

8. Qualitative Research: A Methodological Understanding

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8.1 Introduction:

The onset of COVID 19 outbreak has changed the entire educational system in the world with Assam as no exception. The entire educational system has moved to 100 percent online mode overnight. The online education has started in each and every part of India because of the nationwide lockdown in end of March 2020 and it still continues till date (September 2020). This paper reflects the educational situation in Assam during and post pandemic COVID 19. The study has been conducted with the help of both primary and secondary sources of data. The study found that though many students are getting online classes to enhance their knowledge, there are many who are left out in this crisis time as they do not have access to internet and smart phone.

Research is a technical and creative procedure that people undertake in order to find out things in a systematic way, thereby satisfying their knowledge. The purpose of research is to share some new facts to existing human knowledge base by new discoveries by the researcher. The fact of the matter is that researcher goes beyond the process of simply gathering sheer information. Research is a finer aspect of academics engaged in logical, in-depth, planned and systematic investigation of a particular problem. The term “research” is derived from the French “recherché”, which means “to go about seeking”. John W. Creswell, states “research is a process of steps used to collect and analyse information to increase our understanding of a topic or issue.” The three steps involved in such process are mainly posing a question, collecting the relevant data and required information and facts for answering the same and finally to formulate and present an answer to the readers. Of the various forms of research that have been widely practiced, this chapter seeks to discuss and detail the Qualitative Research technique, the various modalities and aspects associated with it.

Qualitative research is a particular aspect of research that seeks to understand, describe and sometimes explain social phenomenon by analyzing knowledge, accounts and stories by any simple but in depth approach of interaction and communication, observation or recording of facts. The condition of such research should be entirely naturalistic in nature and the researcher should be intimately involved in the entire process. Tracing its roots to Phenomenology or Symbolic Interactionism, Qualitative research is also called Social Constructivism research. This type of research experienced a steady growth since the 1960s, starting with the emergence of the approaches from a symbolic interactionist perspective (Becker et al., 1961) and the development of grounded theory (Glaser and Strauss, 1967). The researchers undertaking this type of research often consider themselves ‘instruments’ in the research process, for the observations and interpretations of the world they are dealing with often gets filtered through their own personal lens.

Basically subjective in nature, qualitative research deals with the meanings inductively derived from the up close and personal and social interaction with the human community being studied.

While the methodology is expected in terms of such research to centre on the approaches, modulations and interpretations on the way in which human beings made sense of their subjective reality, attaching meaning to it. In the same way, a thorough explanation of the choices and steps undertaken to collect and analyse the said data is also to be illuminated, for the purpose of validating the research.

8.1.1 Characteristics of Qualitative Research:

- a. **Naturalistic Setting:** This is perhaps the most important aspect of a Qualitative Research because natural environment is best for the collection of the data. Artificial or created environment can infiltrate through the smooth functioning and hamper the research process.
- b. **Employing Varied Research Methods:** The researchers are free and flexible to use any research method or methods as per his convenience to acquire the desired data. He can use Focus Group Discussions, face to face interviews, phenomenology, content analysis or the like as and when required.
- c. **Decipher Participant's Meaning and Context:** The researcher should be fully aware of the context in which he is performing his research study and has to be adequately suave in analyzing their wordings, gestures or expressions. Everything that a researcher finds relevant, starting from verbal wordings to facial expressions should be taken into account and noted down.
- d. **Flexible Nature:** Qualitative Research is known to be flexible and can change its dimensions during the course of the research process.
- e. **Recursive Approach:** 'Recursively' allows the researcher to change his research design during the ongoing process of the research. In case of qualitative research, data are collected repeatedly, until the specific conditions are met or the researcher attains a saturation level.
- f. **Purposeful Sampling:** Qualitative Research calls for the purposeful sampling, where the researcher chooses his population on the basis of his convenience, availability of information and resources and fulfilment of purpose.
- g. **Unobtrusive:** Sometimes qualitative researchers may employ unobtrusive research methodology, where the researcher need not do any interaction with the human beings but still can collect adequate amount of information by studying and analyzing their letters, messages, video calls, personal mails or the alike. Instead of establishing a direct communication, the indirect data collected can be potential sources of information for the unobtrusive researcher.
- h. **Holistic Perspective:** Qualitative research is wholesome in nature and takes into account all the dimensions or aspects that concerns a particular research problem.

8.1.2 Role of the Researcher:

- a. **Naturalistic setting to be maintained:** while visiting a particular field for the purpose of data collection, the researcher should in no way create an artificial situation by letting his arrival known beforehand or by any other means which disturbs the free flow of the participants to be studied.

- b. **Openness:** the researcher should know to behave as any normal individual, accept rewards and rebukes alike and not be manipulative or overwhelmingly subjective while penning down facts and produce whatever data is obtained as it is.
- c. **Rapport Establishing:** the researcher has to strike a good and efficient rapport and friendship with his or her participants under study, for proper communication, cooperation and deliverance of facts.

8.2 Research Questions for Qualitative Research:

Since Qualitative Research is a reflective process, in which the researcher adapts his or her approach based on the participant's response, the questions also changes in the course of the study. Qualitative research questions need to articulate what the researcher wants to know about the intentions and perspectives of those involved in social interactions. The four types of research questions are listed as below:

- **Exploratory Question:** such type of questions are asked to know more about a topic or investigate facts about a phenomenon that has little information otherwise.
- **Explanatory Question:** the questions asked to participants for detailed explanation or description of a particular incident or phenomenon around which the researcher's interest area is likely to revolve.
- **Descriptive Question:** such questions are basically asked to narrate a phenomenon to get a detailed grasp of the concerning causes associated with it.
- **Emancipatory Question:** such questions are asked o the participants which are meant for them to engage in social action around the phenomenon involving them. Example - Paulo Friere's influential work on conscientization (Freire, 1972, p.77), defined as "the process of developing a critical awareness of one's social reality through reflection and action."

8.2.1 Qualitative Research Instruments:

A research instrument is a significant measurement tool employed by the researcher to collect, measure and analyse data relating to the subject under study.

The importance of a research tool lies in the fact of validating a particular data collected coupled with the reliability factor, which otherwise falls meaningless and insignificant in determining further analysis and derivation relating to the further findings of the study. The instruments of qualitative research are as follows-

- **Participant Observation:** a particular researcher sometimes watch the sample under consideration performing some actions and try to discover the meanings people attach on the performance of their actions. Under such kind of information, the researcher attempts to fully participate and becomes a part of the lives and activities of the social community and its members. This enables the researcher to share accurate information about the events, circumstances, life styles, problems, discourse, habits or feelings of the studied samples instead of maintaining a distant observer's code. The observer in such case can genuinely feel the intricate issues and prepare his report exhaustively.
- **Enquiry in Depth:** the researcher collects information on all aspect and sources until he or she is fully satisfied about the issues concerning his or her said study. It is always necessary for the investigator to reach a saturation point regarding the research question

at hand by the process of enquiry and re-enquiry, for preparing the report with the maximum range of detailed information available.

- **Unstructured Interviewing:** unstructured or non-directive interviews are such in which the questions to be asked are not scheduled beforehand or pre-planned. While entering the field of investigation, anything that comes to the mind of the researcher by seeing or observing something new or unpredictable, can be enquired immediately. Qualitative research also accommodates Structured Interviews in some cases, but on an analytic basis, unstructured interviews re found to be the best in this regard.
- **Focus Group Discussion (FGD):** in order to understand an issue at a deeper level, FGDs are very helpful. FGDs are predetermined semi-structured interviews where a skilled moderator induces a particular topic to generate a discussion among the participant themselves. Usually comprised of seven to ten people in an ideal group, everybody should be allowed to give their views and the researcher should have a recording instrument to record the elicited responses.
- **Open Ended Questionnaires:** such questions are highly subjective with no strict 'yes' or 'no'. This research technique relies heavily on giving explanatory or descriptive answer to a particular questionnaire by a researcher, with room for further probing by the response given by the respondent. Example- a questionnaire circulated to ten teachers asking them to write down about the day to day happenings of a particular rural school.
- **Documents, Videos and Tape Recorders:** this is the best instrument for collecting and recording authentic data as the information collected through field notes in a hurry may sometimes fail to provide the actual impact of the contemporary circumstances later, when the researcher sits down to develop and analyse on the collected data.

8.2.2 Methods of Qualitative Research:

The different research approaches that qualitative researchers use to collect information in a naturalistic setting are mentioned and elaborated hereby.

- a. Narrative Research:** In order to get specific insights into the life cycle of an individual, such type of research is undertaken. Narrative Research narrates the life of an individual by exploring their life cycle in detail. For example, a researcher goes on his way to collect information and study the life structure, behavior, food habits, day to day habits, attitude, interest areas, psychological bent of mind, likes or dislikes, love for sports and games of a particular person or group and reporting it likewise. It is basically the in depth study of human sciences. The collection of such intricate details from a group or individual and elaborating it through narration also requires much strenuous and skilled effort on the part of the researcher.
- b. Phenomenology:** This method attempts to understand or explain the life experiences or consciousness about the respondents regarding a particular event or phenomenon. For example, a person is asked about his or her perception regarding a near one's demise in the family. The primary objective regarding phenomenology is to get hold of the description and explanation of the phenomena as consciously experienced by the participant.
- c. Field Research:** Field Research employs the collection of raw data in a naturalistic setting by means of informal interviews, participant observation, collective discussions, or analysis of personal documents produced within the group. For example, social scientists would conduct their research proceedings in a natural setting to know more about the

culture, taste, customs, language, habits or social structure of a particular ethnic population.

- d. **Grounded Theory:** This theory investigates a process, action or interaction with the goal of developing a theory grounded in observations. Grounded theory basically focusses in building a theory by creating meaning from the data. It can use multiple types of data and provide an in depth perspective. By coding the collected data into categories, new theories can also emerge. All the data should be collected at the ground level and then be divided into three parts-
 - **Initial Coding:** The first round of collected information is to be put into categories. This step involves the production of initial codes from the collected data and assigning them into particular themes. The aspects of the data which are repeated are collected and put under their respective themes.
 - **Axial Coding:** This stage involves the re-reading of the data and to find out whether any significant category is left out or needs to be added.
 - **Final Coding:** In case of final coding, the researcher needs to revisit the population from whom information are taken innumerable times till he feels that no additional information is missed out by him or her. In other words, the researcher should have complete data saturation whereby he or she would feel to stop the investigation. Example- Psychologists like B.F Skinner or Edward Thorndike established their respective theories after repeated exercise.
- e. **Ethnography:** This type of research originates from the academic disciplines of anthropology or sociology. A distinct cultural group of population is usually studied and the personal entry into the group on the part of the researcher is usually to be done through a gatekeeper. The process of collecting the required data is to be done in a complete immersive way. The anthropologist enters and spends a significant amount of time in the real environment which is needed to be observed. The participants are to be observed in their real life settings without causing any disruption to their normal moves. Both emic (from the perspective of the subject) and etic (from the perspective of the observer) perspectives of the individual's mind have to be taken care of for the ethnographic study to be valid and solid. For example, there is a particular instance of a researcher, Daniel, marrying and staying in an ethnic group for twenty five years to know and study the culture, habits and dispositions of a tribal village in East India.
- f. **Case Study:** Case studies are very common approaches in psychological researches where they are used to answer the how or why questions when the researcher has little control over the events. It is simply the study of a case within the real life. It examines the episodic events or develop an in depth analysis of single or multiple cases on a particular issue and derive a conclusion. Example- a researcher undertakes a case study about the probable causes of maladjustment of a differently abled child in his classroom.

8.2.3 Approaches of Qualitative Research:

The qualitative research can be divided into the following categories.

- a. **Discourse Analysis:** Discourse Analysis refers to a process where by analyzing the discourse of the speaker, we can understand, interpret and give meaning to the intentions of the speaker or samples under study. While discourse is just about studying the words, analysis is about adding or subtracting them in order to derive a meaningful concept. While undergoing a research, the main aim is to identify dominant discourses and analyse it skillfully. Besides words, discourses can also be in the form of pictures, talks or texts.

- b. Conversation and Event or Micro Analysis:** Conversation Analysis originated as an approach to the study of the social organization of everyday conduct. It focusses on how individuals in social settings engage in meaningful acts through language and make sense of the world around them.
- c. Narrative Analysis:** Since narratives are the easiest way to create, recreate, analyse and grasp, narrative analysis is a prominent method in research methodology in unfolding patterns of behavior or life style of a group or community in a lucid and interesting way. Narrative research is not a singular approach; rather, it refers to a range of ways in examining the role of storytelling in understanding the identity and social life (Riessman, 2008).
- d. Document Analysis:** Document Analysis is a social research method which involves a lot of reading. It identifies and interprets patterns in a data and classifies them. In the application of a document analysis, the data is useful, comprehensive and flawless, which can be collected at different time periods by in depth study of the documentations available at hand.
- e. Content Analysis:** a mode of research that does not collect data directly from the people. Content Analysis is typically the study of recorded human communications such as books, websites, videos, messages or tweets, where the researcher can frame a finding based on such already existing informative sources.

8.2.4 Steps of Qualitative Research:

Since qualitative research acknowledges a subjective element in the research process, it generally seeks to collect an in depth insight into the modalities of the human behavior by analyzing words, pictures, recorded data collected in a natural setting through the course of the research process and generate findings on the basis of that, which paves the way for his final research report. Some of the steps of the qualitative research design are as follows:

- a. Select Research Topic:** The crucial phase for a researcher when he has to keep a number of factors into consideration while deciding on the topic of his or her research. The research topic should be decided upon by doing a lot of background study about the matter at hand. Not too common or too controversial topic should be selected. The areas of public interest where the researcher feels might be a gap, despite of previous research may be undertaken or such topics may be chosen which may be of major help to the community at large.
The topic should be such that the researcher might be committed to it throughout the process and be honest and ethical in all sort of data collecting procedures, so that the original perspectives be reflected in his work.
- b. Determine Research Questions:** Good and effective research questions can navigate the research paper smoothly. The research questions should centre on the research problem. The research questions illuminates and highlights the main motif behind the conduction of the research.
- c. Set Resign and Instrument of the Study:** A researcher should have a well-planned design about the ways in which he is to go about while he is undertaking his research.

The population he is to study in order to gather information for his research purpose has to be determined. The tools and instruments he has to employ for the purpose of data collection has also to be thought out by him so as to carry about his research procedures smoothly.

- d. Collect Data from the Field:** In case of qualitative research, the data collection is a crucial aspect because the researcher has to play a vital part in collecting first-hand information by intricately being involved in the process.
- e. Analyse Data:** The various sets of random data which are collected by the researcher in the course of the field study are coded and categorized, until the researcher finds a direction about their analysis. While analyzing, the researcher should not be biased or manipulative and should always produce original findings.
- f. Generate Findings:** The analysed data can take the form of findings, which he researcher can generate after the successful completion of the analysed data.
- g. Validate Findings:** the researcher can check the validity of the results by running pilot test or by checking the internal consistency of the collected data. Validating the research findings is a must for the purpose of genuineness and authentication of the detailed result.
- h. Write Research Report:** The completion of the above steps allows the researcher to write the research report, whereby he explains and justifies his research findings and make it understandable.

8.2.5 Some Criteria for Judging Qualitative Research:

- a. Credibility or Truth Value:** the most pertinent question that looms the mind of the readers is that how credible are the findings or can the findings of the researcher be trusted at all. The question as to whether something is hidden, falsely put or manipulated is an issue which is constantly in operation. The authenticity or the trustworthiness of the research reports should not be debatable at any cost.
- b. Dependability or Consistency:** Once a research about a particular issue in a particular place is conducted, how sure we can be that the findings of the research would be replicated if the study were to be conducted with the same participants in the same context, is also an issue to be thought about. Example – If three researchers visiting the same place in three different times collects the same data, and every time if the collected data is found to be somewhat similar, then the research can be said to have consistency.
- c. Transferability or Applicability:** while a research report is being presented, we should also look into the fact as how applicable are the findings of that research to another setting or group of people.
- d. Conformability or Neutrality:** while reading and judging a research finding, we should also be assured as to how far the findings of that research reflect a natural setting rather than the creation of the researcher's bias or prejudices.

8.2.6 Researcher's Role in Validating Qualitative Research:

- a. Inclusion of the Primary Data in the Final Report:** A researcher should not leave out bits and pieces of information he has acquired in his data collection process, and rather produce them diligently in his final report so as to remain clear and unquestionable.
- b. The Researcher Should be Expressive:** Any personal feeling or occurrence that the researcher came across during the data collection should be candidly expressed by the researcher, if it is of utmost relevance. This may help the readers to easily grasp the content and the scenario of the research study.
- c. Balance:** A balance should be struck between what the researcher's explanation of what was perceived by him as important and what is actually important that has been found out through the research proceedings. Such real and significant areas should be reflected adequately in his course of explanation.

- d. **Seek Professional Feedback:** The researcher should arrange and allow scrutiny of his research manuscript by his colleagues and seniors, for proper judgment and error free progression of his work.
- e. **Write Accurately:** proper sentence construction, lucid language, avoidance of double meaning words, correct words should be used in the illustration of the research report.

8.2.7 Triangulation of Data:

Triangulation refers to a process where the researcher analyses the same situation from multiple angles or whereby he uses multiple methods or data sources to study the same phenomenon. Triangulation of data is a very important aspect in qualitative research. Dezin (1978) has identified several types of triangulation.

- a. **Data Triangulation:** If the qualitative research report has to be authentic or acceptable to others, an opportunity for proper data triangulation must be given. For example, the same person sometimes undergoes two or three modalities for giving the same information. Once even if the data is collected from the person through questionnaire, the same data has to be collected from the same person via Interview. After one month or after a certain time lapse, the same data needs to be collected from the same participant or group of participants by using any other tool, to ensure whether the respondent has changed his or her mind in the course of time.
- b. **Investigator Triangulation:** In a research study, when more than one field investigator is involved, and each one has undergone the same category of training, each investigator must give similar ideas regarding the collected data, failing which there would be clear indication of some sort of problem area which is yet to get settled.
- c. **Theory Triangulation:** During the course of investigation, any theory that a researcher comes across, needs to be properly triangulated. For example a researcher gets a data that a particular village is subjected to repeated theft issue. In order to ensure that the said information is authentic, the researcher needs to call different persons like the police personnel, village politicians, club members, district officials, the villagers, the local market shops and several other related persons regarding a particular issue, before coming to a conclusion that the theory which was propagated is authentic, correct, approved and final.
- d. **Methodological Triangulation:** A researcher needs to be very authentic in his approach as to the methods and modalities he is to adopt, while collecting a data to establish a fact.
- e. **Analysis Triangulation:** Analysis Triangulation may be descriptive but sometimes graphical triangulation may be given. Qualitative analysis may not always call for ANOVA or ANCOVA, but small numerical figures of statistical representation can be given at times, in order to make the findings understandable to the reader.

8.2.8 Advantages of Qualitative Research:

- The researcher in a qualitative research gains a deeper and rich understanding of the people and events in a naturalistic setting. The findings, therefore, are ecologically valid.
- Qualitative researchers allows the respondents to express themselves freely rather than expressing their opinions to structured questions. Qualitative researchers always invites spontaneous responses from the participants of their study.

- Qualitative research produces more in depth and comprehensive information of the situation under study. An intricate analysis detailing the facts and responses are produced.
- Qualitative research seeks a wide and vivid understanding of the entire situation.
- Unlike other research designs, qualitative research allows a lot of flexibility to the researcher.

8.2.9 Limitations of Qualitative Research:

Like every other research method, qualitative research design also comes up with certain limitations, as follows:

- a. The research report faces the problem of too much subjectivity at times. Despite of validating the research by various means, there always lies the risk of manipulation of the data or the biasness of the researcher.
- b. While going through the research report, it sometimes become very difficult for the readers to detect researcher's induced bias and get a genuine picture of the issue he wants to study.
- c. The scope of such type of research is limited, for it requires in-depth comprehensive data gathering approaches.
- d. The method of data collection in case of qualitative research is time consuming and taxing. It becomes very difficult at times to ascertain when the saturation is reached.

8.3 Use of Software in Qualitative Data Analysis:

Since the researcher has to struggle down with a vast source of transcription and notes in case of qualitative research, he often gets juggled up about the proper placement and setting of his collected data. The qualitative data analysis software makes the research process easier and methodical for the researcher. Tools are used to assist the researcher with transcription analysis, coding, recursive abstraction, text interpretation, content analysis, discourse analysis and grounded theory methodology. Some rated and widely used qualitative data analysis software are NVivo, ATLAS.ti, Provalis Research Text Analytics Software, Quirkos, MAXQDA, Qiqqa, webQDA, Hyper RESEARCH, Transana and F4analyse.

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