involved with the insiders' central activities but still does not fully commit to "members' values and goals" (Adler & Adler, 2007). During this period of observation, the researcher may develop relationships with the insiders, such that they become "friends." This role also has disadvantages, in that there is a trade-off between the depth of the data revealed to the researcher and the level of confidentiality provided to the group for the information they provide. Also, the researcher may "over identify" with the insider, loose objectivity, and "go native," thus jeopardizing her/his role as a researcher/observer.

4. The final role outlined by Gold (2008) is the complete participant: This is the ultimate level of involvement as the researcher goes native and studies the group in which he/she is already a member. Researchers act as members, not researchers, he/she is completely hidden from view while observing so that they do not unnaturally "alter the flow of the interaction" or when the researcher is in plain sight in a public setting, yet the public being studied is unaware of being observed (Adler & Adler, 2007). While this role is ideal for obtaining a very good understanding of the insiders, the identity of the complete participant is unknown to the insiders, which can be problematic for the researcher who may become so self-conscious "about revealing his true self" that he/she becomes "handicapped when attempting to perform convincingly in the pretended role" In either case, the observation in this role is unobtrusive and unknown to participants.

Advantages of observation technique

1. Observation as a research method has a number of clear advantages over interviews and questionnaires. First, information about the physical environment and about human behaviour can be recorded directly by the researcher without having to rely on the retrospect or anticipatory accounts of others. For a number of reasons, such accounts may be inaccurate. For example, they may be shaped by the particular role the person plays in ways that make the account misleading, the information may not have been systematically recorded and may therefore contain errors, or the account may be distorted by the person's concern to present a desirable image of him- or herself. Since observation enables the researcher to note down what he or she sees as it occurs, observational data are often more accurate.

2. Observation is probably the most common and the simplest method of data collection. It does not require much technical knowledge. Although scientific controlled observation requires some technical skill of the researcher, still it is easier than other methods. Everybody in this world observes many things in their daily life. Little training can make one a perfect observer of his surroundings.

3. Observation is one of the main bases of formulating hypothesis. By observing a phenomenon continuously, the researcher may get well acquainted with the observed. He came to know about their habits, likes, dislikes, problems, perception, different activities and so many other things. All these help him a lot to form a hypothesis on them. Researchers, therefore, have to be good observers.

4. In other methods like interview, questionnaire etc., the researcher has to depend on information provided by the respondents. So these are indirect methods and here the investigator does not have any means to examine the accuracy of the data supplied by them. But in observation the observer can directly check the accuracy from the observed. He can apply various devices to test the

reliability of their behaviour. So very often the data collected through observation is more reliable than those collected through interview or questionnaire.

5. Observation can deal with phenomena which are not capable of giving verbal information about their behaviour, feeling and activities simply for the reason that they cannot speak e.g. infants or animals. Observation is indispensable for studies on infants who can neither understand the quarries of the researcher nor express themselves clearly. In the case of animal, observation is the only way out. For deaf and dumb persons, for serious cases of abnormality or mad persons, for non-cooperative persons, for too shy persons and for persons who do not understand the language of researcher, observation will be the only appropriate tool (Kawulich, 2005).

6. Observation method does not require the willingness of the people to provide information about them. Often some respondents do not like to speak about themselves to an outsider. Some people do not have time or required skill to provide important information to the researcher. Although observation cannot always overcome such problems, still relatively speaking it requires less active co-operation and willingness of respondents. Observation is ever possible without the knowledge of the respondents.

There are numerous advantages of observation technique over other methods of data collection. It is evident that making direct observations is a simple and unobtrusive way of collecting data. Gathering firsthand information in the field gives the observer a holistic perspective that helps them to understand the context in which the item being studied operates or exists. Observation is an effective method because it is straightforward and efficient: It doesn't typically require extensive training on the part of the data collector, and he or she is generally not dependent on other participants.

Challenges faced when collecting data through observation

Observation method is constantly faced with longer time requirements, high levels of observer bias, and impact of observer on primary data, in a way that presence of observer may influence the behaviour of sample group elements. It is also important to note that observation data collection method may be associated with certain ethical issues. Fully informed consent of research participant(s) is one of the basic ethical considerations to be adhered to by researchers. At the same time, the behaviour of sample group members may change with negative implications on the level of research validity if they are notified about the presence of the observer.

Most times the environment, event or behaviour of interest may be inaccessible and observation may simply be impossible (or at least very difficult). According to Labaree (2002), this may be because the social norms surrounding the event or behaviour do not usually permit observation (as with human sexual behaviour, for example), because the behavior deliberately avoids observation (as with many forms of deviance), because the event or behaviour occurs rarely or irregularly (as with disasters), because the observer is barred from access to the event or behaviour (as is frequently the case in studying powerful elite groups), or because the event or behaviour happened in the past Sometimes events and behaviour are just not open to observation.

A second challenge is that people may, consciously or unconsciously, change the way they behave because they are being observed, and therefore observational accounts of their behaviour may be inaccurate representations of how they behave 'naturally'. This is the problem of reactivity

Going into a new environment may require the researcher to adopt the role of complete observer, whereas studying a group in which he/she is already a member allows the researcher to adopt the complete participant role. What is important is that the researcher assumes an appropriate, fluid role - one that allows her/him to observe intimately the everyday life of the insiders (Carey, et al, 2001). Researchers are rarely at either end of this continuum, and their role often changes as the research progresses. Pope (2005) noted that issues to consider include the observer's own professional role, the possibilities for influencing behaviour and changing the dynamic of the situation, and the practicalities of how to observe and record observations. Researchers also need to consider what they bring to the encounter as insiders or outsiders (Bonner and Tolhurst 2002).

Strengths and weaknesses of different observational roles need to be considered in terms of being part of someone's world, maintaining role, bias, and privacy and consent. Traditionally, anthropologists immersed themselves in the world of 'outsiders', often for prolonged periods which often affect the research. Hannerz (2003) obliged that, this participant role reflects a belief that 'deep familiarity' is required to obtain the best data, achieved by getting emotionally, physically and socially close to the people being studied. Deep familiarity definitely affects the objectivity of the study as the researcher might be tempted to forget his aim of undertaking the study (Lofland 2015). It is difficult to fully participate in some worlds, for example those of lone or elite workers, (Pope 2005) and perhaps because of this, healthcare researchers frequently examine the familiar, as insiders. Participatory roles may create difficulties with maintaining the role of researcher. There is effort required in maintaining the 'pretense' of a participatory role, (Gold 2008), whilst also ensuring the researcher role is adequately addressed. (Borbasi, Jackson and Wilkes 2005). Subjectivity and bias are also potential weaknesses. Some argue that the position of complete observer is free from most of the potential bias that can arise from too close an affiliation with research subjects.

Based on the observations of Allen (2004), increasing participation in a situation can increase the risks of subjectivity and bias, along with the drawback of being familiar with much of what is seen. Borbasi et al. (2005) submitted that it is critical that an appropriate balance is found between an appropriate use of self, and subjectivity, using a reflexive approach to make processes visible. Roles are also increasingly constrained by the requirements of research ethics committees or other governance requirements, where the needs of informed consent procedures take precedence over a desired participatory role.

Johnson and Sackett (2018) discussing on participant observation as a source of erroneous description in behavioral research, noted that the information collected by anthropologists is not representative of the culture, as much of the data collected by these researchers is observed based on the researcher's individual interest in a setting or behavior, rather than being representative of what actually happens in a culture. To alleviate these problems, the researchers advocated the use of systematic observation procedures to incorporate rigorous techniques for sampling and recording behavior that keep researchers from neglecting certain aspects of culture. Their definition of structured observation directs who is observed, when and where they are observed, what is observed, and how the observations are recorded, providing a more quantitative observation than participant observation.

Conclusion

Based on the findings of the study, the following conclusions were drawn:

1. Observation technique provides information on the natural settings of man as humans tend to exhibit a more moderate behavior when examined or under investigation. In addition, it helps develop a holistic understanding of the phenomena under study that is as objective and accurate as possible.
2. Since observation enables the researcher to note down what he or she sees as it occurs, observational data are often more accurate. The data collected through observation is more reliable than those collected through interview or questionnaire.
3. Observation can deal with phenomena which are not capable of giving verbal information about their behaviour, feeling and activities simply for the reason that they cannot speak e.g. infants or animals, for deaf and dumb persons, for serious cases of abnormality or mad persons, for non-cooperative persons, for too shy persons and for persons who do not understand the language of researcher, observation will be the only appropriate tool.
4. Observation is an effective method because it is straightforward and efficient: Gathering firsthand information in the field gives the observer a holistic perspective that helps them to understand the context in which the item being studied operates or exists.

Recommendations

1. Most times the environment, event or behaviour of interest may be inaccessible and observation may simply be impossible. In this case, other research techniques such as questionnaire or interview might be effective.
2. The researcher must be fully trained on the proper use of the observation technique to maintain the pretense of a participatory role, and to evade cases of bias and subjectivity which might affect the accuracy and reliability of the data.
3. People may, consciously or unconsciously, change the way they behave when they notice that they are being observed especially when overt observations is applied. Sequel to that, observational accounts of their behaviour may in some cases be inaccurate representations of how they behave 'naturally'. To overcome this, the adoption of other research techniques can also be adopted for the study.

REFERENCES

Adler, P. A., & Adler, P. (2007). *Membership roles in field research*: Vol. 6. Qualitative research methods. Newbury Park, CA: Sage Publications.

Adler, P. A., & Adler, P. (2004). *Observational techniques*. In N. K. Denzin & Y. S. Lincoln (Eds.), Handbook of qualitative research (pp. 377–392). Thousand Oaks, CA: Sage Publications.

Agar, Michael H. (2010). *The professional stranger*: an informal introduction to ethnography. SanDiego: Academic Press.

Allen D. (2004). *Ethnomethodological insights into insider-outsider relationships in nursing ethnographies of healthcare setting*s. Nurs Inq; 11: 14–24.

Becker, H. S., & Geer, B. (2010). *Participant observation and interviewing*: A comparison. In W. J. Filstead (Ed.), Qualitative methodology: Firsthand involvement with the social world (pp. 133–142). Chicago: Markham.

Baker, L. M. (2004). *The information needs of female police officers involved in undercover prostitution work.* Information Research, 10(1), paper 209. Retrieved February 26, 2006, from http://InformationR.net/ir/10-1/paper209.html.

Bernard, H. Russell (2014). *Research methods in anthropology*: qualitative and quantitative approaches (second edition). Walnut Creek, CA: AltaMira Press.

Bonner A and Tolhurst G. (2002). *Insider-outsider perspectives of participant observation*. Nurse Researcher; 9(4): 7–19.

Borbasi S, Jackson D and Wilkes L. (2005). *Fieldwork in nursing research*: positionality, practicalities and predicaments. J Adv Nurs; 51(5): 493–501.

Breuer, Franz & Roth, Wolff-Michael (2003). Subjectivity and reflexivity in the social sciences: epistemic windows and methodical consequences. Forum Qualitative Sozialforschung / Forum: *Qualitative Social Research [On-line Journal]*, 4(2), Art.25. Available at http://www.qualitative-research.net/fqs-texte/2-03/2-03intro-3-e.htm.

Carey, R. F., McKechnie, L. E. F., & McKenzie, P. J. (2001). *Gaining access to everyday life information seeking*. Library & Information Science Research, 23, 319–334.

Davis, P. M. (2004). Information-seeking behavior of chemists: A transaction log analysis of referral URLs. *Journal of the American Society for Information Science & Technology*, 55(4), 326–332.

DeMunck, Victor C. & Sobo, Elisa J. (Eds) (2008). *Using methods in the field*: a practical introduction and casebook. Walnut Creek, CA: AltaMira Press.

DeWalt, Kathleen M. & DeWalt, Billie R. (2002). *Participant observation*: a guide for fieldworkers. Walnut Creek, CA: AltaMira Press.

DeWalt, Kathleen M. & DeWalt, Billie R. (2008). *Participant observation*. In H. Russell Bernard (Ed.), Handbook of methods in cultural anthropology (pp.259-300). Walnut Creek: AltaMira Press.

Erlandson, David A.; Harris, Edward L.; Skipper, Barbara L. & Allen, Steve D. (2003). *Doing naturalistic inquiry*: a guide to methods. Newbury Park, CA: Sage.

Fine, Gary A. (2003). *Towards a peopled ethnography developing theory from group life*. Ethnography, 4(1), 41-60.

Gold, Raymond L. (2008). *Roles in sociological field observations*. Social Forces, 36, 217-223.

Gorman, G. E., & Clayton, P. (2005). *Qualitative research for the information professional* (2nd ed.). London: Facet.

Guba EG and Lincoln YS. (2014). *Handbook of qualitative research*. Thousand Oaks: Sage.

Hammersley M and Atkinson P. (2007). *Ethnography*. Principles in practice. 3rd ed. Routledge: London.

Hannerz U. (2003). *Being there... and there... and there*! Reflections on multi-site ethnography. Ethnography; 4(2):201–216.

Kawulich, Barbara B. (2005). *Participant Observation as a Data Collection Method* [81 paragraphs]. Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 6(2), Art. 43, http://nbn-resolving.de/urn:nbn:de:0114-fqs0502430.

Johnson, Allen & Sackett, Ross (2018). *Direct systematic observation of behavior*. In H. Russell Bernard (Ed.), Handbook of methods in cultural anthropology (pp.301-332). Walnut Creek: AltaMira Press.

Labaree, R. V. (2002). *The risk of "going observationalist*": Negotiating the hidden dilemmas of being an insider participant observer. Qualitative Research, 2(1), 97–122.

Lofland J. (2005). *Analytic ethnography*: features, failings, and futures. Journal of Contemporary Ethnography 2005; 24(1): 30–67.

Marshall, Catherine & Rossman, Gretchen B. (2009). *Designing qualitative research*. Newbury Park, CA: Sage.

Merriam, Sharan B. (2018). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass Publishers.

Pearsall, M. (2007). *Participant observation as role and method in behavioral research*. In W. J. Filstead (Ed.), Qualitative methodology: Firsthand involvement with the social world (pp. 340–352). Chicago: Markham.

Pope C. (2005). *Conducting ethnography in medical settings*. Med Educ; 39: 1180–1187.

Powell, R. R., & Connaway, L. S. (2004). *Basic research methods for librarians* (4th ed.) Westport, CT: Libraries Unlimited.

Rajasekar, S., Philominathan P, and Chinnathambi V, (2014). *Research Methodology*. Retrieved from: http://arxiv.org/abs/physics/0601009v3

Schensul, Stephen L.; Schensul, Jean J. & LeCompte, Margaret D. (2009). *Essential ethnographic methods*: observations, interviews, and questionnaires (Book 2 in Ethnographer's Toolkit). Walnut Creek, CA: AltaMira Press.

Schmuck, Richard (1997). *Practical action research for change*. Arlington Heights, IL: IRI/Skylight Training and Publishing.

Syed Muhammad S. K., (2018). *Basic Guidelines on Research: Methods of Data Collection*. Chapter 9. Published online: https://www.researchgate.net/publication/325846997

Walshe, C, Gail Ewing & Jane Griffiths (2011). *Using Observation as a Data Collection Method to Help Understand Patient and Professional Roles and Actions in Palliative Care Settings*. Palliative Medicine 26(8) 1048– 1054. http://sagepub.co.uk/journals

Williamson, K. (2000). *Research methods for students and professionals*: Information management and systems. Wagga Wagga, NSW: Charles Sturt University, Center for Information Studies.