



A Discussion on Accurate and Effective Data Collection for Qualitative Research

Ali YILDIZ¹

Keywords

Qualitative study, Data collection, Document analysis.

Abstract

The purpose of the study is to discuss accurate and effective data collection for qualitative studies. The analysis of the written documents for the study was carried out via the descriptive analysis approach. Many documents reviewed, checked for authenticity, arranged, and organized by field experts can be a source of data, and using these documents can enhance the reliability and validity of qualitative studies. It is considered in qualitative studies that the researcher must constantly keep in touch with the study group to gather correct and effective data, choose the most appropriate time for the group in every respect, and determine the data collection tools in line with the participants' interests and opinions. In addition, it is known that the participants must be encouraged to express their real opinions easily, that they must feel comfortable and safe during the study process and in the study environment, and that recording devices can sometimes be intimidating. If qualitative data is considered to be obtained from documents, the priority must be given to first-hand documents that are relevant to and necessary for the problem addressed.

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1. Introduction

Qualitative research is defined as a research method that uses qualitative data collection tools such as observation, interview, and document analysis and follows a qualitative process to reveal events and phenomena realistically and holistically in their natural settings. At the same time, qualitative research adopts an approach based on the foundation of theory, and thus, it regards investigation and understanding of social phenomena in their own environments or settings (Yildirim & Simsek, 2018, p. 41). The quality of the qualitative data is considerably based on the researcher's methodological skills, sensitivity, and honesty. There are three ways to collect qualitative data: interviews, observation, and document analysis. A systematic and careful observation does not mean being present in a setting and looking around. Carrying out a successful interview does not consist of only asking questions. Document analysis is not only about reading what is written in a document; it requires more than this (Patton, 2014, p. 5). Document analysis involves the analysis of written materials that give information about the events or phenomena to be examined (Yildirim & Simsek, 2018, p. 189). Birth, death, marriage, police, different institutions, and program records, censuses, court

¹ Corresponding Author. ORCID: 0000-0001-6241-2316. Prof. Dr., Atatürk University, Basic Education Department, ayildiz@atauni.edu.tr

decisions, notarial documents, and contracts are usually known as official (or formal) records. Written documents such as letters, diaries, memories, biographies, inscriptions, edicts, meeting records, progress reports, newspapers, articles, journals, and books and visuals including pictures, slides, films, videos, stamps, clothes, and tools and equipment are regarded as popular documents (Sonmez & Alacapinar, 2016, p. 108; Yildirim & Simsek, 2018, p. 190; Merriam, 2013, p. 132).

Conducting qualitative research epistemologically requires being sincere and close with the participants as far as possible. It is indisputably very important to carry out the research in the natural setting where the participants live, exist, and work. Being present in these settings means understanding and evaluating correctly what the participants say (Creswell, 2015, p. 20). One of the most distinctive qualities of qualitative research is that the studies are carried out by focusing on the phenomena, events, or behaviors in their natural settings. A natural setting sometimes can be a classroom, a clinic, or a neighborhood. Thus, qualitative studies are usually defined as field research (Buyukozturk, Kilic Cakmak, Akgun, Karadeniz, & Demirel, 2013, p. 235). It is thought that including small sections from the biographies of two scientists, a naturalist, and a philosopher who reflect their observations and the results of their observations or assumptions in their lives, works, and works of art and thus associating them with this study contributes to the meaningfulness, effectiveness, and the strength of the study.

Although Charles Darwin (1809-1882) grew up in an intellectual setting, he was not a successful student at school according to his teachers. The problem arose from Darwin's unique interests which were not compatible with the school program. He was deeply interested in animals, particularly insects. This interest that engulfed Darwin at very young ages provided a bridge to make observations at high-order levels, which became clear in later years (Yildirim, 2012, p. 137). Darwin was sent to the University of Edinburgh in Scotland to study medicine. But he did not like anatomy course, and thus he did not pay attention to his lessons and failed his medical education which he continued for two years. His father, a doctor, persuaded his son, who did not want to become a doctor, to become a clergyman, at least! Charles was switched to Cambridge University from Edinburg. He completed his theology education when he was 22 years old, but he did not want to serve in the church because, in his second university, he continued his beetle-collecting passion besides his theology education. Moreover, he attended botany and geology courses (Robinson, 2014, p. 207).

Charles Darwin published "The Origin of Species" on 24 November 1859. The study was about the theory of evolution which he developed based on his observations especially in Galápagos islands, after his five-year scientific journey he took with the HMS Beagle (Wikipedia, 2020). The theory of evolution does not explain the origin of the first living species, but it does explain how early life forms evolved throughout the long geological periods (Kilic, 2019). Darwin neither wanted to become a doctor despite his father's insistence nor he wanted to serve in the church as a clergyman because his interest was oriented towards a different field. In addition to his education in medicine and theology, he put forward the evolution theory as a result of his effort, attempt, desire, and studies. Darwin's interest got

ahead of his education which he received in two different faculties which offered formal education and where he was registered successively in two different disciplines. Based on this short biography, an assumption was made. It is possible to collect correct and effective data for the qualitative study to be carried out if the opinions and interests of the individuals in the study group about the data collection tools and methods of the study are known.

The term cynic refers to a person who has a simple lifestyle, swears violently at impoliteness, and strives for revealing the hypocrisy of the world (Gros, 2019, p. 116). Nature is raw for a cynic. The cynic is not immoral. The cynic benefits from the simplest biological functions of his body to reject everything that human beings sell such as good education, taught values, and the hypocrisy mask they wear when talking about nature. The cynic lives outdoors, that is, he does not have a home. He can live in an empty barrel that he runs into. Sometimes wrapped in his cloak, he can sleep in the trench or next to the wall. He is exposed to not only nature (heat, cold, rain, etc.) but also the human glances because he eats, drinks, and sleeps in the streets (Gros, 2019, pp.119-120). Diogenes, a cynical philosopher, sees a child drinking water from his hands from the fountain. Diogenes stops for some time and then bewildered, he says to himself, "Did you learn your lesson?" Immediately afterward, he takes the wood cup out of his bag and throws it away with a triumphant smile. Diogenes is happy because he has just got rid of another burden (Gros, 2019, p. 121). This observation carried out in its natural setting provided a correct and effective qualitative data because the observation caused the observer to make an accurate assumption and reflect on his life immediately.

In addition, there might always be something to learn from the new generation. The environment and conditions change constantly. As stated in the theory of evolution, if given enough time, organisms' babies can be diversified and evolve into a different species invading different ecological niches (Robinson, 2014, p. 211). Today's children today are not the children of our childhood. In my childhood, we did not have a telephone at our home and still we do not have one because a phone as a communication tool has been individualized and everyone has a cell phone which has been used for years. Due to this change that has occurred at an unprecedented pace in the last fifty years, it is impossible to think that today's children are the same children of my childhood. They are not expected to play the games that we used to play fifty years ago and continue to learn with a fifty-year-old method. This expectation is contrary to Darwin's theory of natural selection. Similarly, it can be assumed that researchers cannot reveal and determine the opinions of the children, students, or young adults in their study groups effectively, correctly, and healthily with understanding, methods, and data collection tools that existed fifty years ago.

The purpose of the study

The purpose of the study is to discuss accurate and effective data collection for qualitative research.

2. Method

Document analysis on its own can be used as a data collection method. Document analysis involves the analysis of written materials consisting of information about the events or phenomena investigated (Yildirim & Simsek, 2018, p. 189). The descriptive analysis approach was used for the analysis of the documents determined for the study. It is more appropriate to analyze which information, findings, or results are revealed by the documents via descriptive analysis (Yildirim & Simsek, 2018, p. 138).

Public records and personal documents are the two types of documents that are commonly used in qualitative research (Merriam, 2013, p. 132). Not all kinds of documents are used. The priority must be given to the documents that are first-hand and necessary for the problem investigated (Sonmez & Alacapinar, 2016, p.108; Keskin & Yaman, 2014). As stated by researchers (Yildirim & Simsek, 2018, p. 192), many documents including columns, course books, organizational documents, articles, and annual reports which are reviewed by the subject-matter experts and checked for its authenticity, organized, and arranged can be a source of data, and using these documents can increase the reliability and validity of the qualitative research.

3. Findings

The written documents of the relevant qualitative studies for this study (Forster, 1994; Yildiz, 2012; Merriam, 2013; Patton, 2014; Yildiz, 2014; Creswell, 2015; Yildiz, 2016; Sonmez & Alacapinar, 2016; Yildirim & Simsek, 2018) were examined. Based on the analyzed studies' instructions, applications, and findings as well as the researcher's observations, experiences, and intuitions, it is considered that the requirements specified below must be paid attention to collect correct, effective, and proper data in qualitative research.

1) It is highly unlikely that a researcher can collect correct and effective data by asking open-ended questions to a group with whom he/she has not met previously because nobody would like to do something for someone they have not met before. A researcher whom the group is not familiar with comes to the classroom and ask the group, "Can you please answer the open-ended questions in the interview form for my research?" Inexperienced researchers mostly use this method. In such a case, participants usually do not make an effort to express and write their real opinions for the open-ended questions. They either leave the questions unanswered or give short replies (yes, no), which are relatively incorrect without giving any reason.

2) The researcher must prefer to gather the research data in a time interval when the participants are not tired, reluctant, or preoccupied with some problems. It is not realistic to motivate the study group before an exam, late in the day, or on a tight schedule, that is, when they have a lot of lessons and are expected to focus on the open-ended questions. Otherwise, the conditions which can be divided into two categories can be experienced. The first category is to leave the questions blank without writing anything, and the second category includes participants who avoid writing any reason or explanation and giving short answers such as "yes" or "no."

3) Another important issue is that the tools and activities to be used to collect data must be approved and adopted by participants. How correct is it for a researcher to randomly specify a letter, summary, diary, or poster activity considered to be used for a study which aims at examining the effects of writing to learn on academic achievement without considering the study group? When compared to the letter-writing activity, the poster-making activity can be more effective, correct, or suitable for the study group consisting of mostly students who do not like writing. The researcher must choose the most suitable activities for the study group and consider and aim for collecting correct and effective data as well. The researcher must know the study group very well, talk to them, get their opinion, keep together, and spend enough time with them for a suitable selection.

4) Before the researcher introduces the data collection tool to the participants, firstly he/she must encourage and motivate them. The researcher must say the following: "Your opinions are important to me," or "I want to know what you think because I need it" and "I even want you to share your opinions that you find absurd because they are very precious for me." The researcher who could not achieve this may realize that the obtained data have not reflected the participants' real ideas. Subsequently, the researcher remaining silent assumes that these data reflect the actual opinions of the participants and then sustains the data collection procedure. In this regard, because the study does not reveal the group's real opinions, the study can be regarded as a weak study.

5) Using recording devices during interviews can be another problem. Nobody usually likes to be recorded. Even obtaining consent from the participant may not be a solution because the individual may not be willing to declare his/her real opinions, that is, he/she can censor his/her real opinions. The researcher must be experienced in conducting interviews. He/she must have a command of the subject matter of the study and know what he/she wants. The interviewee must feel at ease, find the setting safe, confide in the researcher, and his/her talk must not be frequently interrupted. The researcher must carry on the interview by taking short notes.

6) First-hand documents related to the research problem must be prioritized in a qualitative study that employs the document analysis method as the data collection tool. In case the document that is considered to be examined in the study is accessible, original, and clear, its data can be analyzed and used. The researchers must prefer to analyze the documents that fulfill the first three requirements, such as books, periodicals, newspapers, organizational documents, annual reports, and unpublished articles, and thus valid, reliable, and effective data can be collected because choosing such documents for the document analysis studies is considered as an important advantage.

4. Results, Discussion, and Suggestions

Researchers must constantly keep in touch with the study group for correct and effective data collection, choose the time that is most appropriate for the group in every respect, and determine the data collection tools in line with participants' interests and opinions. Moreover, participants must be encouraged to express their real opinions, they must feel safe and comfortable in the study process and

setting, and recording devices can sometimes be discouraging. If documents are considered to provide qualitative data, first-hand documents related to the research problem must be prioritized. The document that is considered to be analyzed must be accessible, original, and clear.

There are qualitative studies in the literature that support the conditions summarized in the previous paragraph and specified more clearly and elaborately as six items in the findings section. According to Creswell (2015, p. 21), the researcher relies on the participants' statements, collaborates with them, spends time with them, and becomes one of them. In another study (Yildirim & Simsek, 2018, p. 356), it is stated that being close to the data and attending the process provide important advantages to the researcher for the collection of significant data. Open-ended research questions offer important flexibility for the researcher for the sampling and data collection for and analysis of the events and phenomena being examined (Yildirim & Simsek, 2018, p. 351). Other documents analyzed (Buyukozturk, Kilic Cakmak, Akgun, Karadeniz & Demirel, 2013, p. 235; Patton, 2014, p. 4) may require obtaining qualitative data through the field study, in which qualitative researchers go to the environment where they carry out the study and spend a considerable amount of time with the participants to gather data. Diogenes' (Gros, 2019, p. 121) observation of a child drinking water from his hands from the fountain and throwing the cup away immediately, that is, reflecting it in his life reveal the effectiveness of the data obtained from its natural setting. Similarly, Darwin's theory of evolution that arose from his observations of the species living in the Galapagos islands (Wikipedia, 2020) is another evidence proving that the data obtained from the natural setting are effective and meaningful. In addition, Yildiz (2016) states that some participants may feel uncomfortable with recording devices or they may oppose being recorded, which supports the opinions stated in the fifth item of the findings section in this study.

Despite their planned, meticulous, and constructive efforts during a qualitative study process, experienced researchers may still not be able to reach participants or may experience some other problems. Do you think the first thing that the researcher remembers at that moment is the advantages of the document analysis method? Saying the opposite does not seem to be a rational argument. While discussing data collection with young researchers, it is usually more beneficial to give them correct and effective examples. Talking about and discussing an effective observation done, a successful interview, and a reliable document analysis can help respondents to create a correct and accurate picture in their minds. As a result of the descriptive analysis of the written documents about the study, findings and opinions stated as a list of a total of six items in the findings section are also suggestions of this study.

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