14

METHODS OF CHILD STUDY

The transformation of an infant, totally dependent on adults, into an independent person with complex abilities has always attracted much attention. There are many early accounts, recorded as Baby Biographies by different scholars, of how children learn. Charles Darwin, working on biological diversity, wrote a book *On the Origin of Species* and also documented his son's acquisition of language. Many years later, Piaget provided a deep understanding of emergence of thought and language in children by observing and keeping detailed notes of his children. He later talked to many children at play to understand development of morality in childhood.

The unique features of childhood have captured the imagination of different poets and writers. Systematic records of children's lives appear in poetic versions of childhood.

In the context of India, Tulsidas and Surdas have written about Rama and Krishna, describing poetically their childhood with an interface with divinity.

Piaget improved on the idea of baby biographies and presented a systematic and more scientific procedure to recording childhood actions. Earlier studies on the socialization of children focused on adults to understand how children responded and how they learn. In recent years, there has been growing understanding of recognizing children's potential to be actively making meaning of their physical social world. In keeping with children's skills and experiences within a context, more child-oriented ways based on mediums that promote children's expression have evolved.

In order to understand children's behaviour and thought more systematically, it is important to know specific techniques of studying children. In this lesson, you will study some of the methods and ways of researching children's development.

LEARNING OUTCOMES

After studying this lesson, you will be able to:

• explain various methods of child study;

• describe how children express themselves through art; and

• explain ways of reporting the progress of children.

14.1 RESEARCH AND STUDY OF HUMAN DEVELOPMENT

Research with children builds our understanding of their behaviour, nature of responses and ways in which they learn or why they ask questions. We may believe children behave in a particular manner but in our interactions with them in varied situations, we may be surprised to find that they are different from what we had thought. Children's skill acquisition may vary according their specific social group. Parental expectations may also differ from group to group. Often parents feel that children are not reading enough or teachers may observe that parents are not taking enough interest. Such observations would be speculations till a systematic examination could be built as evidence in support of or to negate the hunch. Conclusion of any kind can only be made after collecting data from the sample population. The facts collected would be categorized and analyzed to arrive at a conclusion. This process of investigating and deriving inference from a body of facts and figures comprises research. It can be of many kinds with several ways of collecting data referred to as techniques of studying human behaviour.

Let us study different types of research designs that guide research on children.

14.1.1 Types of Research Design

Research design is framework or detailed procedures for carrying out the research systematically. The nature of the problem to be studied guides the selection of the research design. The participants (sample) are selected from sections of social groups depending on the nature of the problem. In the case of children, one has to ensure that the selected methods and techniques are well thought out, age-appropriate and not heavily dependent on print.

Cross Sectional Research: is a way of collecting data from a group of people of different ages at a particular time. This group is matched for all features such as socio-economic status and educational background. This type of research is quick as the data is gathered at one point of time.

Longitudinal Research: is a study of research issues collecting information from a set of people at different intervals of time over a decided period. To study the selected problem, the sample is followed over time and data is gathered from the same set of participants at different points of time. Even though rich and useful information is gathered, such studies are expensive and difficult to sustain.

Case Study: It is an in-depth study of individuals, groups or institutions. This kind of study is done using several techniques. In the Case Study approach, both standardized as well as other techniques of study can be used.

Experimental Design: It is a research design in which two or more groups are compared under similar conditions where each group may get a different treatment (intervention).For example, in the experimental design involving two groups, the group which receives the intervention is called the control group and the other group under study which does not receive the intervention is called the experimental group.
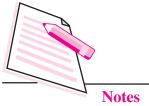
14.2 TOOLS AND TECHNIQUES OF STUDY

It is important to identify the methods or techniques of gathering data depending on the age of the children or their literacy level as there are many different ways to engage with children. Although, the methods are based on ordinary and everyday experiences of human beings like talking and watching other people, however, the difference in scientific study is that they are systematic, reliable, standardized and valid methods. Under different methods, different tools are used to collect data from the participants.

14.2.1 Selecting a Tool

Once the basic design is decided, the next step is to identify the method for data collection. This method would be decided keeping in mind the age, educational background and the nature of the research problem. For example, infant studies would rely more on observation, and large-scale investigations of educational practices can be conducted through a questionnaire. Attitudes and choices of illiterate populations can be gathered through interviews. Also, nuances of interactions are captured best through interview method. A good tool must possess certain characteristics discussed below.

- **Reliability:** Implies that on repeated use, tools should give consistent or stable results. For example, the results obtained from the tool should remain the same regardless of the time of administration of the tool and the researcher.

• **Validity:** This refers to the fact that the tool should assess or measure what it is supposed to measure, and not something else. For example, a test of intelligence, should be meaningful for intelligence and not some other quality.

• **Standardisation:** It is a process of establishing the reliability and validity of the tool by administering it on a large population. This means that the test has to be administered and scored in a consistent manner for the entire population.

INTEXT QUESTIONS 14.1

A. State whether the following statements are true or false:

1. Observing a selected group of children at regular intervals is a longitudinal study.

2. Children cannot be part of research study as they have to grow.

3. Reliability is when, on repeated use, questions are understood differently.

4. Validity is when the technique measures what it is supposed to measure.

5. Standardized tests are constructed on large populations to ensure their worth and value.

B. List the different types of research designs.

14.2.2 Observation

Observation is a method for understanding changes during early childhood and gaining insightful learning regarding behaviour patterns of children. It is a useful technique of studying young children, and also as a supplement to other techniques. It is the systematic observation of activities of the person who is under observation. To observe means to examine an object, or an individual, or group of people, or an event with all of the senses. Observation being directly observing behaviour with the purpose of describing, it helps in recording changes to discuss with parents or write reports on children. In observations, it is important to plan the procedure before-hand to ensure good results. Some examples of methods of observation and recording include:

Time-Sampling: requires taking short and uniform time periods to observe to note down children's behaviour. For example, taking observation notes of the bahaviour under study after a gap of every 15 minutes.

Event Sampling: Can be used for noting only specific behaviours like language or aggression.

Checklist: a list of parameters on which the teacher (or parent or other adult) checks the behaviours or traits observed during the period of observation. An observer may observe an activity or an event and then complete a checklist on whether or not key behaviours occurred.

Specimen Description: when using specimen description, the observer records children's behaviour and all events that are before and subsequent to the behaviour. The observer may write notes on everything that happens in his or her presence. Audio-visual devices may also be used for recording the observations.

There are two types of observations which are :

14.2.2.1 Participant and Non-Participant Observations

Participant observation takes place when an observer participates with children and in the events being observed. Non-participant observation occurs when an observer observes events without interacting with the children being observed.

14.2.2.2 Structured and Unstructured Observations

Structured observation is a technique in which an observer observes events using a guide that has been planned in advance. Events are recorded according to the observation guide. The observer is not involved in the activities being observed, but records them as unnoticeably as possible.

Unstructured observation is a technique in which an observer observes and record behaviour in a holistic way without the use of pre-determined categories or guide. Everything that happens on the setting is recorded.

14.2.2.3 Advantages of the Observation Method

1. It provides direct information about behavior of individuals and groups.

2. It helps to gather data when the situation is real and not artificially set up.

3. It is possible to obtain information where laboratory experiments cannot be conducted.

4. It helps to develop a holistic perspective.

14.2.2.4 Disadvantages of the Observation Method

1. It is expensive and time-consuming

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2. Selective perception of observer may distort data.

3. Investigator has little control over situation.

4. Behavior or set of behaviors observed may be a typical/not normal.

5. Results can change if the subject becomes aware they are being observed.

6. The observer may not be able to note all the behaviors that occur.

Factors to be kept in mind while observing

1. Note down the duration, date and place of observation and information about the subject.

2. Note as many details as possible by keeping notes about the children's behavior as well as context

3. Record behaviors as they occur

4. Do not write interpretations

5. Respect the children who are being observed

6. Do not disturb the activities of children who are being observed

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14.3 INTERVIEW

It is a technique that simply uses direct conversation with children to gather data. One person (Interviewer) questions the other (Interviewee) on certain issues and then draws conclusions from these conversations. It is a detailed, in-depth conversation that is guided by certain objectives. The interview schedule is the list of questions used for interviewing. The face-to-face contact in interviews is useful in repeating, reframing and sometimes probing emotional issues. The interview can be audio-recorded or noted. Audio-recordings are more accurate and need to be transcribed. Transcription is the procedure of playing back the tape and writing out the responses. Every utterance is captured including all *uhms, ahs,* false starts and stutters, repetitions, distracting speech patterns ("you know", "like") and interviewer's remarks such as "right or yes". Also included are pauses, laughter, crying, interruptions, personal comments, external noises, in short: everything we hear!

The steps in constructing and conducting an interview are:

1. Decide on an issue that you want to study and look for a suitable title

2. List out the areas on this issue that are important to investigate

3. Write down the questions; word them carefully and simply

4. Arrange the identified questions from simple to more complex

5. Prepare an introductory passage for the respondent to explain your purpose

6. Try out the questions before conducting the final interview to ensure that the wording is valid. Try to use a conversational approach

7. Take some time to make the respondent feel comfortable in your presence. This is also called rapport-formation

8. Conduct the interview in a cordial manner

9. Thank the respondent and wind up the interview politely

10. Care should be taken to note the answers accurately. It is advisable in such cases to write out the detailed interview responses as soon as the interview is finished

The different types of interviews are:

14.3.1 Types of Interview

14.3.1.1 Structured: A structured interview involves the researcher asking the children a list of predetermined questions with a predefined set of answers about a carefully-selected topic.

14.3.1.2 Semi-structured: interviews are conducted with a fairly open framework which allow for focused, conversational, two-way communication. They can be used both to give and receive information. It contains a set of flexible questions that can be used as a guide.

14.3.1.3 Unstructured: An informal discussion that has no strict guidelines, allowing the discussion to be open and not necessarily concise in its nature.

14.3.2 Advantages of Interview

1. Interview is a powerful technique for studying in-depth issues.

2. Questions can be re-worded or repeated in case these are not understood correctly.

3. The interviewer and interviewee can proceed at their own speed.

4. Doubts can be clarified and further questioning can proceed in case the need arises.

5. It can be used with illiterate participants quite easily.

14.3.3 Disadvantages of Interview

1. Intensive training is required to conduct interviews.

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2. Sometimes the face-to-face conversation can make children uncomfortable especially when the questions are intimate in nature.

3. Sometimes writing and recording can make children feel conscious.

Factors to be kept in mind while interviewing

1. Questions should be carefully constructed

2. The interview should not be too long

3. Care should be taken to establish rapport and to make children comfortable

4. The confidentiality of answers obtained during the interview must be maintained

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INTEXT QUESTIONS 14.2

A. Fill in the blanks.

    1. Watching a child for short duration after brief intervals is called — _____.

    2. In a structured interview _____ can be free flowing to explore a theme.

    3. Play behaviour of infants can be best studied by _____

    4. The interviewee's privacy has to be respected by ensuring _____.

    5. _____is good method for understanding feelings, emotions and values.

B. Put the terms given below in the related columns:

Participant and non-participant, real setting, interactions, semi-structured, face to face, event sampling

Observation	Interview

14.4 QUESTIONNAIRE

The questionnaire is a tool that uses questioning as a strategy to gather responses. It consists of a set of written questions which calls for responses on the part of individual(s) or the subject(s). It is a very concise, preplanned set

of questions to elicit information about the feelings, beliefs, experiences, perceptions, or attitudes on a selected topic. The questionnaire may be self-administered or group-administered.

14.4.1 Types of Questionnaire

The questionnaire may be closed ended and open ended. Let us study about theses as follows:

14.4.1.1 Closed ended Questionnaire: It consists of a list of pre-decided questions with forced choices. The respondent is required to choose one of choices from the set of multiple options provided.

14.4.1.2 Open Ended Questionnaire: It consists of list of pre decided questions where there is a scope to provide descriptive and subjective responses.

14.4.2 Advantages of Questionnaire

1. Administering questionnaires involves low cost and is less time-consuming.

2. Information can be collected from a large number of individuals in a relatively short period of time

3. Each respondent receives the same set of questions phrased in exactly the same way. Questionnaires may, therefore, yield data more comparable than information obtained through an interview.

14.4.3 Disadvantages of Questionnaire

1. It can only be conducted with literate respondents.

2. There is no scope to clarify meanings or explain the questions and the responses.

3. There is no scope for follow-up questions.

4. It has a low return rate i.e. the respondent may not return the filled in questionnaire.

5. There is a possibility that the respondent may not answer all the questions.

Factors to be kept in mind while preparing a questionnaire

1. Wording, sequence of questions and instructions have to be carefully prepared

2. Confidentiality must be ensured

3. Sufficient blank space must be provided in case of open ended questionnaire.

4. The questionnaire may be provided to the respondents in their local language.

Notes

Differences between Questionnaire and Interview

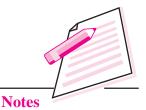|	*Interview*	*Questionnaire*
1	Takes place in face-to-face	Administered through a printed form
2	Except for infants and young children, can be used with everyone	Can only be used with literate persons
3	Time consuming	Less time consuming
4	Can be done with only a small number of people at a particular time	Can be administered to a large number of people at a particular time
5	The analyses of responses is complex	Relatively easy to analyse as the responses are received in predefined categories
6	The meaning of questions can be clarified to the interviewee in face-to-face situation.	The subjects make their own interpretation since the doubts cannot be clarified
7	Possible to have an in-depth understanding about the respondent	Limits the responses of the respondent since it close-ended
8	Only socially desirable responses may be obtained	Anonymity while answering the questionnaire allows respondents to be more honest
9.	Constructing an interview schedule is relatively easy	Construction of close-ended question is time consuming and complex

INTEXT QUESTIONS 14.3

State whether the following statements are true or false.

1. In an interview, the doubts and questions of the participants can be clarified.

2. Questionnaire is used to gather information from literate population.

3. Questionnaire is less time consuming.

4. In a structured interview, the sequence of the questions does not matter.

14.5 ART AS A FORM OF COMMUNICATION

Artistic forms of expression such as role play and drawings can be used with

children to elicit their responses. These can serve as tools to gather meaningful data on children's behaviors and thought. Let us study more about these art forms:

14.5.1 Role Play

Role Play is a method in which different individuals assume a role, playing themselves or another person in a given situation or scenario, based on the objectives. It is a method for exploring the issues involved in complex social situations. Those involved in role-play are expected to "act out" the demands of the particular situation or role. For example, in role play, children play situations that may be acted out which may be reality-based or imaginary. The researcher may observe children playing roles of different characters or their responses to these characters in post-play discussion.

14.5.1.1 Advantages of Role Play

- It helps to gather different points of view and perspectives of children as displayed through the role play.

- It is useful to elicit responses including emotional responses in children.

- It aids to assess children's responses to problems and their solutions; skills of initiative, communication, self-awareness and cooperation.

- It facilitates identification of complex human interactions.

14.5.2 Drawings as Sources of Conversation

Children from a young age like to scribble with crayons. They may use particular colours or strokes on paper. The drawings may have no concrete shape or resemblance to reality. When teachers or mothers have asked children about what they have created, there is often a meaningful narrative. In recent years, researchers have made use of engaging children aged four to six years to respond to their own drawings. Drawings are analyzed on the basis of colour, intensity of strokes and their narratives.

14.6 REPORTING CHILDREN'S PROGRESS

14.6.1 Anecdotal Records

Anecdotal records are detailed description of important episodes which are written and maintained on a daily basis to record children's progress over a period of time. The anecdotal records provide important periodic information of children's lives. Records may encompass many aspects of children's development such as their behaviour, interaction, interests, likes, dislikes etc.

14.6.2 Portfolio

A portfolio is a collection of children's work which reflects their development and progress. It includes children's writing, drawings, art and craft work, activity sheets, photographs, videos, etc. It is an evidence of children's growth, development and learning providing a rich and comprehensive picture of a children's lives. Any form of drawing, writing and any other activity of the children can be assembled in the portfolio. It provides a comprehensive medium to assess growth and development of children in various domains. The collection also gives an opportunity to children to discuss their work, recall and remember special episodes or events and share it with others.

WHAT YOU HAVE LEARNT

- Specific techniques of systematically studying children, their behavior and thoughts viz..observation, interview,questionnaire, art and role play.

- Research design which a is framework or detailed procedures for carrying out the research systematically. These include Cross Sectional Research, Longitudinal Research, Experimental Design and case study.

- The characteristics of a good tool used for data collection.

- Anecdotal records are detailed description of important episodes which are written and maintained on a daily basis to record children's progress over a period of time. These provide important periodic information of children's lives.

- A portfolio is a collection of children's work which includes children's writing, drawings, art and craft work, activity sheets, photographs, videos, etc. It is an evidence of children's growth, development and learning. It provides a rich and comprehensive picture of a children's lives.

TERMINAL EXERCISE

1. Discuss some of the issues and concerns that may be explored through a case study of a child.

2. How can different art forms be used to gather data on children?

3. Describe the usefulness of observation as a method to understand infant behaviour in the first six months.

4. Describe the differences between the interview method and the questionnaire.

5. List the points to be taken care of while conducting:
   - An interview
   - Observation
   - Questionnaire

ANSWERS TO INTEXT QUESTIONS

14.1

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

(B) Cross sectional, Longitudinal, Experimental and Case Study

14.2

A: 1. Time sampling; 2. conversations; 3. observation;

   4. confidentiality; 5. interview

B:

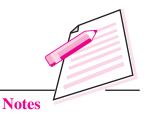| Observation	Interview
Participant and non-participant	semi-structured
Real setting	face-to-face
Event sampling	interactions

14.3

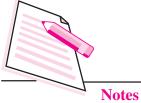A. 1. True, 2. True, 3. True, 4. False

GLOSSARY

Biography: Life story

Contexts of development: Social influences and circumstances of individuals

Domains of development: Different areas of development and learning

Principles of development: Universal features for growth and development

Stages of development: Age-related periods of growth

Techniques of study: Different tools for studying behavior

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