
UNIT 4 NATURALISTIC INQUIRY AND CASE STUDY

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4.0 INTRODUCTION

This Unit is a continuation of our discussion of the methods of social research that we introduced in Unit 1 of this Block. We take up two more methods of research – Naturalistic Method and Case study – for discussion in this Unit. The term naturalistic inquiry denotes investigations concerning social phenomena conducted in natural settings. Mostly, naturalistic inquiry is identified with the concept of field studies in the areas of ‘Anthropology’ and ‘Sociology’. It has a unique position in the conduct of research in social sciences and has attracted social researchers relatively recently. If a researcher is interested in studying the problems related with development of rural community, he/she may use naturalistic inquiry method to study the problems in their natural settings to find out actual problems that confront them.

‘Case study’ can be defined as an intensive investigation concerned with pertinent aspects of a particular unit in a given situation. The unit of investigation may be an individual or a group of individuals, or a social institution, a community or a culture.

A case study conducted on individuals may be linked with the processes of growth and development of a child; the behaviour of gifted children, psychoanalysis of a problem child, role of a leader in specific social movements, etc.

We shall look into both Naturalistic Inquiry and Case Study in some detail in this Unit.

4.1 OBJECTIVES

On the completion of this Unit, you should be able to:

- explain the meaning of Naturalistic Inquiry;
- list the steps taken in this type of research;

- explain the issues of trustworthiness and objectivity in naturalistic studies;
- describe the characteristics of the ‘case study’ method of research; and
- explain the various steps in the ‘case study’ method in social research.

4.2 NATURALISTIC INQUIRY

The process of scientific inquiry follows a paradigm of deductive-hypothetico-inductive approach. In other words, the process of scientific inquiry starts with statements of hypothesis, which are arrived at through a deductive process. Then starts the process of testing hypotheses or theoretical questions either in physically controlled situations or through statistically controlled techniques. Objectivity is to be ensured through selection of representative samples, use of standardised tests and instruments, and use of different sophisticated statistical designs for treatment of data and generalization of findings. On the contrary, naturalistic inquiry follows an altogether different conceptual framework which takes into account the following factors.

- Multiple Realities:** First, naturalists assume that there exist multiple realities in social situations which exist in concrete forms. They are perceived by people differently and thus become different mental constructs for different people. In other words, realities are taken to be what people perceive them at a particular point of time. Since social situations keep on changing from time to time, the realities, too, keep on changing. Furthermore, since the realities are context specific, they cannot be tangible in a generalised form.
- Meanings and Interpretations:** Naturalists emphasise study of meanings given to or interpretations made about objects, events and processes concerning social situations. To them, changes in terms of social and behavioural phenomena cannot be identified with the concept of physical movements but by external observation alone. An understanding of human behaviour or a social phenomenon involves understanding of how humans see what they are doing or participating in an activity.
- Generation of Knowledge:** Naturalistic inquiry insists on generation of knowledge resulting from the interaction between the researcher and the respondents. The respondents answer the questions put by the inquirer in terms of their perception or the meanings they attach to their actions. Moreover, interactions take place between the researcher and his/her respondents to achieve maximum levels of responsiveness and insights concerning the problem under investigation.
- Generalisation:** As stated above, naturalists do not believe in the process of generalization as propounded by scientists. Naturalists argue that in the process of making generalization, a lot of meaningful information existing in individual units is undermined; hence, generalized knowledge does not represent real knowledge. For them, the process of knowledge generation must take into account the differences or the real evidence existing in specific situations. That is why, they take into account extreme cases while collecting data.
- Human Relations:** In the case of human relations several intrinsic factors, events and processes keep on influencing each other constantly. Therefore, it is not possible to identify one-to-one cause and effect relationships in this case of naturalistic studies. To naturalists causality in social sciences cannot be demonstrated in the ‘hard’ sense as it is done in the case of physical sciences.

Rather, only patterns of plausible influences can be inferred from social and behavioural studies.

- vi) **Value Systems:** Naturalists do not believe in value free inquiry. They assume the influence of value systems in the identification of problems, selection of samples, use of tools for data collection, the conditions in which data are gathered, and the possible interaction that take place between the researcher and the respondents. That is why naturalists stress that the researcher's bias cannot be ignored and it must be mentioned in research reports.

4.2.1 Procedural Uniqueness of Naturalistic Method

From the procedural viewpoint, the following need to be highlighted.

- i) **Holistic approach:** Naturalists intend to develop a deeper understanding of a given situation in a holistic fashion. In other words, all possible information concerning all the significant dimensions of the situation under study is gathered with a view to portray the situations in their totality. For example, Role of Panchayatiraj in Rural Development cannot be studied in a partial fashion. It has to be studied in a holistic manner taking into account the composite influence of all the socio-economic and cultural factors.
- ii) **Insightful inquiry:** Naturalists emphasise insightful inquiry, where humans are treated as the sole means of data collection. Qualitative methods like participant observation, informal interviews and discussions, reading of relevant literature, and daily observation notes and diary writing are very often used for fieldwork. However, the use of quantitative techniques like test administration and survey are not totally ruled out in the process of data collection under this approach.
- iii) **No *a priori* theory:** A researcher goes to the field for data collection without having any *a priori* (pre-specific) theory in mind. Naturalists apprehend that an *a priori* restricts the inquiry to those elements which may have been significant prior to developing an understanding of the situation. It blocks the process of holistic enquiry. The naturalist investigator develops theoretical propositions only after interacting with the field. However, it is pointed out by naturalists that there is no insistence on developing theories afresh in each and every inquiry. Experience-based theories in relation to specific situations may act as preliminary guidelines for many naturalistic investigations.
- iv) **No pre-specific design of study:** Prior to fieldwork, naturalists do not make explicit statements on the hypotheses and the conditions in which data are to be collected, analysed and interpreted. The researcher develops only a broad outline of the study in advance. As the inquiry progresses, appropriate design emerges in the field; hypotheses, mostly in the question form are developed therein; final decisions are taken about the sample respondents/situations during the field work; experiences gathered through personal insights, intuition, personal images and apprehensions are recast into appropriate procedures for analyses are adopted to study the pattern of relationships on the basis of the specific data collected.
- v) **Naturalistic setting:** As stated earlier, naturalists believe in conducting studies in realistic settings. To them, reality cannot be studied in fragmented and controlled situations. They intend to unfold what happens in realistic situations rather than studying what can happen in controlled situations.

Check Your Progress 1

List the six aspects of the conceptual framework of naturalistic inquiry.
Also describe briefly the procedural uniqueness of the naturalistic method.

- Note:** a) Space is given below for your answer.
b) Compare your answer with the one given at the end of this Unit.

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4.2.2 Naturalistic Method: Main Steps

Different opinions have been expressed by naturalists about the procedural details of naturalistic studies. On the one hand the radical naturalists believe in non-specification of the processes of conducting a study. They take field work as an almost mystical process which is non-teachable. Accordingly, an investigator can start his/her field work after learning about the relevant substantive theory or theories and reviewing the empirical results of some field studies related with it.

On the other hand, most experts recommend field work to be made as deliberative as possible, retaining the naturalistic status of the study as a whole. This is to smoothen the processes of the conduct of the study. As stated by Erickson (1986), "Preconceptions and guiding questions can be developed beforehand. But the researcher should not presume to know at the very outset, where specifically the initial questions might lead next." The steps can be organised in the following sequence.

- i) **Identification of broader questions of inquiry:** First, the researcher is supposed to specify the pertinent issues or questions related to social settings which can be resolved or answered through field study. The main focus of the researcher should be on the specific structure of occurrences rather than general character of any social phenomenon. The issues can be directly linked with improvement of social practices in specific situations. Questions can be raised not only to study the events or facts but also to identify the perspectives of the individuals involved in particular events or processes. As stated earlier, emphasis should be laid on identifying perceptions of individuals regarding their own decisions or contributions to the occurrence of events or processes.

The motto of the social researcher should be to understand the realities by identifying satisfactory patterns in the actions of individuals participating in social activities. For instance, in a social situations, broader questions can be raised, such as, if relationships between a community organiser and the community are fully interactional, how do people give clear feedback to community organiser, or how do leaders influence community organiser or how do the community organiser and people create an atmosphere where most of the community people appear to utilise the programmes/services?

The above questions guide the preliminary field work and generate further questions in a given context in the course of inquiry. Besides identifying the broad framework of questions, we must prepare a general outline of the sample population to be contacted or situations to be observed in particular contexts, and draw a sketch of the types of instruments or techniques to be employed for data collection.

- ii) **Collection of the initial level data:** Once we identify the broad questions for the investigation, we may make deliberate attempts to identify a full range of variations in the social and the organisational arrangements related to the situations/problems under study. We may start the inquiry in a broader context of the situation before proceeding to investigate specific occurrences of events in a social set up like a rural/tribal community. For instance, prior to starting an in depth inquiry of functioning of a social institution, we may gather evidence on external social surroundings where the institution functions. This may require us to do an extensive exercise of data collection. After this, we concentrate on indepth observations or interaction with the situation which is being studied.
- iii) **Procedures for the collection of data:** Data collection can be carried out in different phases through participant observation. You may be introduced as one of the internal members/participants of the social set-up under study. It may be possible that real participants of the system like community leaders, people and head of the community, or head of the social institution can act as observers for conducting the study. We can collect data through all the relevant and available sources and means such as:
 - a) study of available literature, records and documents, diaries, pictures, photographs,
 - b) interactions with the persons concerned with the programme under study, and
 - c) our direct observation of and experiences regarding the programmes/situations.

You, as a field worker, would make use of purposive sampling of significant situations or behaviours you want to study, as well as the persons you want to interact with. Flexible approaches are followed in the field to identify:

- a) the situations where participation can take place more intensely,
- b) the persons with whom intensive interaction is required, and
- c) the people with whom casual dialogue is needed.

As stated earlier, even though a broad framework of sampling is chalked out prior to data collection, the actual process of sampling takes place during field work.

- iv) **Devices of data collection:** You can use different devices for data collection, such as taking notes about an observed situation, using electronic appliances like tape recorders and video cameras, taking photographs and collecting relevant documents and literature on the problem. Planned informal interviews/dialogues with different groups of respondents can be conducted and their opinions and perceptions can be recorded either during the time of the interview or immediately after the interview. Daily diaries pertaining to the experiences of the field work also need to be maintained.

You have to maintain separate records regarding (a) what you observe in the situations, (b) perception of respondents about the problems/events, and (c) your own perceptions about the persons and their involvement in the issue or programme under study.

Since there is no hypothesis prior to data collection, data are not manipulated directly to test the hypotheses. However, through scrutiny of daily observation records and evidence gathered, you would identify the emerging themes and patterns, phrases, actions, action sequences, expressed thoughts, feelings, etc. This process helps you identify further the meaningful situations to be studied and also the way in which the complete information can be collected.

As we saw earlier, field work can be conducted in different rounds. At the end of the first round of intensive field work, you may analyse the data qualitatively, refine the previous questions, and arrive at new specific questions for further verification. This is the stage where you can generate certain context specific hypotheses for minute observation.

Moreover, at this stage, your focus is on a more restrictive range of events within the setting, and you begin to look for possible connections or influences between the setting, and its surrounding environment.

Again, you return to the field with pinpointed questions/hypotheses. Since the scope of inquiry is sharpened at this stage, in-depth interaction concerning the pinpointed questions takes place conveniently. It should be noted that in the final stages of field work, the focus becomes more and more specific along with the development of the working hypotheses.

- v) **Data analysis:** In naturalistic studies, data are analysed descriptively. The synoptic views of descriptive data are referred for interpretation. More specifically, the frequency data are presented in two or three way contingency tables indicating the patterns of behaviour. Occasionally, we use non-parametric statistical techniques (you will read about it in Block 4 Unit 3) like a chi-square test, Man-Whitney two tailed tests or rank-order correlation techniques for the identification of certain patterns of relationships in the context of the specific situation under study.

A sound naturalistic study follows a cyclic process of data collection, generation of hypotheses, examination of data, further generation and/or modification of hypotheses, further data collection and verification till specific research questions are identified and the patterns of refined relationships are arrived at. Moreover, the final level analysis of data can provide a ground for identification of specific suggestions for improvement of the system.

Let us do the following exercise before we proceed to highlight the issues and problems related to naturalistic inquiry.

Check Your Progress 2

In the process of conducting naturalistic inquiry, what is the major focus of study; and how does a researcher conduct a naturalistic inquiry? Answer briefly in about 50 words.

Note: a) Space is given below for your answer.
b) Compare your answer with the one given at the end of this Unit.

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4.2.3 Issues Regarding Trustworthiness and Objectivity in Naturalistic Studies

Trustworthiness of findings: There have been attacks on naturalists on the issue of the trustworthiness in their process of inquiry. It is said that qualitative approaches may bring subjectivity into the inquiry, and the biases of the researcher may not produce authentic information for others. Moreover, because of subjective interaction, valid knowledge may not be generated. Naturalists have reacted to these objections with force and conviction.

In the recent past, there have been efforts to fix certain standards to check the trustworthiness of naturalistic inquiry. The criteria are outlined as follows:

- i) **Credibility** pertains to the level of agreement between researchers' data and the interpretations, and the multiple realities that exist in the minds of respondents.
- ii) **Transferability** is the quality that makes it possible to derive the accurate meaning of information on interpretation available in specific contexts.
- iii) **Dependability** is essentially the stability of information sought and interpretation derived in different situations on a specific issue.
- iv) **Confirmability** refers to the possibility of studying the collected objective/systematic information and reaching similar/same conclusions by different researchers.

The naturalistic approach is guided by the following principles to enhance the credibility, transferability, dependability and confirmability of the studies they lead to:

- a) Prolonged field work can enable one to overcome a variety of possible biases and wrong perceptions, which may appear in one short trip. Moreover, it can help us to identify the salient characteristics of the problem/programme under study.
- b) Persistent observation of certain typical meaningful features can increase the credibility of the study.
- c) Interaction with colleagues helps us evolve suitable designs, share the researcher's anxieties, apprehensions and feeling concerning field work and share with them the growing insights in the field.
- d) A variety of data sources using different investigators with different perspectives can project a consolidated picture of the field easily and can enhance the dependability and confirmability of the data.
- e) Study of the varieties of adequate reference materials like documents, pictures, films, videotapes and audio recordings are essential for increasing trustworthiness of data.
- f) Crosschecking of data and interpretations by some of the respondents can enhance internal validity of the study.
- g) Increasing purposive sampling to collect different instances across a wide range of events can be useful in maximising the range of information and increasing external validity of information.
- h) Substantive description of events in specific contexts can be useful in establishing the reliability and dependability of information and conclusion.

Although the above checks are followed in naturalistic inquiry, there is no guarantee for the trustworthiness of a study. However, such checks can generate a convincing situation regarding the meaningfulness of the study. Unlike a long history of scientific inquiry which has established clear-cut standards for its trustworthiness, naturalistic inquiry has a very recent origin, and is yet to evolve suitable checks to enhance its trustworthiness and authenticity.

Problems of observation: The strength of naturalistic inquiry lies more in the competence of the field worker than the tools, techniques, and designs of data collection. There are several issues pertaining to the experience and expertise of the field worker, such as his/her relationship with the group being studied, the ethics involved in the processes of intensive data collection etc. We shall now touch upon some of these issues briefly as follows:

- a) First, it is necessary that only a researcher with a clear understanding of the problem should take up the task of conducting a naturalistic study. Since the meaningfulness of the conduct of the study depends entirely on human approach, it is very important to see ‘who’ conducts the study and ‘how’ he/she proceeds with the study.
- b) There have been some problems in situations in which an outside researcher acts as a participant observer. In such cases, there is an apprehension that a stranger who is accepted as an observer may be deliberately informed and invited to observe just because he/she is a stranger. Strangers may notice events that contrast with their expectations. They may affect the behaviour of the group through their influence while assessing this group. The personality traits of the observers and the situations to be studied are the major factors in developing a close affinity between the scholar and the field and making him/her comfortable with the situations.
- c) The inside observer, i.e., a person from within the institution studied who now acts as an observer, may face major problems in the process of data collection. The group member who acts as an observer may confuse his/her role as an observer with that of a group member. He/she may get a biased picture about his/her group or the institution because of his/her personal/emotional involvement with the group. Then, there are ethical constraints too; they chiefly pertain to the confidentiality required within the group. For example, he/she may be denied access to certain situations or documents because he/she is one of the members of the group.

To sum up, the investigator needs a great deal of self-awareness and a thorough understanding of the group processes to make the process of naturalistic inquiry meaningful.

Check Your Progress 3

- i) State briefly, what measures you have to follow to ensure authenticity of data in naturalistic studies.

Note: a) Space is given below for your answers.

b) Compare your answers with the one given at the end of this Unit.

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ii) What kinds of problem do you anticipate if you are to act a) as an internal observer to observe some of the activities of the institution where you work, and (b) to observe the activities of an outside institution as a participant observer?

Situation a)

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Situation b)

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4.3 CASE STUDY METHOD

Case studies of social institutions may include the study of different individual units like the family, a cultural organisation, a social institution, a class or a developmental programme. In the case of studies on communities, a village, a tribe, a slum area or a culture, each can be considered a unit of investigation.

Whatever the unit of a case study, it is treated as a whole in the context of specific situations. The wholeness is determined through an abstraction of ideas. In one case, an individual's specific behaviour may be perceived as a totality; in another case, a situation consisting of group activities may be treated as a whole. Especially, in social situations, the units under investigation could be a whole developmental programme, a micro-credit system, instructional development in a group setting or in an 'individual setting', allowing the possibility of using a single method or integration of a number of methods.

4.3.1 Purposes of Case Studies

Usually, case studies are conducted for developing a deeper understanding about intricate relationships existing in the process-aspects of a specific unit/units through qualitative investigations. In this context, the case study method is not very different from the approaches of naturalists. So, many a time, the case study method is treated as a kind of naturalistic inquiry. For example, the functional aspects of any normal or exceptional institution may be the focus of a case study or any other approach used by the naturalists.

Case studies are conducted with a clinical purpose. They are treated as diagnostic and prognostic measures for clients' treatment. This approach has a psycho-therapeutic background. In social research, case studies are conducted for resolving different problems and bringing about improvement in institutions facing such problems.

There can be case studies of biographical type, which aim at giving an account of an individual or tracing the development of an institution, or a developmental programme through longitudinal and prolonged investigation.

4.3.2 Characteristics of Case Study Method

The procedural aspects of a full-fledged case study display certain specific characteristics, viz., continuity in investigation, completeness, authenticity of data,

confidential recording and intellectual synthesis. We shall explain each one of them briefly as follows:

- i) **Continuity in investigation:** Continuous and prolonged enquiry about the situations is necessary till the underlying factors are explored and plausible patterns of their interaction/relationship identified. For example, the problems underlying the communal harmony cannot be explored in one go. A researcher may have to undertake prolonged inquiries.
- ii) **Completeness:** A sound case study involves extensive collection of data concerning internal as well as external environment of the unit under study. Data collection continues till the completeness of data is ensured and a complete picture of the unit emerges.
- iii) **Authenticity of data:** A report of the case study must be based on meaningful, reliable and valid information regarding the case. Several qualitative and quantitative techniques such as interviews, observations, record surveys and administration of test questionnaires find their appropriate application in case studies. Use of multi-techniques approach to data collection and cross-examination of data through different techniques can take care of the authenticity of data. Moreover, since the researcher interacts with the typical situations personally, most of the ethical issues regarding the nature of data, the sample situations, or sample respondents, the nature of interactions etc., emerge during the investigation. These issues need to be dealt with care to make the case study ethically meaningful.
- iv) **Confidential recording:** The necessary data, involving personal and ethical issues like relationships of teachers and pupils with the management, discipline, confidential records, documents about the institution etc., must be handled tactfully and every care must be taken to maintain their secrecy.
- v) **Intellectual synthesis:** Since a case study involves multimethod inquiry and deals with all significant situations concerning the unit, appropriate synthesis of the data is necessary to depict the uniqueness of the unit and to explore significant relationships. A skilled investigator with theoretical sophistication, insightfulness and writing skills can do justice and prepare a sound case study.

4.3.3 Case Study: Main Steps

Most researchers treat case study method as one of the forms of naturalistic inquiry. Therefore, the case study method follows the same steps as are followed in the case of naturalistic inquiry. However, the following steps are considered to be very significant.

- i) **Selection of a case for investigation:** The first step in any case study is the identification and selection of a case for investigation. It mostly depends on the basic questions of researcher, such as: am I interested in the study of a normal situation with a view to developing deeper insight in the phenomenon? Or am I determined to solve the problems of a typical institution? Or am I assigned the job of evaluating the functioning of an institution? Or am I interested in identifying the underlying factors contributing to the excellent performance of an institution? Once the case is identified, then one needs to determine the status of the case. For this, several pieces of preliminary information are collected about the background of the case through the already available sources. At this stage, the initial exercise in setting the course of research is done; it comprises the following:
 - Demarcation of the relevant aspects of the case to be investigated;
 - Preparation of a broad outline of the study of sample situations, and

- Preparation of the appropriate tools for collecting the 'benchmark' data about all the pertinent aspects of the case under study.

Answers to the questions would tell us whether we have identified the 'case' or not.

- ii) **Data collection:** Now we move on to the stage of data collection. In the process of collecting benchmark data about the case, we may make use of both qualitative as well as quantitative techniques like observations, interviews, check lists, proforma, open-ended questionnaires, record surveys, psychological tests, etc. every care must be taken to use the tools specifically relevant for the case. In most cases, the first round exploratory work is done through personal interaction with the situation under study.
- iii) **Analysis of first round data:** Through systematic analysis of the first round data, we can identify the more complicated situations or problems, and raise pertinent questions about the influential factors. In the case of clinical investigations, we can state various hypotheses about the solutions to the problems.
- iv) **Second round investigation:** The second round investigation is conducted for only those specific questions or factors which are identified through the analysis of the first round data. Intensive investigations about these specific issues/problems are conducted through prolonged observations, informal and formal interviews, questionnaires, cross-examination of different documents and records, administration of specific tests etc. At the end of this second round of data collection, analysis and interpretation of data begin. However, during the interpretation of the data, if some more evidence is needed we may go for another round of data collection. Actually, in a case study, the process of data collection, its analysis and interpretation go on in cyclical order till satisfactory answers to the questions arising in the course of investigation are found and a clear cut picture of the case emerges through investigation. Most case studies aiming at understanding the dynamics of an educational/social unit stop at this stage.
- v) **Follow-up:** Investigations should be made regarding the effectiveness of the alternative measures introduced. Such investigations give us feedback on the strengths and weaknesses of the corrective measures. If we find them to be less effective, we should conduct further studies to arrive at some 'newer' remedial measures and apply them to the case.

Check Your Progress 4

Suppose you select Indira Gandhi National Open University for your case study or any other Institution from your state/district. Specify the broader components of the unit to be studied and list the different techniques to be used for data collection.

Note: a) Space is given below for your answer.

b) Compare your answer with the one given at the end of this Unit.

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4.3.4 Scientific Nature of Case Study Method

There have been criticisms against the case study method for lack of scientific approach. One criticism is that the case study method is useful in the exploration of knowledge related to a single unit, but it does not have scope to test hypotheses or confirm any evidence.

However, this limitation of the case study method, cannot undermine its meaningfulness in the process of generating knowledge. Even though the case study method is viewed as a kind of naturalistic inquiry, this method accommodates the process of hypothesizing in a manner different from that of the survey and the experiment methods.

- i) **Generating hypothesis in the case study method:** Hypotheses in the case study method are generally found in the form of questions or statements related to the various aspects of the given aspects of the educational process which are tested or confirmed more qualitatively in the given context of investigation. As stated earlier, while conducting a preliminary study on the unit, we may start with certain broad questions since we have limited experience of the case. Further, in the process of interaction with different educational situations, several statements may be generated for further verifications.

For instance, in an investigation of the classroom dynamics of an instructional system taken as a case, we may start with broad questions such as: what is interactional pattern in the class; and “how is it related to students’ achievement?” While observing the interactional pattern you may witness a very high degree of cohesiveness among the group members and this could induce you to think further regarding the factors related to the cohesiveness in the specific case leading to further questions.

- ii) **Testing hypotheses in the case study method:** Testing hypotheses in case studies generally follow the qualitative approach, viz., the researcher’s insight into and impressionistic views about the process under investigation. However, the data processed in quantitative terms can be integrated with qualitative treatment for developing a holistic perspective regarding the case.
- iii) **Generalization of case study findings:** Contributions of the case study method to the process of evidence-generalization depends on several considerations, viz., the nature of the case under study, the theoretical framework generated, and the extent of objectivity possible. An investigator approaching a case would primarily have the purpose of understanding that particular case in its entirety and, hence, he/she may not be concerned with extending his/her understanding to other cases. However, such an understanding may take the form of further hypotheses which could be tested through other investigations.

There are possibilities of considering the findings of a case which may be significantly similar to another case studied at a later stage. There are situations where studies of different cases can be useful in developing a new trend. For example, Piaget’s intensive studies on selective children have generated respectable generalization, but more generalizations may be possible from the findings of a large number of case studies, provided the researchers concerned come from similar background and have similar experiences, ideological commitments and interest in certain issues. Although the contribution of the case study to the generalization of findings seems to be neglected, its potential in contributing to theorisation cannot be ignored by any insightful researcher.

The issues concerning the objectivity and trustworthiness of the case study method are similar to those of the naturalistic method already discussed in the preceding section.

Check Your Progress 5

Explain briefly in about 50 words the contribution of a case study to the process of generating hypotheses and theories.

Note: a) Space is given below for your answer.

b) Compare your answer with the one given at the end of this Unit.

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4.4 LET US SUM UP

In this Unit, we have discussed Naturalistic and Case Study methods of research. We have focussed on the meaning and significance of these methods, their uses in the educational field, steps in conducting studies in each method, and problems and issues raised about them.

- With regard to generating knowledge in context specific situations, naturalistic inquiry makes unique contributions in the field of research in social sciences. It uses the researcher's impressionistic views as the main source of knowledge.
- Case study method can be treated as a kind of naturalistic inquiry since this method also aims at developing deeper understanding about a case; an institution, a programme or an individual in ways not very different from those used in naturalistic inquiry. A well-organised case study can generate meaningful hypotheses for further research through prolonged interaction with the case use of multi-method investigations and cross-examination of data.

4.5 CHECK YOUR PROGRESS: THE KEY

- 1) The six aspects of the conceptual framework of naturalistic inquiry are i) multiple realities, (ii) meanings and interpretations, (iii) generation of knowledge, (iv) generalisation, (v) human relations and (vi) value systems.

The uniqueness of naturalistic method is to be seen in its holistic approach – insightful inquiry and its opposition to a priori theories and pre-specific design of study.

- 2) The major focus of naturalistic inquiry is an understanding the interrelationships of influential factor in a time and context that would reveal the nature of specific and concrete reality. Naturalistic inquiry requires the researcher to interact with the field through participant observation, formulate specific questions in the course of such interaction and continue the inquiry in the field till a clear pattern of relationships is identified and the real nature of events understood.

- 3)
 - i) Continuous and prolonged field work, interaction with colleagues, variety of the sources of data and use of multi-methods/techniques, cross checking of data, increasing sample situations and substantive description of data can enhance the authenticity of data in naturalistic studies.
 - ii)
 - a) Ethical problems, emotional attachment with the field and lack of seriousness in participants' responses.
 - b) Exaggeration of facts by respondents, and influence of prejudices/biases in assessing the group situations.
- 4) The following could be the components: the courses offered, students, process of course development, distribution of courses, student support services, evaluation processes, and management of physical and human resources. In this case, both qualitative and quantitative techniques such as, record surveys, interviews, observations, questionnaire-based surveys and achievement tests could be used to collect data.
- 5) Interaction with situations and analysis of first round data may lead to the identification of questions of causal type. Findings of case studies may be used as hypotheses for further studies, and also extended to cases of similar nature. Generalisations could be made on the bases of the findings from a number of cases studied in a broader context.

Reference and Further Readings

- Cook, Thomas D. and Charles S. (1979), Reichardt (eds.) *Qualitative and Quantitative Methods in Evaluation Research*, Sage, Hills.
- Engstorm, G.A. (1970), "Research Utilization, the *Challenge of Applying Social Research*", *Welfare in Review*, Vol. B, No.1.
- Epstein, I & Tripodi, T. (1973), *Research Techniques for Programme Planning, Monitoring and Evaluation*, Columbia University Programme, New York.
- Erickson, F. (1986), *Qualitative Methods in Research on Teaching* in Merlin C. Wittrock (Ed.). *Handbook of Research on Teaching*, Third Edition, Collier Macmillan Publishers, London.
- Freeman, H. and Sherwood, C. (1965), "Research in Large – Scale Intervention Programme". *Journal of Social Issues*. Vol. 21, No.11.
- Jain, S.C. (1982), *Application of Social Research in Developmental Projects*, Baroda Citizens Council, Baroda.
- Kidder, Louise H. (1981), *Research Methods in Social Relations*, Holt, New York.
- Lal Das, D.K. (2000), *Practice of Social Research : A Social Work Perspective*, Rawat Publications, Jaipur.
- Monette, Duane R. et. al. (1986), *Applied Social Research: Tool For the Human Services*, Holt, Chicago.
- Rubin, Allen & Babbie E. (1989), *Research Methodology for Social Work*, Belmont Wadsworth, California.
- Strauss, Anselm (1982), *Qualitative Analysis for Social Scientist*, Cambridge: Cambridge University Press (Photocopies of a major portion of Ch.1 in the Library).
- Van Maanen, John (1982), *Varieties of Qualitative Research*, Sage, New Delhi.