UNIT 4 CASE STUDY

Structure

4.0 INTRODUCTION

Earlier you have studied about the survey research, ex-post-facto research and experimental research. Now we are going to read about the case study method in research work. In the field of social sciences case study is important tool for a good research methodology. It can be apply on the single subject, small and large group, a class within a school, a school with in a city, or event. Case study methods involve an in-depth study, longitudinal examination of a single subject or event and it may be descriptive or explanatory. A case study is not different to a survey method, but instead of collecting data about few factors from a large number of units the researcher makes a depth and intensive study of a single subject. It is limited in scope but more exhaustive and more informative as compared to survey. It can be used in a school atmosphere, for example, a teacher may use case study to identify the causes of failure in mathematics of a group of three students in class V of a village primary school who continuously failed in three unit tests. The teacher will study these cases in detail in order to arrive at the specific causes of the failure of these students and then take a decision about the remedial measures, which may be taken to overcome the problem of failures. In this unit you will be understand the nature of case study, criteria and types of case study.

4.1 OBJECTIVES

After going through this unit, you will be able to:

- Define case study;
- Explain the nature of case study;
- explain the criteria for selection of case study;
- Delineate the types of case study; and
- describe the steps involved in case study.

4.2 NATURE OF CASE STUDY

Case study provides a systematic and scientific way of perceiving or examining events, collect data, analyse information, and prepare a report. As a result the researcher may gain a sharpened understanding of why the instance happened as it did, and what might become important to look at more extensively in future research. Case studies lend themselves to both generating and testing hypotheses.

In other words, case study should be defined as a research strategy, an empirical inquiry that investigates a phenomenon within its real-life context. Case study research means single and multiple case studies, can include quantitative evidence, relies on multiple sources of evidence and benefits from the prior development of theoretical propositions. Case studies based on any evidence of quantitative and qualitative research.

Single subject-research provides the statistical framework for making inferences from quantitative case-study data. According to Lamnek (2005) "The case study is a research approach, situated between concrete data taking techniques and methodologic paradigms."

In the past years, case study method was used in the field of clinical psychology to examine the patient's previous history regarding the person's mental health status. To know about the patient's physical and mental health, and to make an accurate diagnosis, it is very important to know about the patient's past and present health related and environmental problems and issues.

Psychoanalyst Sigmund Freud used case study method to assist his subjects in solving personality problems. The detailed accounts of interviews with subjects and his interpretations of their thoughts, dreams and action provide excellent examples of case studies. Guidance counselors, social workers and other practitioners conduct case studies for diagnosing particular condition or problem and recommending remedial measures. They collect data from a particular individual and confine their interest to the individual as a unique case or collect data from a small group of individuals, which form a unit for depth study.

The case study approach is based on reality. Some of these studies have been conducted in school environment, which have mostly centered on behavioural problems of children. Observation, interviews, psychological tests and inventories have been used for collecting relevant data about the case or cases. However, subjective bias is a constant threat to objective data gathering and analysis techniques. The researcher must be thoroughly familiar with the skills which are associated with the conduct of case-studies.

The Case study is also useful in psychology. It refers to the use of a descriptive research approach to obtain an in-depth analysis of a person and group. The various techniques may be applied on the subject such as personal interviews, observation, psychometric tests, and archival records. We can use the case study method in clinical psychology to describe rare events and conditions. Generally case study is a single-case design, but it can be a multiple-case design, where replication instead of sampling is the criterion for inclusion. One thing we must remember about the case study is that it must provide valid and reliable results for the development of future research.

4.3 CRITERIA FOR SELECTION OF CASE STUDY

For selection of cases for the case study, we often use information oriented sampling. Our cases are based on this only information, which is mostly based on the extreme cases or typical cases. The average case is often not the richest in information. Extreme or a typical case reveals more information because they activate more basic mechanisms and more actors in the situation studied.

In addition, from both understanding oriented and action oriented perspectives, it is often more important to clarify the deeper causes behind a given problem and its consequences, than to describe the symptoms of the problem and how frequently they occur, etc.

Random samples emphasising representativeness will seldom be able to produce this kind of insight. It is more appropriate to select a few cases for their validity, but this is not always the case. Three types of information oriented cases may be distinguished:

- Critical cases
- Extreme or deviant cases
- Paradigmatic cases

Yin (2005) suggested that researchers should decide whether to do single-case or multiple-case studies and choose to keep the case holistic or have embedded sub-cases.

4.4 TYPES OF CASE STUDY

There are four types of case studies which are (i) illustrative case studies (ii) exploratory case studies (iii) cumulative case studies and (iv) critical instance case studies.

1) **Illustrative Case Studies:** These are primarily descriptive studies. They typically utilise one or two instances of an event to show what a situation is like. Illustrative case studies serve primarily to make the unfamiliar familiar and to give readers a common language about the topic in question.

2) **Exploratory (or pilot) Case Studies:** This type of case studies performed before implementing a large scale investigation. Their basic function is to help identify questions and select types of measurement prior to the main investigation. The primary pit fall of this type of study is that initial findings may seem convincing enough to be released prematurely as conclusions.

3) **Cumulative Case Studies:** These serve to aggregate information from several sites collected at different times. The idea behind these studies is the collection of past studies will allow for greater generalisation without additional cost or time being expended on new, possibly repetitive studies.

4) **Critical Instance Case Studies:** These examine one or more sites for either the purpose of examining a situation of unique interest with little to no interest in generalisability, or to call into question or challenge a highly generalised or universal assertion. This method is useful for answering cause and effect questions.

4.5 STEPS FOR CASE STUDY

The following steps are used in the conduct of a case study:

Step 1. Determining the present status of the case or cases

The first step is to determine the present status of the case or cases through direct observation. In addition to physical examination of the case or cases, a psychological evaluation is required to determine the general ability level etc. For example, to make a case study of a 'slow learner', the first thing to do is to determine the present status of the child by making an assessment of his physique cognitive factors through direct observation and psychological test.

Step 2. Identifying the most probable antecedents of the case or cases

Determining the most probable antecedents of the case or cases is the next important steps. This information helps in formulating a workable hypothesis or a set of hypothesis. For example, in case of 'slow learner' cited in Step 1, the researcher may formulate a hypothesis that occurrence of slow learning behaviour in the child is due to unhealthy have environment, bad study habits and poor teaching in the school.

Step 3. Verification of Antecedents/Hypotheses

The case is then checked for the presence or absence of the antecedents supposed to apply to situation of under study. For example, the behaviour of slow learning of the child. This involves multi-method approach, which includes observation, past history of the case, interview etc.

Step 4. Diagnosis and Remedial Measures

After the verification of the antecedents or hypothesis (es , the next step is directed towards the diagnosis of the causes (example, causes of slow learning) and suggesting remedial measures in the light of the causes.

Step 5. Follow-up of the case or cases

The last step of the case study is the follow-up of the case (es) to study the impact of remedial measures. If impact is positive, the diagnosis is taken to be correct.

4.6 WAYS OF CASE STUDIES

There are different ways of using case studies, which are given below:

1) **Writing analysis of case study**

The most careful analysis of a case study is probably obtained when it is made in writing. Case studies can be used as term papers with other related readings and bibliographies.

2) **Panel of experts**

Although group members miss the advantages of participation, listening to a panel of experts a case may be useful especially as an introduction to the case method. A variation of this technique would be to bring in a panel of experts to analyse a case after a group had already done so.

3) **Analysis of similar case studies**

Another variation of case discussion is to collect from the group members incidents from their experience similar to the case under consideration. Generalisations drawn from the case under consideration may carry over to the experiences of other members.

4) **Cross examination**

By cross examination group members with questions prepared in advance, they will discover that it is necessary to do careful thinking and preparation before entering into case study. This technique, especially appropriate for use with cases containing a great deal of detail, gives the researcher many opportunities to ask individuals to defend their points of views in terms of the data presented.

Self Assessment Questions

A) State whether the statement *True or False*

1) Case study involves in-depth study ( )

2) Case study provides a systematic and scientific ways of perceive ( )

3) Case study can be used only in clinical psychology ( )

4) The approach of case study is based on the artificial atmosphere ( )

5) Critical case studies are useful for cause and effect questions ( )

B) Fill in the blanks

1) Case study means single and ———— case studies.

2) Case studies based on any evidence of quantitative and .....research.

3) ..... case study performed before implementing a large scale investigation.

4) ..... is the last step of case study.

4.7 MISCONCEPTION ABOUT CASE STUDY

There is little misconception about the case study for using in research work. Flyvbjerg (2006) define five misconceptions about case study research:

1) Generally, theoretical knowledge is more valuable than concrete, practical knowledge, because one cannot generalise on the basis of an individual case and, therefore, the case study cannot contribute to scientific development.

2) The case study is most useful for generating hypotheses, whereas other methods are more suitable for hypotheses testing and theory building.

3) The case study may affect the bias tendency toward verification, i.e., a tendency to confirm the researcher's preconceived notions.

4) Some time it is difficult to summarise and develop general propositions and theories on the basis of specific case studies.

4.8 LET US SUM UP

The key points of our discussion in this unit have been that case study is an important area of research which helps the researcher to study the individual and develop appropriate strategies to provide remedial instructions. In this unit attempt is made to make you aware about the systematic steps of case study on the basis of which strategic interventions can be planned for the development of a particular aspect.

Case study is also useful in psychology. It refers to the use of a descriptive research approach to obtain an in-depth analysis of a person and group. The various techniques can be applied on the subject such as personal interviews, observation, psychometric tests, and archival records.

There are four types of case study (i) illustrative case studies, (ii) exploratory case study, (iii) cumulative case study, and (iv) critical instance case studies.

There are various steps to conduct the case studies such as, *Step 1* Determining the present status of the case or cases; *Step 2* Identifying the most probable antecedents of the case or cases; *Step 3* Verification of Antecedents/Hypotheses; *Step 4* Diagnosis and Remedial Measures; and *Step 5* Follow-up of the case or cases**.**

There are the different ways to using case study such as, (1) Writing analysis of case study, (2) Panel of experts, (3) Analysis of similar case studies, (4) Cross examination.

4.9 UNIT END QUESTIONS

1) What do you mean by case study method?
2) How can we use case study method in psychology?
3) What are the criteria of case study?
4) Explain types of case study.
5) What are the important steps to conduct the case study?
6) Explain ways of using case studies.

4.10 SUGGESTED READINGS AND REFEENCES

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4.11 ANSWERS TO SELF ASSESSMENT QUESTIONS

A) True or False

1) True, 2) True, 3) False, 4) False, 5) True.

B) Fill in the blanks

1) multiple, 2) qualitative, 3) exploratory, 4) follow-up.