

SKILL ENHANCEMENT COURSE (SEC) – I

RESEARCHING CHILDREN AND CHILDHOODS IN INDIA

COURSE OBJECTIVES

This paper provides a guide to develop research skills and to design and conduct research with children. The research skills i.e. critical thinking, problem solving, analysis and dissemination, incorporated here help students to learn the research and inquiry skills relevant to children's worlds. It provides enhanced opportunities to strengthen inquiry-based and experiential research practices. It also promotes action research. The course will enhance understanding about children, childhood and research.

LEARNING OUTCOMES

On completion of this course, learners are expected to:

- Critically understand the nature of the child and childhoods in the socio-cultural context of India.
- Develop the ability to visualize and design research.
- Learn to interpret data and findings and identify how research informs practice.
- Apply generic research skills such as critical and analytical thinking and problem-solving to various contexts.

UNIT I: BUILDING PERSPECTIVE ABOUT CHILDREN

- Understanding the child: developmental principles and debates
- Knowing children in the context of diversity
- Role of family, school and society in children's lives
- Knowing child as a researcher

UNIT II: METHODS, TECHNIQUES AND TOOLS FOR STUDYING CHILDREN

- Longitudinal and Cross-sectional Studies
- Case study as a method
- Observation, Interview and Diaries as means of obtaining data from children
- Drawings and Photographs as tools for exploring children's worlds
- Presenting data, Drawing inferences and Writing research reports

UNIT III: BUILDING PERSPECTIVE ABOUT CHILDREN

To have hands on experience, students are expected to engage with any one the following or similar kinds of field based mini research:

- Primary school children's perceptions of peer relationship/ friendship
- Social and emotional development of Visually- impaired or Physically challenged Children or children with any other disabilities in family/school
- Value of culturally relevant education for minority students in primary /elementary school
- Role of media on children's behaviour, aspirations, body image and identity

LESSON 1

BUILDING PERSPECTIVE ABOUT CHILDREN

Parul Singh

Learning Objectives

On completion of this lesson, learners will be able to:

- Describe the concept of Growth and Development
- Explain the principles of Development
- Discuss the various debates pertaining to Development
- Identify diversity as one of the important dimensions for understanding children
- Understanding the influence of the family, school and society on the social development of the children
- Develop the ability to visualize and design research for children to recognize them as active researcher

1. Understanding the Child: Developmental Principles and Debates

Children have been regarded as valuable contributors to research in recent years. In order to make meaningful contributions, it is important to gain knowledge about childhood and the everyday lives of children. If you look around, you will discover that various kinds of changes take place in the life of a person from birth, which continue until old age. In a given period of time, man grows and develops, learns to talk or communicate, walk, count, read and write. We not only physically change from conception to death, but we also change depending on the way we perceive, use language and establish social relationships. This chapter will introduce you to the changes in the entire life sequence of individuals seen in different contexts. The most potent facet in psychology is to understand the child with reference to the developmental principles. The understanding of the nature and principles of development is very essential for the realization of the aims of education.

Concept of Growth and Development

A person undergoes changes from the conception to death. The change in human beings is synonymous with two concepts: Growth and Development. Generally, we interchangeably use these terms.

- **Growth** basically refers to the quantitative changes in body proportion like change in height, weight, internal organs etc. In other words, growth means growing the size of not only the height and weight of the general dimensions of the body, but also the parts of the body such as the head, arms, trunk, heart, and muscles. This ranges from the early stage of growth to the late stage. Growth is only limited to physical

improvements that are quantifiable. You must be aware that the specifics of a newborn baby such as body weight, height and sex are reported in the medical document at the time of birth. To understand the different aspects related to the notion of growth, you may research any medical record of any newborn baby.

- **Development** is more than a concept. Development cannot be seen as simply adding 1 inch to one's height or improving capacity. Instead, development is a **complex process of integrating many structures and functions** whereas growth refers to the growth of physical organs or the whole organism which is quantitative. Thus growth, in short, is a part of development.
 - Development refers to a progressive series of changes in an expected pattern as a result of perspective and experience, whereas growth refers to the organization of changes in all parts of the body, measured or quantization. So, growth can be measured by size, length and weight, whereas development is related to both quantitative and qualitative attributes of a person.
 - Growth and development are a continuous process of change that makes the helpless infant mature and self-reliant, which keeps moving from birth to lifelong. They can be measured and observed in one of three main manifestations: (a) Physical, (b) mental, and (c) behavioural.
 - **Development has been defined in various forms by various intellectuals.**
 - » “Development is a process of change that enables people to take charge of their own destinies and realise their full potential”. -Clark J. 1991
 - » “Positive changes in the material social, political and physical status of a country’s people...” - Rooy and Robinson 1998
 - » “Development means a process of growth and capacity change over time as a function of the interaction between maturity and the environment”- Liebert, Poulos and Marmor (1979)
- Thus, four important dimensions of development (1) Growth, (2) Capability, (3) Maturation, (4) Interaction with the environment can be seen as - which can also be expressed in this form.*
- (Mathematically expressed)*
- $$\text{Development} = \text{Growth} + \text{Capability} + \text{Maturation} + \text{Interaction with the environment.}$$
- **Maturation** refers to achieving the ability to perform such tasks on a particular stage which could not be done earlier. This is the natural growth and development of the child in which the genetic blueprint has special significance
 - **For example,** most of us people learn to walk at one year and speak up at two years of age, approximately. If the child is unable to attain maturity, then there is a problem in adopting or developing all these behaviours in this way.

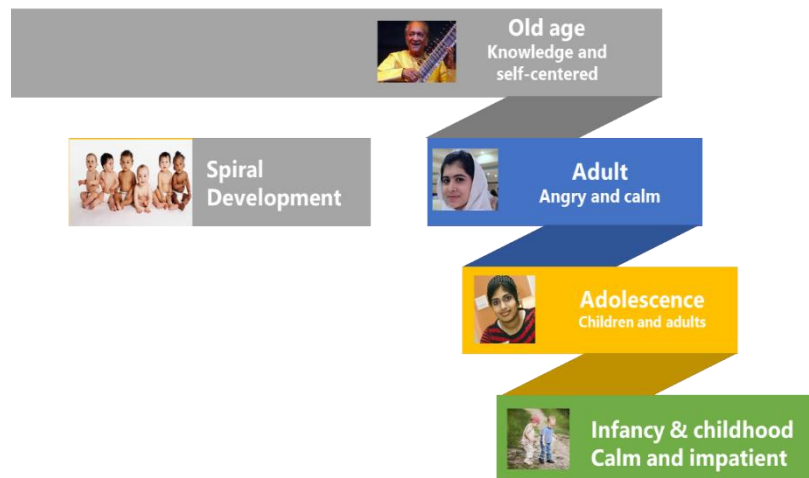
Developmental Principles

1. **Principle of Continuity-** Development is a continuous process. Development takes place initially at a rapid pace but later at a slower pace. Development of both physical and mental traits continues gradually until these traits reach their maximum growth.
2. **Principle of Individuality-**The development of each person is different or varied in its kind.
3. **Principle of Modify ability-** Development can be done through education process (in direction and speed).
4. **Principle of Definite and Predictable Pattern-** There is a definite form of development such as Cephalocaudal, that is, development proceeds from the head area to the foot area. Just as the head area will develop first, then from the torso area to the foot area, the process of development goes on. Even before birth and even after birth, this process goes on and proximodistal development takes place from the center of the body to outside. Growth occurs in a proximodistal sequence, that is, the individual's spinal cord first develops and then develops outward.
5. **Principle of Uniform pattern-**The pattern of development of infants in all parts of the world is one.
6. **Principle of Integration-**This principle implies that the development of the child proceeds both from general to specific and from specific to general. The child while busy in his specific activities arrive at a general rule. Again he gives a try-out of his general rule on certain specific activities. Thus, the development of the child integrates both general and specific activities.
7. **Principle of cumulative and Recapitulatory Development-**Development connects one after the other and also reappears after an interval, such as self-aggrandizement (Ego-centrism), which reappears in adolescence after infancy.
8. **Principle of Interaction between Heredity and Environment-** Hereditary determines the extent to which development is possible, the environment seeks opportunities and possibilities for development between those boundaries.

9. Principle of Spiral Development-

Development is cyclic rather than linear. Growth can be slow, rapid or even slower, after definite development, there is a break in time to organize development. And development does not occur at a

constant or steady pace, at a particular stage of development, after the child has developed to a certain level, moving forward, the development turns backward and then proceeds in a circular pattern as illustrated.



10. Principle of Constancy of Individual Differences: Individual differences in development remain constant. Those who grow slower from birth will continue to do so, while those who developed faster in their early years will continue to develop faster.

11. Principle of different rates of development: Different parts of the body develop at different rates. Different aspects of physical and mental qualities develop according to themselves and reach maturity at different times. In some areas, physical development may be rapid, while in others it may be slow.

Debates in Child Development

The debate on Heredity vs. Environment, Nature vs. Nurture, Continuity vs. Stage-like and Activity vs. Passivity are a continuing phenomenon in developmental sciences, resulting from emerging theoretical perspectives and research findings in Psychology and Educational fields.

1. Heredity vs. Environment—Heredity and the environment also play an important role in the development of personalities. There can be no clear answer to this question as to what position in the creation phase heredity plays its role and what part of the ecosystem is there. We may claim that an entity is a product of heredity and the environment. If the individual has a healthy heredity than there is good chance that individual grows into healthy personalities. The scope of developing a person into a healthy human being is increased by an equally good climate. Heredity, in the larger sense, means equality and inequality. Heredity is thus related to all variables that are not present at the time of the child's birth, but are calculated only at the time of conception.

- 2. Nature vs. Nurture**—Is development the result of nature or of nurture? Educationists and psychologists have debated on this issue countless times. When we speak about nature in child development, we talk about what is hereditary in children. On the other hand, when we are referring to the impact of the environment, we speak of nurture. People who are in favour of nature suggest that development is exclusively the duty of nature. Those who are in favour of nurture, on the other hand, claim that an individual's development depends on the environment, how the individual is nurtured. The question of nature, therefore, emerge vs. nurture. But if we examine the individual's development, it does not appear to be either the product of solely nature or the portion of solely nurture, but rather the product of both nature and nurture. Researcher D.O. Hebb said that asking whether behaviour is due to nature or to nurture is similar to asking whether the area of rectangle is due to its length or its width (Meaney, 2004). Just as both length and width are necessary to determine area, genes and environment interact to determine behavioural development. More recent research has continued to show how nature and nurture are inextricably intertwined in surprising and complex ways. We have left behind the era of nature versus nurture and entered the era of nature through nurture in which many genes, particularly those related to traits and behaviours, are expressed only through a process of constant interaction with their environment (Meaney, 2010).
- 3. Continuity vs. Stage like**—The discussion on continuity vs. Stage like question focuses on whether the changes in humans are gradual or sudden across the life cycle. The theory of continuity suggests that the growth of an individual is a smooth and gradual process. There is a general basis for the course of the entire developmental period. But the stage like growth shows that the shift is sudden over the course of life. It also implies that each stage of growth is unique and is distinguished by distinct characteristics. For example, if a child is at the stage of infancy, the behaviours unique to that stage will be exhibited, which will not be the characteristic of the same child at the stage of adolescence. In other words, as per the theory of discontinuity development is stage specific.
- 4. Activity vs. Passivity**—The two issues associated with the growth of children are activity and passivity. With the example of Preeti and Ruchi, two students, we can understand this. Both study in the same class, but even though she makes less attempts, one student has a greater potential to obtain high scores. Ruchi, on the other hand, with average cognitive capacity, works harder to explain concepts. While Preeti scores high initially in the first test, but gradually because of more hard work, Ruchi improves her achievement. The first problem of 'activity' implies that the person is interested in the production process. S/he does not acknowledge what is innately understood. Rather, s/he attempts to map her/his own development path. As we can see in the case of Ruchi's attempts to enhance her efficiency. In the other hand,' passivity' in growth means that individuals embrace what is coming in the direction of growth as it is. In other words, psychologists who view development as a function of individuals' passivity believe that the individual embraces change as it happens naturally.

Key Points

- ✓ In education the most important issue has always been development. The nature of Human development is dynamic.
- ✓ Growth and Development are two processes involved in the development process of the individual.
- ✓ Occasionally, the two terms are used interchangeably. However, they have different connotations.
- ✓ Principles of continuity, individual differences, sequentiality, generality to specificity, interrelation, interaction, rate differentiation, integration, and predictability are just a few of the underlying principles of growth.
- ✓ In terms of the essence of creation, psychologists have had several debates. There are four main debates in this discussion, i.e. Heredity vs. Environment, Design vs. Nurture, Consistency vs. Stagelike, and Action vs. Passivity.

Do and Learn

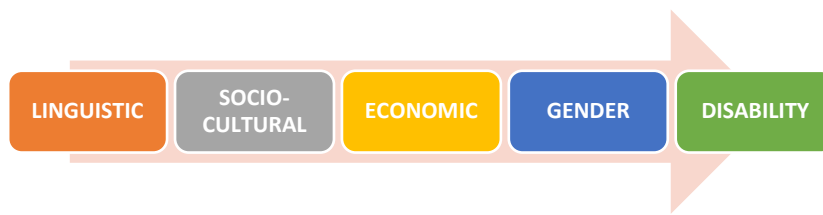
- ❖ Observe any 5 children from your surrounding of different age groups and identify at least five aspects of growth and development in them.

Self-Assessment

1. Why is it important to have a clear understanding of child development?
2. What are the various principles of Development?
3. How can you describe heredity as being more important than the environment? How would you evaluate your arguments?
4. What is the importance of the nature-nurture relationship in the study of child development?

2. Knowing Children in the Context of Diversity

Children around the world are in many ways similar to each other, but depending on the context in which a child grows up, the way development happens varies greatly. Context is a very broad concept that encompasses all of the settings in which development takes place. In multiple ways, children grow, including families, classrooms, communities and cultures. Let us see some of the various aspects of diversity found in the social groups of children around us:



1. **Linguistic Diversity**—India is multilingual, like many other nations in the world. In India, the language canvas is like a mosaic with an enormous variety of speech patterns woven together into an organic whole. Language labels are typically difficult to attach to the varying speech patterns around locations. The problem of delineating between languages and dialects with a reasoned-out case for taking a position is rarely decided upon. Multilingual is a countable proportion of the population. There are several languages used in social communication, often combinations of other languages; there are frequent changes from one language to another; there are multiple layered patterns of language use in many cultures, such as parents' use of the home or regional language with their children, while their native language is used with their elders.
2. **Socio-Cultural Diversity**—To a sociologist, cultural diversity refers to the variation of the world's human communities or traditions; to the variety of a group or entity or region's composition or varied cultures. It is called multiculturalism as well. In order to adapt to life conditions in different parts of the world, it requires the different social structures, belief systems, traditions, ways of living and methods that the societies adhere to. The term "cultural diversity" is also often used in a particular area or in the world to denote the variety of human communities or cultures. The vibrant fabric of Indian culture, one of the oldest known to mankind, has been woven over thousands of years by geographic, historical and religious influences. In many respects, the dynamic demographic profile left in our culture by the strikingly different-looking Aryans, Asians and Dravidians has been the leader of our socio-cultural diversity. Religion is the cornerstone of our cultural background in many forms. In India, this is intertwined with every aspect of life and culture and is a primary factor contributing to our diversity. In fact, due to the rich cultural heritage, each region within a state of India has its own identity very different from the neighbouring region and, of course, the other states of the world. The kinds of festivals, the ways of celebrating them, while some are the same across states, and the religious traditions contribute to each region's unique identity. The abundance and richness of the cultural heritage of the various regions of each state is what contributes to cultural diversity for children.
3. **Economic Diversity**—In our culture, the varied levels of social groups and the distance between them have made a growing contribution to diversity. The caste system became entrenched in our society from that time on and education was monopolised by the upper caste people who knew Sanskrit, and the seeds of class inequalities were also sown in our soil. Thus, the caste and class influence of money gave rise to economic disparities and added another dimension to the diversity of children.

4. **Gender Diversity**—Gender is a social construct in which a person's sex is a biological status. Gender diversity refers to the disparity in the social outlook for individuals vis-a-vis their sex around them. A female has been regarded as the weaker of the two since ancient times. As a girl, she must be protected by her father, as a wife- by her husband, as an old mother by her son. Her job is to give birth to children and take care of everyone in the family. A male is looked upon as the family's bread winner, head of the family, protector and saviour. The life experiences of a girl and boy were very different from this socially discriminatory status of males and females solely because of their sex. This distinction contributes tremendously to the diversity of children's lives to varying degrees across regions.
5. **Diversity, Disability and Ability**—Diversity in any social group has yet another dimension of disabilities and capabilities. Disability is a diversity classification that transcends all other indices like class, caste, race, religion and language. It represents the only minority group that anyone can become a member, anytime in life (Slorach, 2011). “The principle of diversity provides the foundation to accept disability as part of human variation. However, it is a sad reality that in practice our treatment of difference has been rather poor, especially in the context of disability” (Ability Junction, 2011). Disability is a widely misused and misunderstood concept, as illustrated by the World Health Organization (WHO) definition: Disability is an umbrella term, covering impairment, activity limitations, and participation restrictions. Impairment is a problem in body function or structure; an activity limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations. Thus, disability is a complex phenomenon, reflecting an interaction between features of a child’s body, and features/norms of the society in which he/she lives. When groups of children who are perceived as disadvantaged use a range of tactics to make their problems understood and embraced by society, the ambit of diversity grows. Simultaneously, subsumed in the definition of diversity is the awareness that some differences may cause an individual to face unique disadvantages in terms of social status and life opportunities, while others may not. Finally, diversity is not merely a descriptive term; it implies an intellectual stance that supports and respects cultural pluralism and encourages its protection within a society; the notion of diversity requires inclusion and reverence for community members; it is filled with a political viewpoint that is positively oriented to society's equality and justice.

Key Points

- ✓ In terms of the types of children and the ways in which they learn, classrooms are diverse.
- ✓ Due to the differences in experience, environment and socio-economic and cultural backgrounds, children learn in varied ways.

- ✓ Diversity in the classroom refers to learning styles, cultures, educational backgrounds, language, and parental support.
- ✓ Diversity means appreciating the differences between people and the ways in which these differences can be used as resources and lead to a working atmosphere that is richer, more innovative and more productive
- ✓ Acceptance and appreciation require the notion of diversity.
- ✓ It means recognizing that each person is distinctive, and recognizing our individual differences.
- ✓ It is the exploration of these differences in a safe, positive, and nurturing environment.
- ✓ It is about respecting each other and going beyond simple empathy to accept and celebrate within each person the rich dimensions of diversity.

Do and Learn

- ❖ Establish a relationship with your classmates and create a checklist with regard to all the dimensions listed above with the emphasis on diversity across them.
- ❖ Imagine you've been given the opportunity to teach students in class IX. How can you select your tactics and approaches for coping with diversity in the classroom?
- ❖ Define any five parameters that can be used to identify the diverse needs of students.

Self-Assessment

1. What do you mean by diversity?
2. Discuss some of the various aspects of diversity found in the social groups of children.
3. Define gender diversity and its impact on children's life.

3. Role of Family, School and Society in Children's Lives

Family, school, and society all have a huge effect on the lives of children. The school has a part to play in training the student for the future career, but also in making him a capable member of society. Teachers need to have an instrumental impact, inspire learners to work in groups, and focus their classes on engagement, teamwork and cooperation. The school, as the educational community, positions students at the centre of the educational process and assigns particular attention to their integral development as an essential factor for growth and progress.

Family: It is important to observe it in the sense of educational types of parenthood when we examine family effect on the social development of children. The first positive or negative social behavioural traits that children use in contact with peers are the results of the social

interactions that the child has acquired in the family and are directly affected by the parents' educational styles. For most children, families provide the primary background for growth. Today, families are of several types, but whether they are nuclear families, single-parent families, step-families, or adoptive families, all of them share one essential function: they are responsible for their children's socialisation. They instil their culture's norms, values, behaviours, and beliefs so that kids grow up to be positive, productive members of their community. Some families have more resources, others have fewer, and these disparities have an impact on the growth of children. Studies defined socioeconomic status (SES) as the social standing of an individual based on a combined measure of the income of a family and parental education and occupation. A higher SES typically helps a family to have more money to promote the production of healthy children. Low SES parents have less access to good parental care starting before the infant is born, and their babies are more likely to be born prematurely or at low birth weight and to develop other long-term health issues. On average, children who grow up in poverty are found to have poorer academic performance than those who do not. If you consider that parents with more resources are willing to afford books, educational opportunities, and other things that a family with less resources cannot provide, this makes sense. Furthermore, the developing brain and body are affected by poorer nutrition and less access to health care, affecting the capacity of a child to learn. Finally, very traumatic incidents, such as loss of income, relocation, divorce and breakup, and abuse, are more likely to be encountered by families with fewer resources. The response of children to such stress, especially when it is repeated, puts significant strains on their ability to grow optimally.

Berk (2008), describes the family styles of upbringing as a synthesis of the actions of parents in various life circumstances depending on which the family establishes a permanent educational atmosphere. He emphasises four types of education for parents:

- Authoritarian-Parents want to keep everything under control and do not display any signs of affection, attachment or comfort, and the result of such behaviour is that children do not grow a high degree of pro-social behaviour, yet hostility, quarrelsome, bad temper and self-destructiveness are filled in their behaviour.
- Authoritative-Parents have a loving, delicate relationship with the children's needs with strict limits on the children. The effect is the optimistic picture of the children about themselves and sometimes they achieve high academic achievement.
- Indifferent- Parents are emotionally detached and distant from children, indifferent to the actions of children, not interested in the progress of children. The consequence is child abuse and lack of supervision.
- Indulgent-Parents have a warm and loving relationship with them, but with too much pampering, so that these parents' children are often impulsive, irritable, without self-control and spoiled. The cause of depression and anti-social behaviour may also be the effect.

It is important to emphasise that studies have confirmed that parents' educational style is related to the degree of pro-social behaviour development and influences the person's socio-metric status. The children raised by the authoritarian style of education find friendships simpler and are well received in the groups, while the educational approaches where parents show the power by intimidation and punishments resulted in difficulties in the relationships of peers. In the social sense, the authoritative educational style is the most appropriate style because it offers the greatest opportunities with certain limitations for the development of children's self-confidence and freedom. Children who have desirable social skills and ability to solve problems are nurtured in families with open contact between parents. The warmth of parents and the presence of parents make children responsible for the impact of parents and allows for more successful socialisation. Especially interesting are the studies on parental emotional literacy that confirmed its impact on the actions of students, but they are necessary for more research that would provide a more detailed response to this complex influence of the family. In providing a sense of stability and interaction in the family system in which the children will grow, all the above displays of the results of research show in favour of family significance. And it serves as a starting point in the analysis of the social environment as well as in the direct correlation between the quality of the relationship between children and parents and the progress of social children.

School: School is another context for development. Children aged 6 to 17 spend 6 to 7 hours a day in school during the school year. Children learn academic skills in this sense, such as reading, writing and arithmetic, and older children and teenagers are trained for higher education or workforce entry, but schools also play a role in socialising children to become responsible citizens. Today's school's significance is reflected in the sense that the school should be a growing environment in which students feel successful and fulfilled. The school must be the place where they can demonstrate their knowledge, skills and talents, resolve disputes non-violently, learn in an engaging and imaginative way, establish teamwork and relationships with others more effectively, be more compassionate, and use the knowledge and experiences gained in daily life. Since school will help the social development of the students with its impact and it is the practise of empathy and compassion exercises, allowing all students to feel supported, valued and appreciated. It is also important to promote the creation of real expectations for each student, along with the required adaptation, dialogue about the role of failures in the learning process, and learning how to learn. It is important to build transparency and proper relationships with oneself and others, to teach students to solve problems and make choices, to adjust negative, stagnant developmental and active school situations, to facilitate active learning and self-evaluation, to use self-disciplinary educational techniques. Several studies illustrate the significance of the class in which the teacher not only teaches the material of the class, in which it is not only done frontally in a conventional way, but leaves space for interpersonal contact between students. The school that is needed today is the school that promotes students' overall growth, respects diversity, and promotes class individualization and socialisation. The student must

gain knowledge and grow imagination in the classroom, with an active role, and the teacher needs to promote social awareness and collaboration between the parents and the school. In addition to gaining knowledge, we need the school as a modern institution based on cultivating the personality of the student and his/her individuality as a full young person who is an equal member of the social group. The school today, however, is viewed as a closed institution for innovation and imagination, without a spirit of solidarity, where talent is not seen as an advantage, and empathy, expression and comprehension of your own emotions, self-control, freedom, adaptability, popularity, ability to solve problems with others, persistence and friendly conduct are not educational priorities. The school thus structured will not attract the youth of today and respond actively to their needs and expectations. Furthermore, the relationship between the school and parents as a significant factor of children's social development has been increasingly emphasised in previous years, so there is growing discussion in recent years about developing a model of educational partnership with parents. The model suggests the need for a shift in the roles of parents and teachers that will support, promote and lead the students' crucial and self-directed teaching process and social growth. Suitable pedagogical upgradation is required as they will take on this role, which will enhance their theoretical and practical knowledge, both parents and teachers. There is still a common view of children's upbringing and education that implies separation from learning basic school skills to encourage feelings of self-worth, resistance and protection. The modern pedagogical model, however, is based on the belief that the self-respect, competence and resistance of children will develop when they really encounter accomplishments in school and at home, when they really begin to enjoy learning and learning about their achievements.

Society: Many aspects of development are influenced by the features of the society in which children live. The range and quality of social services available to children and their families are deeply impacted by economic adversity in society. The standard of neighbourhood schools impacts the available educational opportunities and out-of-school activities. The amount of time children spend outside their homes and the kinds of activities they do with this time is influenced by whether a neighbourhood is safe or not. In the environment, the amount of noise can physically impair their hearing or hinder their learning and social contact with others. Social environments may facilitate healthy growth or expose children to environmental contaminants, like breathing polluted air, consuming contaminated water, and chemicals that can cause physical and neurological damage. Culture is also one of the dimensions of society, and not only individual differences, but also community differences, such as those between different cultures, alter the general findings of research on development. A very strict parenting style, for example, would probably have a different impact on children raised in culture who perceive strictness as an assignment of love and care than in one that sees the same actions as a sign that the child is not liked by the parent.

Key Points

- ✓ The influence of the family, peers and school, especially during middle childhood is evident through the social development of children's.
- ✓ Even though the influences of the school and peers are involved when they start school, the influence of the family is still present in the middle childhood era.
- ✓ The family will assist with the proper social development of the students through its assistance and cooperation with the school.
- ✓ It is evident that the social development of children is under the influence of family, peers and school, especially during middle childhood.
- ✓ During the development of school events that promote social interactions between children, the reciprocal cooperation of family, school and society can be manifested.
- ✓ The teacher plays an important role in the lives of children, which should be strengthened with activities that foster cooperation and mutual respect among them.
- ✓ The school is an incredibly important location because it facilitates the creation of desirable personality traits such as self-respect, emotional intelligence, and pro-social behaviour modelling.
- ✓ A teacher with a range of teaching strategies, processes and social modes of work helps the child to contribute to social experiences that improve the quality of social development of children.

Do and Learn

- ❖ List any five activities for establishing the linkages between family and society by school authority.

Self-Assessment

1. What are five events that can be used to link the school and the society?
2. What role does school play in the education of children from a diverse background?
3. How family, school and society play an important role on the social development of the children.

4. Knowing Child as a Researcher

The concept of children as active researchers is rapidly gaining credence in response to changing perspectives on children's status in society. Such perspectives have shifted in the wake of the UNCRC (1989) towards a recognition of children as social actors in their own right rather than parts of an 'other' such as part of a family or school. Children are party to the subculture of childhood which gives them a unique 'insider' perspective that is critical to

our understanding of children's worlds. A good place to start is an examination of the term 'Knowing child as a researcher' and unpick what this really means, beginning with the historical trail which has led us to this point. The early years of developmental psychology bequeathed a dominant legacy of children as 'objects' of research, of research being carried out 'on' children. This perspective was promoted by physical and biological sciences which used the model of animal research to measure development. As late as the 1980s Skinner's (1972) operant- conditioning principles were still being applied in child research. 'The child is portrayed, like the laboratory rat, as being at the mercy of external stimuli'. But later on after 1989 children began to be seen as 'subjects' or 'participants' rather than 'objects' and research 'with' children became common practice. This was accompanied by a greater emphasis on listening to children, although frequently at a tokenistic level, and to some extent perspectives were still bound up with images of children as 'adults in waiting' and of childhood as a preparation for adulthood. A realisation of children as social actors in their own right, agents in their own worlds provided the momentum to propel agendas towards research 'with' children and to the gradual acceptance that children could be more than participants in research, they could be co-researchers. This new era has seen children invited onto steering groups and involved in some aspects of data collection. However, criticism is still being levelled at the tokenism of some of this participation, the adult manipulation, unequal power-relations and the adult focus of such research. It is the adults who frame the research questions, choose the methods and control the analysis. For the most part, children are unequal partners. This brings us to a consideration of children as researchers in their own right, or 'active researchers'. Such initiatives acknowledge the importance of affording children and young people a voice which is listened to and heard by adults.

Why is it important that children engage in their own research?

Unlike the disability or race premise, in which the able-bodied or white person has no first-hand experience of what it is to be disabled or black, there is an argument that we have all been a child at some stage and have all experienced a childhood of some sort. Why, therefore, is it so important that children engage in their own research? Surely adults can do this and can empathise with their one-time child perspective? The response to this is that adults simply cannot become children again because they cannot discard the adult baggage they have acquired in the interim and will always operate through adult filters, even if these are subconscious filters. It would also be unwise to try and apply principles of a childhood from a generation ago to a contemporary childhood. Above all we need to be able to learn and understand about the lived experiences of children of today. Children observe with different eyes, ask different questions – they ask questions that adults do not even think of - have different concerns and have immediate access to peer culture where adults are outsiders. The research agendas children prioritise, the research questions they frame and the way in which they collect data are substantially different from adults and all of this can offer valuable insights and original contributions to knowledge. If the case for 'why?' can be made, an equally convincing case needs to be made for 'why now?' Hart's (1997) 'ladder of

participation' has been criticised for its overly simple linear approach to the concept of participation but it does provide a working framework for fruitful discussion and has been influential in moving the debate forward. One of the outcomes of this debate is that genuine participation cannot happen without some power sharing and that this will only occur when we move beyond consultation and joint decision making to a position where children are empowered to take the lead on some of the issues which directly affect their lives. Children undertaking their own research about matters which concern them is a significant step in this direction.

Barriers to children's empowerment as proactive researchers

Skeptics contend that children are not mature enough to participate in their own research, and within this maturity controversy, age is widely used as a delineating factor. However, this view, primarily from an earlier discipline of developmental psychology, which ties competence to age and 'stages' of development, is strongly challenged and supplanted by the theory that social experience is a more accurate predictor of maturity and competence. The competency of children is 'different from' not 'less than' the competence of adults. The argument that children do not have enough understanding and information does not stand up to close examination. In certain aspects of life, adults certainly have greater experience than children, but with respect to childhood itself - in the sense of what it is like to be a child - it is children who have the expertise. If the fields of research that attract children emanate directly from their own experiences, then no adult, except the most qualified ethnographer, can expect to obtain the abundance of information inherent in children's own understanding of their worlds. To dismiss children's research efforts as simplistic and to assume that adults should study the subjects more effectively ignores some important points:

- Children excel in getting answers from within their peer group in ways that due to power and generational problems would not be feasible for adult researchers.
- Their work contributes to the body of information from a true child's viewpoint about children's experiences.
- The dissemination and, ultimately, ownership of studies carried out by them is an effective vehicle for the voice of the infant.
- The experience of engaging as active researchers is an inspiring mechanism that leads to a virtuous cycle of increased trust and self-esteem that results in more active engagement of children in other areas that impact their lives.

While the experience and awareness of childhood and children's lives of children is clear, their lack of research knowledge and skills is a real obstacle to children participating in research, not least because of validity and rigour issues. It soon becomes clear that these qualities are not inherently synonymous with being an adult, they are synonymous with being a researcher, and most researchers have undergone some sort of training, reflecting on the skills necessary to conduct research. Without experience, many, maybe most, adults will not be able to conduct research. Therefore, it would seem that not their lack of adult status but

their lack of research skills is an obstacle to inspiring children as researchers. Why not teach them, then? The task of distilling the dynamics of the research process is exceedingly difficult without losing its core values.

Practical and ethical problems for child researchers

However, problems and questions arise for child researchers, as they do for adult researchers and for children who are the subjects of research. How can young researchers work with adults on reasonably equal, informed and unpressured terms? How much responsibility is it fair to expect children to carry and how much should adults intervene to support them or to control the research? How can adults avoid exploiting or manipulating children, as in the participation ladder mentioned earlier? How much time can children be expected to give to research beyond the work they may already do at school, at home or outside the home, or begging? Should they be paid and, if so, how much, and in cash or in kind? There can be further problems with research expenses, and access to research meetings for children who have to have an adult escort. When research is conducted through schools, teachers may need to be, or insist on being, involved and this can set up new adult-child power imbalances to attend to. When child researchers seem to be over-impressed with, for example, the views of officials which they have collected, should adults encourage them to be more critical? Who should have final control over the data and any reports, the children or adults or both jointly? And even when all the complex arrangements have been made and children arrive to give their thoroughly researched presentations to world summits, they may be silenced and i For child researchers, however, concerns and problems occur, as they do for adult researchers and for children who are the subjects of study. How can young researchers operate on fairly equal, educated and unpressurized terms with adults? How much is it fair to ask children to bear responsibility and how much can adults interfere to help them or monitor the research? How, as in the participation ladder described earlier, can adults avoid abusing or manipulating children? How much time can it be expected for children to devote to study beyond the work they can do at school, at home or outside the home, or begging? Are they going to be paid and, if so, how much, in cash or in kind? Further problems with research costs and access to research meetings for children who have to have an adult escort can arise. Teachers can need to be, or insist on being, active as research is carried out across schools, and this may throw up new imbalances in adult-child control to attend to. If, for instance, child researchers appear over-impressed with the opinions of officials they have gathered, should adults allow them to be more critical? Who should have final influence, children or adults or both together, over the data and any reports? And they can be silenced and overlooked even after all the complicated arrangements have been made and children arrive to give their deeply studied presentations at world summits.

Key Points

- ✓ The rising literature on children as scientists indicates that they are still an underestimated, under-used resource.
- ✓ Now that women's research has become much more informative because women are involved as researchers, similarly the scope of children's research could be extended by including children as researchers in several processes, levels and phases of the process.
- ✓ Children are the greatest source of learning about their own perceptions and experiences.
- ✓ The children can be a means of access to other children, even those who can be shielded from odd adult scientists.
- ✓ The novelty and immediacy of study reports for children will draw greater attention and interest than many adult studies in using the data.
- ✓ Doing research gives children (especially those who are disadvantaged) more skills, trust, and motivation to overcome their challenges than adult researchers working on their behalf might have.

Do and Learn

- ❖ Conduct a small research investigation to study the role of friends in framing the attitude of the children of age group 9-13.

Self-Assessment

1. What obstacles did you face as a young researcher? And what is the best way to deal with these difficulties?
2. Why is it important for children to perform their own research?
3. Identify ethical dilemmas that occur during research and how to overcome them?

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LESSON 2

LONGITUDINAL AND CORSS-SECTIONAL STUDIES

Ranjan Kumar Sahoo

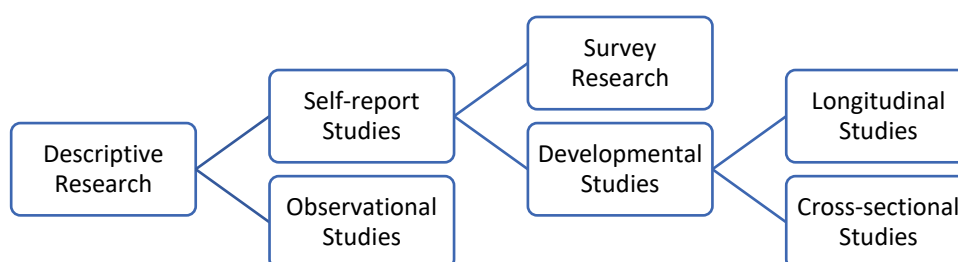
Learning Objectives

On completion of this lesson, learners will be able to

- State the purpose of longitudinal and cross-sectional studies.
- Identify the key features of both longitudinal and cross-sectional studies.
- Distinguish between longitudinal and cross-sectional studies.
- Describe the different types of longitudinal studies.
- State the strength and weakness of both longitudinal and cross-sectional studies.

Introduction

Essentially most of the research studies undertaken in education are descriptive in nature. Descriptive studies are concerned with the assessment of attitudes, opinion, conditions and procedures. L.R Gay defines “descriptive research involves collecting data in order to test hypothesis or to answer questions concerning the current status of the subject of study”. Descriptive studies have been classified in different ways. But one of the logical ways to categorise descriptive method is on the basis of how the data are collected. On the basis of data collection this method has been classified into two categories: self-report studies; and observational studies. A self-report research study is that where information is collected from individuals using tools like questionnaire, interview, standardise achievement or attitude scale whereas in an observational study, the current status of a phenomenon is determined not by asking but by observing. The self-report studies are further categorised into different types such as survey research and developmental studies. Both longitudinal and cross-sectional studies come under the developmental studies. Developmental studies are generally concerned with behavioural variables which differentiate a child at different stage of age, growth or maturation. Developmental studies investigate the growth and development of the child in the areas of physical, intellectual, emotional and social development. The details about both longitudinal and cross-sectional studies are as follows:



A. Longitudinal Studies

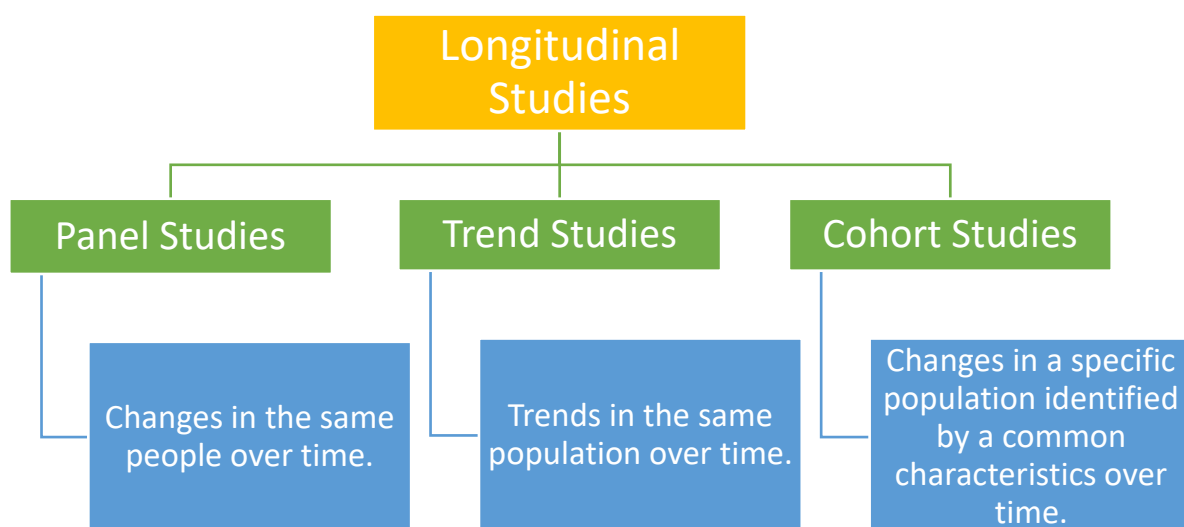
When a same group of children are studied over a period of time as the children progress from one stage to another stage, at that time longitudinal studies are used. Under this method the same sample of subjects is studied over an extended period of time. We can also say that the longitudinal study gathers data over an extended period of time where successive measures are taken at different points in time from the same respondents. These studies are extremely useful for studying the dynamics of a topic or an issue over time. Hence, basic features of longitudinal studies are:

- Single sample over extended period of time.
- Enables the same individuals to be compared over time.
- Micro-level analysis.

Types of Longitudinal Studies

According to Ary, Jacobs, Sorensen and Razavieh (2010) there are three different designs which are used in longitudinal studies: panel studies, trend studies, and cohort research. The details are as follows:

Figure: Types of Longitudinal Studies



1. Panel Studies: In a panel study, the same subjects are studied several times over an extended period of time. For example, a researcher studying the development of Intelligence Quotient (IQ) in elementary school children would select a sample of first-graders and administer an IQ test. This same group would be followed through successive grade levels and tested each year to assess how IQ develop over time.

2. Trend Studies: A trend study differs from a panel study in which different individuals randomly drawn from the same general population and studied at intervals over a period of

time. This continuing trend study permits researchers to examine recorded data to establish patterns of change that have already occurred in order to predict what will be likely to occur in the future.

3. Cohort Studies: In a trend study, different individuals are randomly drawn from the same general population and studied at intervals over a period of time. However, in a cohort study, a specific population is followed over a length of time but selective sampling within that sample occurs. This means that some members of the group may not be included each time.

Strength of Longitudinal Studies

- It allows for intensive studies of individuals because the investigator accumulates data for the same subjects at various levels.
- It helps in research on human growth and development.
- It is useful for establishing causal relationships and for making reliable inferences.
- It brings the benefits of extended time frames.
- It allows in-depth and comprehensive coverage of a wide range of variables.
- It reduces sampling error as the study remains with the same sample over time.
- It helps to provide clear recommendations for intervention to be made.
- It gathers data contemporaneously rather than retrospectively.

Weakness of Longitudinal Studies

- It is more time-consuming and expensive to conduct because the researcher must keep up with the subjects and maintain their cooperation over a long period of time.
- It demands an extended commitment from the researcher.
- It is difficult to maintain the cooperation with subjects for an extended period of time.
- Longitudinal studies in education pose considerable problems of organization due to the continuous changes that occur in pupils, staff, teaching methods and the like.
- There is possibility of sample mortality over time.
- There is possibility of control effects as repeated interviewing of the same sample influences their behaviour.

B. Cross-sectional Studies

When different children at various stages of development are studied at a single point of time at that time we use cross-sectional studies. The basic difference between longitudinal and cross-sectional studies are in a longitudinal study a same group of children are studied over a period of time whereas in a cross-sectional study different group of children are studied at one point of time. Hence, we can say the basic features of cross-sectional studies are:

- Large-scale and representative sample.
- Different groups of samples at one point of time.
- Enables different groups to be compared at a single point of time.
- Macro-level analysis.

Strength of Cross-sectional Studies

- When we want to learn the characteristics of typical children at various stages, the cross-sectional method is preferred because of the greater possibility of obtaining large samples with this technique.
- When we want to study change per se, the longitudinal method is preferred since it follows the same subjects through their development.
- Cross-sectional studies are less expensive as it does not require years to complete.
- Cross-sectional studies are comparatively quick to conduct.
- Limited control effects as subjects only participate once.
- Stronger likelihood of participation as it is for a single time.
- Useful for charting population-wide features at one point in time.

Weakness of Cross-sectional Studies

- There is possibility of chance difference between samples which may seriously bias the results.
- There is possibility of extraneous variables creating difference between the populations sampled.
- Sampling in the cross-sectional study is complicated because different subjects are involved at each age level and may not be comparable.
- It does not permit analysis of causal relationships.
- It is unable to chart individual variations in development or changes, and their significance.
- Sampling not entirely comparable at each round of data collection as different samples are used.
- Omission of a single variable can undermine the results significantly.
- Unable to chart changing social processes over time.

Key Points

- ✓ Both longitudinal and cross-sectional studies come under the developmental studies.
- ✓ Developmental studies are generally concerned with behavioural variables which differentiate a child at different stage of age, growth or maturation.

- ✓ When the same group of children are studied over a period of time as the children progress from one stage to another stage, at that time longitudinal studies are used.
- ✓ When different children at various stages of development are studied at a single point of time, at that time we use cross-sectional studies.
- ✓ The basic difference between longitudinal and cross-sectional studies is that in a longitudinal study a same group of children are studied over a period of time whereas in a cross-sectional study different group of children are studied at one point of time.
- ✓ There are three different designs which are used in longitudinal studies: panel studies, trend studies, and cohort research.
- ✓ In a panel study, the same subjects are studied several times over an extended period of time.
- ✓ In a trend study, different individuals randomly drawn from the same general population and studied at intervals over a period of time.
- ✓ In a cohort study, a specific population is followed over a length of time but selective sampling within that sample occurs.

Do and Learn

- ❖ Identify two or three situations relating to your own area of interest where you think cross-sectional study might be more beneficial and consider why this might be the case.
- ❖ Take three different examples where panel, trend, and cohort research design might be used.

Self-Assessment

1. What are the key features of both longitudinal and cross-sectional studies?
2. Why might a longitudinal research design be superior to a cross-sectional one?
3. What are differences between panel and cohort designs in longitudinal research?
4. What are strengths and weaknesses of longitudinal and cross-sectional studies?

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LESSON 3

CASE STUDY METHOD

Ranjan Kumar Sahoo

Learning Objectives

On completion of this lesson, learners will be able to

- Explain case study method and how it can be used in educational research.
- Describe the characteristics of case study research.
- Describe various types of case.
- Distinguish among various types of case study.
- Describe how to conduct a case study.
- Identify the steps in conducting a case study.

What is a case study?

A case study is a type of research that focuses on a particular unit, whether that unit is a person, a family, an organisation, a cultural group, or even the whole community. The case study puts more focus on the complete examination and interrelationships of a small set of incidents or circumstances. Thus, case study is basically a detailed and intensive study of a particular case. The purpose of the case study approach is to trace all the peculiarities and variables that account for the behavioural characteristics of the case as an integrated whole. It offers subjective evidence rather than quantitative. This offers a thorough understanding of the phenomena and not able to generalize beyond the knowledge. In physical science each unit is the true representative of the population, but in Social Science, the unit or the case may not be a true representative of the population. There are individual differences as well as intra-individual differences. Therefore, on the basis of experience and knowledge, predictions cannot be made. In short, we may conclude that the case study method is a type of qualitative research where a person or a circumstance or an organisation is carefully and thoroughly observed; efforts are made to examine each and every feature of the particular unit in minute details, and then generalisations and inferences are drawn from case data.

In education, case studies are usually carried out to assess the background, atmosphere and characteristics of children with difficulties. The primary goal of the case study is to evaluate the causes and the interaction between the factors that have resulted in the current behaviour or status of the subject of the study.

Case studies use different methods to collect evidence, such as interviews, observations, archives, record analysis and artefacts, and do not rely on a particular technique. The

difference is that whatever techniques are used, they are all based on a particular phenomenon or individual (the case) and aim to gather evidence that can help to explain or perceive the focus of the study.

Some of the definitions of case study method are as follows:

According to P.V. Young, “Case study is a method of exploring and analysing the life of a social unit- be that unit a person, a family, institution, culture group, or even an entire community.”

According to Merriam, “A case study is a detailed examination of one setting, or a single subject, a single depository of documents, or one particular event.”

According to Stake, “Case study is not a methodological choice but a choice of what is to be studied.”

According to Miles and Huberman, “A case study as an investigation of a phenomenon that occurs within a specific context.”

According to Yin, “Case study research as a research strategy that is an all-encompassing method covering design, data collection techniques, and specific approaches to data analysis.”

Characteristics of Case Study Method

The several characteristics of the case study method that follow from the above meaning and definitions are as follows:

- It is a qualitative and holistic approach to studying a phenomenon.
- It provides an in-depth description of a single unit. The “unit” can be an individual, a group, a site, a class, a policy, a program, a process, an institution, or a community.
- It typically includes multiple sources of data collection over time.
- It is an all-encompassing research method.
- It seeks to explain the full set of behaviours of the subject and the connection of these behaviours to the background and environment of the subject.
- It provides a chronological narration with a rich and vivid description of events relevant to the case.
- It highlights particular events that are relevant to the case.
- It integrally includes the researcher in the case.
- It explores the reciprocal inter-relationship of causal factors.
- It studies the behaviour pattern of the concerning unit explicitly and not by an indirect and abstract approach.

Types of case

Yin (2009) distinguishes five types of case.

The critical case. Here the researcher has a well-developed theory, and a case is selected on the grounds that it will allow a better understanding of the circumstances.

The extreme or unique case. The extreme or unique case is, as Yin observes, a common focus in clinical studies.

The representative or typical case. When a case is often selected not because it is unusual or exceptional, but because either it represents a wider group of cases or it provides an apt framework for addressing certain research questions, it is known as a representative or typical case. This helps the investigator to observe crucial social structures and processes.

The revelatory case. The basis for the revelatory case is ‘when a researcher has a chance to observe and examine a phenomenon previously inaccessible to scientific investigation’

The longitudinal case. When a case may be picked because it offers the opportunity to be studied at two or three junctures, it is known as a longitudinal case. However, many case studies have a longitudinal aspect, so that it is more likely that a case will be chosen both because it is suitable for the research questions on one of the other four factors and also because it can be studied over time.

Types of Case Study

There are several types of case study. In terms of their findings, Yin (1984) distinguishes three such types: (a) exploratory (as a pilot to other studies or research questions); (b) descriptive (providing narrative accounts); (c) explanatory (testing theories).

In line with Yin (1984), Merriam (1988) has also suggested three types of case study: (a) descriptive (narrative accounts); (b) interpretative (developing conceptual categories inductively to test initial assumptions); (c) evaluative (explaining and judging).

Stake (1994) identifies three main types of case study which are as follows:

Intrinsic case studies: The intrinsic case study is done in order to explain a specific case that in any way may be special, exceptional, or different. Hence, when a case is rare and has significance and the case itself is of interest, it is called an intrinsic case. It does not necessarily represent other cases or a broader trait or topic for inquiry. The case in and of itself is of interest to the researcher. The study of a bilingual school illustrates this form of a case study.

Instrumental case studies: In an instrumental case study, the researcher selects the case because it represents some other issue under investigation and the researcher believes that this particular case will either offer information or help to clarify the problem. The case is illustrative of something under investigation. For example, the issue of language learning might be studied in a case study of a bilingual school.

Multiple or collective case studies: Case studies may also include multiple cases. When a group of individual studies or multiple cases are conducted to obtain a fuller picture or to

offer insight into an issue is defined as collective case studies. Here, the investigator believes that the phenomenon is not peculiar to a single unit and studying multiple units can provide better illumination. For instance, to explain alternatives approach to school choice for children, a case study researcher might examine multiple schools.

Steps in Case Study Method

A researcher should take a methodical approach to case study research in order to ensure objectivity and clarity. The steps involved in making a case study are as follows:

1. **Identify and determine research questions:** In the case study research process, this step is perhaps the most significant step. The researcher begins with determining the objective of the study by defining the research object and the issue surrounding it. The research object can be a program, an entity, a person or a group of people.
2. **Define the case under study:** This step is quite similar to that of other research approaches in which the researcher defines the variables under investigation (i.e., in quantitative research). In this step the researcher decides on the number of cases to choose (single or multiple) and the type of cases to choose (unique or typical).
3. **Collection of data:** In this phase, the researcher now collects the data with the objective of gathering multiple sources of evidence with reference to the problem under study. The researcher determines which techniques and instruments will be used in collection of data. Observation, interview, photo, questionnaire are some of the instruments used in case study research for in-depth data collection.
4. **Evaluate and analyse the data:** In this step the collected data is categorized, tabulated and cross checked to address the research question of the study. The researcher makes use of varied methods to analyse the collected data to find links between the search object and the results with reference to the original search questions. Throughout the process of evaluation and analysis, the researcher also remains open to new opportunities and insights. As the case study method uses multiple methods of data collection and analysis techniques, it offers researchers the opportunity to triangulate data to strengthen the findings and conclusions of the research.
5. **Prepare the report:** This is the last step and the purpose of this phase is to convey the findings of the study to the reader. The results should be presented in such a manner that it allows the reader to evaluate the findings in the light of the evidence presented in the report. The results are corroborated with sufficient evidence showing that all aspects of the problem have been adequately explored. Further, the report should include every detail starting from acknowledgement of all participants, statement of the problem, research questions, research design, instruments used in data collection, analysis techniques, conclusion with respect to the answer to the research questions and suggestions for further research.

Advantages of Case Study Method

There are several advantages of the case study method that follow from the various characteristics outlined above. Some of the advantages are as follows:

- It helps in conceptual clarity.
- It gives new insight into phenomenon.
- It permits investigation of otherwise inaccessibility.
- It seeks to understand the whole case in the totality of the environment.
- It helps reader to understand fully the behaviour pattern of the concerned unit.
- It helps with constructing new theories, developing or extending concepts, and exploring the boundaries among related concepts.
- It provides holistic elaboration and permit the incorporation of multiple perspectives or viewpoints.
- It has the ability to make visible the details of social processes and mechanisms by which one factor affects others.
- It has ability to capture complexity and trace processes over time and space.
- It can be undertaken by a single researcher without needing a full research team.
- It uses multiple instruments for data collection which helps in data triangulation.
- It helps in obtaining real and enlightened record of personal experiences which very often escape the attention of most of the skilled researchers using other techniques.

Limitations of Case Study Method

A case study generally suffers from the following limitations:

- It is difficult to study objectively.
- It is more time consuming.
- It can be used only in a limited sphere.
- Although it can have depth, it inevitably lacks breadth.
- There is possibility of researcher bias as the researcher's own perception decide which behaviour to observe and which behaviour to ignore.
- There is also possibility of lack of information as sometimes parents and relatives do not like to mention the weakness of the case or individual.
- The results may not be generalizable as the dynamics of one individual or one social unit may bear little relationship to the dynamics of others.

Key Points

- ✓ A case study is basically a detailed and intensive study of a particular unit (case), whether that unit is a person, a family, an organisation, a cultural group, or even the whole community.
- ✓ Yin (2009) distinguishes five types of case: the critical case; the extreme or unique case; the representative or typical case; the revelatory case; and the longitudinal case.
- ✓ There are several types of case study. Stake (1994) identifies three main types of case study: intrinsic case studies; instrumental case studies; and multiple or collective case studies.
- ✓ The intrinsic case study is done in order to explain a specific case that in any way may be special, exceptional, or different.
- ✓ In an instrumental case study, the researcher selects the case because it represents some other issue under investigation and the researcher believes that this particular case will either offer information or help to clarify the problem.
- ✓ When groups of individual studies or multiple cases are conducted to obtain a fuller picture or to offer insight into an issue, it is defined as collective case studies.
- ✓ The steps involved in making a case study are: identify and determine research questions; define the case under study; collection of data; evaluate and analyse the data; and prepare the report.

Do and Learn

- ❖ Identify two or three situations of your interest where you think case study method might be beneficial.
- ❖ Conduct a case study to assess the background, atmosphere and characteristics of a child with difficulties.

Self-Assessment

1. What is a case study?
2. What are the characteristics of case study research?
3. How many types of case are there?
4. What is the difference between intrinsic case studies and instrumental case studies?
5. What are the strengths and weaknesses of case study method?
6. What are the steps involved in a case study research?
7. Determine which kind of case study would be conducted in each of the following:
 - A researcher wants to study how elementary and secondary school Principals in a large urban district use technology in their work.
 - A researcher wants to study the life of a home-schooled child.

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LESSON 4

OBSERVATION, INTERVIEW AND DIARIES AS MEANS OF OBTAINING DATA FROM CHILDREN

Ranjan Kumar Sahoo

Learning Objectives

On completion of this lesson, learners will be able to

- Explain the role of observation, interview and diaries as data gathering techniques.
- Describe the characteristics of a good observation.
- Distinguish among various forms of observation
- Explain guidelines that a researcher should follow when using direct observation as a data-gathering technique
- Describe the different types of interview techniques.
- Describe the procedure to be followed in conducting an interview.
- Define focus group.
- Define diaries and discuss its advantages and disadvantages.

Observation

Meaning: Observation method is one of the commonly used method of data collection. Observation is the process in which one or more person observe what is occurring in some real-life situation. It is a purposeful, systematic and selective way of watching and listening to an interaction or phenomenon as it takes place. There are many situations in which observation is the most appropriate method of data collection. It is appropriate in situations where full and/or accurate information cannot be elicited by questioning. Further, when you are more interested in the behaviour than in the perceptions of individuals, observation is the best approach to collect the required information. This method is used to evaluate observable behaviour both in a controlled and uncontrolled situations.

Types of Observations

1. **Structured Observation:** When the observation is characterised by a careful definition of the unit to be observed, the style of recording the observation, standardised conditions of observation at that time, it is called as structured observation.
2. **Unstructured Observation:** Unstructured observation is just opposite to the structured observation. When the observation is not planned or designed previously, it is called as unstructured observation.

3. **Participant Observation:** When the observer directly observes the situation making himself a member of the group is called a participant observation. Here the observer directly experiences the activities of the members of the group. The observer can observe the natural behaviour of people in the group.
4. **Non-Participant Observation:** When the observer is not a part of the group and he observes the situation from outside it is called non-participant observation. It is used basically when the presence of the observer may affect the behaviour of the subject.
5. **Uncontrolled Observation:** When the observation is carried on in a natural setting without making any change in the situation, it is known as uncontrolled observation.
6. **Controlled Observation:** When the observation situation is designed according to the experimental procedure and it is definite and pre-planned, it is called controlled observation.

Steps for Observation

1. **Planning for the observation:** At this stage the researcher must define the specific activities or the aspects of behaviour to be observed. Because it is not possible to collect data on everything that happens, the observer must decide beforehand which behaviours to record and which not to record. The researcher should determine the nature of the groups of the subjects to be observed, the scope and length of the observation. The tool to be used during the observation should also be decided at this stage.
2. **Executing the observation:** This is the stage when the real work of observation is done. The researcher should make arrangement of the specific conditions for the subject or subject to be observed. At this stage the researcher has to handle the recording instruments properly.
3. **Recording the observation:** At this stage the observer should develop specific procedures for recording the behaviour. Recording of the observation may be done at the time of observation or soon after the observation is over. If the recording is done at the time of observation the observer may record it in writing or he/she may use electronic medium like- tape recorder, camera etc. But when the recording is made after the observation is over, at that time the observer may record the facts in writing for different aspects of behaviour.
4. **Interpreting the observation:** The next step in observation is to interpret the recorded data. It must be done without any bias, or influence of his/her personal attitude and values. The emotional involvement of the observer or his selective perception may increase the subjectivity of interpretation.

Characteristics of Good Observation

Observation, as a data-gathering process, demands rigorous adherence to the spirit of scientific inquiry. The following standards should characterize observers and their observations:

- Observation is carefully planned, systematic, and perceptive. Observers know what they are looking for and what is irrelevant in a situation. They are not distracted by the dramatic or the spectacular.
- Observers are aware of the wholeness of what is observed. Although they are alert to significant details, they know that the whole is often greater than the sum of its parts.
- Observers are objective. They recognize their likely biases, and they strive to eliminate their influence on what they see and report.
- Observers separate the facts from the interpretation of the facts. They observe the facts and make their interpretation at a later time.
- Observations are checked and verified, whenever possible by repetition or by comparison with those of other competent observers.
- Observations are carefully and expertly recorded. Observers use appropriate instruments to systematize, quantify, and preserve the results of their observations.
- Observations are collected in such a way as to make sure that they are valid and reliable.

Advantages of Observation

- It observes the direct behaviour of the object.
- It records behaviour just at the time of its occurrence.
- It is particularly suitable in studies which deal with subjects/respondents who are not capable of giving verbal reports of their feelings for one reason or the other.
- The subjective bias is eliminated under this method of data collection, if observation is done accurately.
- The information obtained under this method relates to what is currently happening; it is not complicated by either the past behaviour or future intentions or attitudes.
- This method is independent of respondents' willingness to respond and as such is relatively less demanding of active cooperation on the part of respondents as happens to be the case in the interview or the questionnaire method.

Disadvantages of Observation

- Although observation method may be used to describe a wide variety of behaviours however, cognitive phenomenon, such as attitudes, motivations, expectations, intentions, and preferences, cannot be observed under this method.
- Observation generally happens over a short duration. Observing behaviour patterns over a period of several days or several weeks generally is either too costly or too difficult.
- Observation is limited to those sites and situations where you can gain access, and in those sites, you may have difficulty developing rapport with individuals.
- It requires good listening skills and careful attention to visual detail.
- The information provided by this method is very limited.
- Sometimes unforeseen factors may interfere with the observational task.
- There is possibility of artificial behaviour when individuals or groups become aware that they are being observed. Depending upon the situation, this change could be positive or negative.
- There is always the possibility of observer bias. If an observer is not impartial, s/he can easily introduce bias and there is no easy way to verify the observations and the inferences drawn from them.
- The interpretations drawn from observations may vary from observer to observer.
- There is the possibility of incomplete observation when the observer takes detailed notes.

Interview

Meaning: One of the widely employed method of data collection is interview. It is a purposeful interaction in which one person obtains information from one or more individuals. It is essentially the oral, in person administration of a questionnaire to each member of sample. It is a process of communication or interaction in which the subject or interviewer gives the needed information verbally in a face-to-face situation. In this process the interviewer can observe certain aspects of a person's behaviour such as his manner of speaking, his poise, his tendency etc. There are many definitions of interview, few of them are as follows:

According to Monette et al., “an interview involves an interviewer reading questions to respondents and recording their answers.”

According to Burns, “an interview is a verbal interchange, often face to face, though the telephone may be used, in which an interviewer tries to elicit information, beliefs or opinions from another person.”

According to Kvale, “an interview is interchange of views between two or more people on a topic of mutual interest, sees the centrality of human interaction for knowledge production.”

The research interview has been defined as ‘a two-person conversation initiated by the interviewer for the specific purpose of obtaining research-relevant information, and focused by him on content specified by research objectives of systematic description, prediction, or explanation.’

Types of Interview

There are basically two main kinds of interview: (1) the structured interview; (2) the unstructured interview.

1. **Structured Interview**—In a structured interview the interviewer asks a predetermined set of questions, using the same wording and order of questions as specified in the interview schedule. An interview schedule is a written list of questions, open-ended or closed, prepared for use by an interviewer in a person-to-person interaction. An interview schedule is a research tool/instrument for collecting data, whereas interviewing is a method of data collection. The strength of structured interview is, in this type of interview desired data can be collected without omitting anything. It provides uniform information, which assures the comparability of data. It requires fewer interviewing skills than does unstructured interviewing. It has also shortcomings like it follows a rigid procedure laid down, asking questions in a form and order prescribed.
2. **Un-structured Interview**—In unstructured interview the questioning is situational. The interviewer is free to develop the conversation along the lines that seems most suitable to him/her. He/she may choose questions depending upon the situation and the topic about which the data are required. The interviewer is free to decide the form and timing of the questions. The strength of unstructured interviews is the almost complete freedom they provide in terms of content and structure. You are free to order these in whatever sequence you wish. You also have complete freedom in terms of the wording you use and the way you explain questions to your respondents. You may formulate questions and raise issues on the spur of the moment, depending upon what occurs to you in the context of the discussion.

Both the above structured and un-structured interview can be conducted in various forms, it can be conducted in the form of personal or group interview or telephone interview.

Personal Interview: In a personal interview, the interviewer reads the questions to the respondent in a face-to-face setting and records the answers. One of the most important aspects of this form of interview is its flexibility. The interviewer has the opportunity to observe the subject and the total situation in which he/she is responding. Questions can be repeated or their meanings explained in case they are not understood by the respondents. The interviewer can also press for additional information when a response seems incomplete or not entirely relevant.

Advantages:

- It allows for greater depth of information which is not possible by any other means
- It has greater response rate as respondents become more involved.
- It allows better control over the interview.
- It provides direct data about feelings, attitudes or emotions of the interviewer.
- The interview is more appropriate for complex situations.
- It is useful for collecting in-depth information.

Disadvantage:

- It is time consuming and more expensive.
- There is possibility of interviewer bias.
- There is subjectivity due to the interviewer's bias.
- There is also possibility of social desirability bias, in which respondents want to please the interviewer by giving socially acceptable responses.
- The validity and reliability of the data obtained through personal interview greatly depends upon interviewer's skill.

Focus Groups: A specific category of interviews is the focus group. It is like a group interview where you are trying to collect shared understanding from several individuals at the same time. In this type of interview the interviewer invites people who are interested in the same general topic to assemble to discuss it. They are assured that they will be free to express themselves in their own words and to respond not only to the interviewer but also to other participants and their responses. When conducting focus-group interview it is also important to ensure that all participants have their say and not something to be dominated by one or two participants. Using a structured or semi-structured interview schedule, an interviewer can pose questions to the group and encourage all participants to respond.

Advantages:

- Here participants respond not only to the researcher but also to other participants and their responses.
- The interaction between participants usually reveals more about the subjects' point of view than would be the case with an interviewer dominated interview.
- It enables the researcher to see how subjects incorporate the viewpoints of the others in structuring their own understanding.

Telephone Interviews: The telephone interview is popular, and studies show that it compares quite favourably with face-to-face interviewing. This method of collecting information involves contacting the respondents on telephone itself.

Nias (1991), Oppenheim (1992) and Borg and Gall (1996) suggest several attractions to telephone interviewing:

- It is sometimes cheaper than face-to-face interviewing.
- It can be conducted over a relatively short time span with people scattered over a large geographical area.
- It is useful for gaining rapid responses to a structured questionnaire.
- Many groups, particularly of busy people, can be reached at times more convenient to them than if a visit were to be made.
- They are safer to undertake than, for example, having to visit dangerous neighbourhoods.
- They can be used to collect sensitive data, as possible feelings of threat of face-to-face questions about awkward, embarrassing or difficult matters is absent.
- Response rate is higher than, for example, questionnaires.

Disadvantages:

- Less opportunity for establishing rapport with the respondent than in a face-to-face situation.
- It takes a great deal of skill to carry out a telephone interview so that valid results are obtained.
- Complex questions are sometimes difficult for respondents to follow in telephone interview.
- The phenomenon of multitasking may affect the quality of telephone interviews.
- There is a chance of skewed sampling, as not all of the population have a telephone.
- Respondents may not disclose information because of uncertainty about the confidentiality.
- Respondents may withhold important information or tell lies, as the non-verbal behaviour that frequently accompanies this is not witnessed by the interviewer.
- It is often more difficult for complete strangers to communicate by telephone than face-to-face, particularly as non-verbal cues are absent.

Procedure of Interview

Whether the interview is conducted in person or by telephone, the interviewer's main job is to conduct the interview in such a way that it helps in obtaining valid responses accurately and completely. An interview procedure mainly involves three broad phases: (1) preparing for interview; (2) conducting the interview; and (3) recording the interview.

1. Preparing for interview: In order to obtain valid information, the interview must be planned beforehand. The interviewer should decide which type of interview will be suitable to the nature of the data required, whether it will be structured or unstructured. The researcher should also decide the procedure of recording the interview. If required, a try-out may be done. The interviewer should also plan the questions fit for eliciting the desired data. Patton (1990) observed that the quality of the information obtained during an interview is largely dependent on the interviewer. Hence, he suggested an interviewer must keep few things in his mind before conducting interview.

- The interviewer needs training in how to contact and approach potential participants.
- Possible participants should be approached in a friendly and professional manner and, whenever possible, these first contacts should be in person. This is very important because potential participants may decide not to participate if they are approached poorly.
- The interviewer must understand his own role. He should not express any opinions and should advise the participants that he is not going to be judgmental in anyway.

2. Conducting the interview: Rapport is the most essential element of interview. So first of all the interviewer should established good rapport with interviewee so that the interviewee feel comfortable in revealing his feelings. The interviewer should behave in a friendly manner with the interviewee. Turny & George have suggested the following techniques of interviewing:

- Ask only one question at a time
- Repeat a question if necessary
- Try to make sure that the interview understands the questions
- Listen carefully to the interviewee's answer
- Observe the facial expression, gesture, tone of voice etc.
- Allow sufficient time to answer to questions
- Do not suggest answer to questions
- Do not show sign of surprise, shock, anger if unexpected answers are given
- Maintain a neutral attitude
- Take note of answers.

According to Field and Morse (1989) there are several problems in the actual conduct of an interview that can be anticipated and, possibly, prevented, ensuring that the interview proceeds comfortably, for example:

- Avoiding interruptions from outside (e.g. telephone calls, people knocking on the door)

- Minimizing distractions
- Minimizing the risk of ‘stage fright’ in interviewees and interviewers
- Avoiding asking embarrassing or awkward questions
- Jumping from one topic to another;
- Summarizing too early or closing off an interview too soon;
- Being too superficial;

3. Recording the interview: It is the third important aspect of interviewing. The interviewer may use a schedule or a voice recording device like tape-recorder or micro phone or a video camera to record the interview. These electronic devices provide an opportunity to evaluate the gesture and facial expression of the interviewee. But when these devices are not available the interviewer may take the note of the data.

Diaries

Meaning: Diaries are a relatively underused method of data collection. When the researcher is specifically interested in precise estimates of different kinds of behaviour, the diary warrants serious consideration. Basically, a diary study is a contextual, qualitative, longitudinal research method used to collect data about user-behaviour, activities, and experiences over time. In a diary study, data is self-reported by participants longitudinally that is, over an extended period of time that can range from a few days to even a month or longer. When participants record their observations or perceptions in the moment, we learn something different about their experiences than might be gained from other methods. Sometimes private reflections are more candid, and participants might feel more able to express themselves in a diary than in an interview.

Corti (1993) recommends that the person preparing the diary should keep following things in his/her mind

- Provide explicit instructions for diarists.
- Be clear about the time periods within which behaviour is to be recorded—that is, day, twenty-four hours, and week.
- Provide a model of a completed section of a diary.
- Provide checklists of ‘items, events or behaviour’ that can jog people’s memory—but the list should not become too daunting in length or complexity.
- Include fixed blocks of time or columns showing when the designated activities start and finish.

Methodology

A diary study is typically composed of five phases:

Planning and Preparation. Define the focus of the study and the long-term behaviours that you need to understand. Define a timeline, select tools for participants to report data, recruit participants, and prepare instructions or support materials.

Pre-study brief. Take time up front to get participants ready to log. Schedule a face-to-face meeting or phone call with each participant to discuss the details of the study. Walk through the schedule or calendar for the reporting period and discuss expectations. Discuss the tools they will be using and be sure each participant has familiarized themselves with the technology; answer any questions they may have before beginning.

Logging period. To support effective activity logging, provide a simple framework. Be as specific as possible about what information you need participants to log, without stifling natural variability and differences that you cannot plan for. (Discovering the unexpected is after all one of the primary reasons to do user research.) Create clear and detailed instructions for logging. Give users example log entries to help them understand the level of detail you need from them. (But make sure you don't bias participants toward those types of entries that you happened to provide as examples.)

Post-study interview. After the study, evaluate all the information provided by each participant. Plan a follow-up interview to discuss logs in detail. Ask probing questions to uncover specific details needed to complete the story and clarify as needed. Ask for feedback from the participant about their experience participating in the study, so you can adjust your processes for the next time.

Data Analysis. Because diary studies are longitudinal, they generate a large amount of qualitative data. Revisit your research questions, then take a deep breath and dig into all of the rich insights you've collected to find the answers. Evaluate the set of behaviours you've targeted throughout the study. How do they evolve and change over time? What influences these behaviours? If the focus of your study is around a particular product or service relationship, look at the entire customer journey.

Advantages of the diary as a method of data collection

- When fairly precise estimates of the frequency and/or amount of time spent in different forms of behaviour are required, the diary almost certainly provides more valid and reliable data than questionnaires.
- When information about the sequencing of different types of behaviour is required, the diary is likely to perform better than questionnaires or interviews.
- It helps in dealt with sexual behaviour which is not possible by questionnaire and there is greater risk of recall and rounding problems.

Disadvantages of the diary as a method of data collection

- Diaries can suffer from a process of attrition, as people decide they have had enough of the task of completing a diary.
- There is a possibility that diarists become less diligent over time about their record keeping.
- There is sometimes failure to record details sufficiently quickly, so that memory recall problems set in.
- The resulting data are more accurate than the equivalent data based on interviews or questionnaires.

Key Points

- ✓ Observation is a purposeful, systematic and selective way of watching and listening to an interaction or phenomenon as it takes place.
- ✓ There are various forms of observations: structured observation; unstructured observation; participant observation; non-participant observation; uncontrolled observation; and controlled observation.
- ✓ The steps of observation include: planning for the observation; executing the observation; recording the observation; and interpreting the observation.
- ✓ Interview is a purposeful interaction in which one person obtains information from another or from more individuals.
- ✓ There are basically two main types of interviews: the structured interview; and the unstructured interview.
- ✓ A specific category of interviews is the focus group. It is like a group interview where you are trying to collect shared understanding from several individuals at the same time.
- ✓ An interview procedure mainly involves three broad phases: (1) preparing for interview; (2) conducting the interview; and (3) recording the interview.
- ✓ Basically, a diary study is a contextual, qualitative, longitudinal research method used to collect data about user behaviours, activities, and experiences over time.
- ✓ A diary study is typically composed of five phases: planning and preparation; pre-study brief; logging period; post-study interview; and data analysis.

Do and Learn

- ❖ Devise an observation schedule of your own for observing an area of social interaction in which you are regularly involved. Ask people with whom you normally

interact in those situations how well they think it fits what goes on. Have you missed anything out?

- ❖ Conduct a one-on-one interview and a focus group interview for your educational project.
- ❖ Identify two or three examples from your own academic field where it may be better to conduct a diary study rather than interviewing, and vice versa.

Self-Assessment

1. What are the characteristics of a good observation?
2. List and briefly describe various forms of observations.
3. Outline the relative advantages and disadvantages of participant observation.
4. What are the various types of interviews?
5. What are the guidelines that a researcher should follow while conducting an interview?
6. What are the strengths and weaknesses of both structured and unstructured interviews?
7. Clearly explain the difference between collection of data through questionnaires and interview.
8. What is a focus group? Discuss its advantages and disadvantages.
9. Discuss diary as a technique of data collection.

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LESSON 5

PHOTOGRAPHS AND DRAWINGS AS TOOLS FOR EXPLORING CHILDREN'S WORLD

Ranjan Kumar Sahoo

Learning Objectives

On completion of this lesson, learners will be able to

- Explain the role of drawings and photographs as tools for data collection.
- Distinguish between drawings and photographs.
- Define types of visual methods use for data collection.
- Describe steps involved in collecting photographs.
- Discuss the strength and limitation of photographs.
- Define drawing and its advantages.

Photograph

There is a saying that a picture is worth a thousand words. Photographs as a method of data collection is one of the most striking developments in recent years. Photographs provide extensively descriptive data which are often used to understand the subject. Photographs and images alike are powerful tools that can describe actions, emotions, and moods of an individual. It represents a significant research breakthrough, since it allows researchers to understand and study aspects of life that cannot be explored through other approaches. In communication with children whose life situations have changed, images can be used as a key support and tool. It also provides an opportunity for approaching people who have difficulty conveying their views and feelings.

There are two specific visual methods that are used for data collection: (1) auto-photography and (2) photo elicitation.

Auto-photography: Auto-photography is a method used in the field that creates an environment where the researcher and the reader can see the world through the participant's eyes by the use of photography. Under this method the participant does not have to speak for themselves. It also does not rely on questionnaires and other research instruments that might be culturally biased. Auto-photography also gives participants a chance to think about who they are and to express this through their chosen images.

Photo Elicitation: Photo elicitation is the use of photographs to generate verbal discussion. Under this method the researcher uses the images as a springboard for discussion with the producers of the photographs concerning the meaning and significance of the images. As the images are used as a basis for data collection, therefore it's called photo-elicitation. It is now

a widely known and a frequently used technique. Photo elicitation produces a unique kind of response as it evokes feelings, memories, and information.

Steps in collecting photographs

The steps involved in collecting photographs are similar to the steps involved in collecting documents:

1. First, you have to determine what photographs can provide information to answer research questions and how that material might augment existing forms of data, such as interviews and observations.
2. Second, you have to identify the photographs available and obtain permission to use it.
3. Third, the most important step you have to check the accuracy and authenticity of the photographs. One way to check for accuracy is to contact and interview the photographer or the individuals represented in the pictures.
4. Fourth, you have to record the data and organize it. You can optically scan the data for easy storage and retrieval.

Advantages

- It allows participants to express themselves through their chosen images.
- It helps to collect deep and meaningful data to understand the subject.
- It helps to capture more detail and a different kind of data than verbal and written methods.
- It provides an opportunity for the participants to share directly their perceptions of reality.
- It helps to describe actions, emotions, and moods of an individual.
- It helps to understand and study aspects of life that cannot be explored through other approaches.
- It provides an opportunity for approaching people who have difficulty conveying their views and feelings.

Limitations

- Photographs are much difficult to analyse because of the rich information.
- There is possibility of misinterpretation of photographs.
- There is possibility of researcher bias.
- It requires specific skills.
- Findings from this research are not able to be generalizable.

- The complete participant perspective under this method may not be able to be portrayed because of anonymity and confidentiality.

Drawing

Drawing is a tool extensively used for performing child-centred research as it helps in giving substantial information about children's perspectives. It is not only a means of data generation, but also it is an intervention in itself with cognitive and psychosocial benefits. Drawing as a research tool provides researchers with a window into the lived experiences of the children and a means to understand how they make meaning of them; they also provide a powerful intervention to engage children in the construction of alternative realities that may have more life enhancing outcomes. Drawing allows an in-depth and less linear insight into complex situations as compared to other approaches. It helps the researcher to enter into the participant's inner world. It offers an opportunity to access experiences which may be suppressed and repressed by the conscious mind.

Drawing as a research tool is often complemented by verbal research methods that encourage collaborative meaning-making that allows the drawer to give voice to what the drawing was intended to convey. This collaboration is vital precisely because the drawing is produced by a specific individual in a particular space and time.

According to Mair & Kierans (2007) the format of this technique is, at first, participants will be asked to respond to a research prompt with a drawing. Then they will be asked to elaborate on their completed drawing through written or oral explanations to further describe and clarify the content and meaning of the picture for them.

Advantages

- It has potential to offer a way of communicating other than speech.
- It encourages collaborative meaning-making.
- It offers an opportunity to access experiences which may be suppressed and repressed by the conscious mind.
- It offers a way of exploring both multiplicity and complexity of human experience.
- It allows the voiceless a chance to tell their own stories the way they have experienced them.
- It allows an in-depth and less linear insight into complex situations as compared to other approaches.
- It enables children to have a say in the production of knowledge.
- It helps in active engagement of children.
- It provides visible proof of research findings.
- Drawings are really a stimulus for communication.

- It helps the researcher to get enter into the participant’s inner world.
- It has the ability to capture feelings and emotions.
- The use of drawings is also appropriate for getting at the memories, thoughts, and feelings of adults.

Key Points

- ✓ Photographs as a method of data collection is one of the most striking developments in recent years. Photographs provide extensively descriptive data which are often used to understand the subject.
- ✓ Photographs and images alike are powerful tools that can describe actions, emotions, and moods of an individual.
- ✓ There are two specific visual methods that are used for data collection: (1) auto-photography and (2) photo elicitation.
- ✓ Auto-photography is a method used in the field that creates an environment where the researcher and the reader can see the world through the participant’s eyes by the use of photography.
- ✓ Photo elicitation is the use of photographs to generate verbal discussion. As the images are used as a basis for data collection, therefore it’s called photo-elicitation.
- ✓ Drawing as a tool extensively used for performing child-centred research as it helps in giving substantial information about children’s perspectives.
- ✓ Drawing offers an opportunity to access experiences which may be suppressed and repressed by the conscious mind.
- ✓ Drawing allows the voiceless a chance to tell their own stories the way they have experienced them.

Do and Learn

- ❖ Identify two or three situations of your interest where you think photographs method might be more beneficial.
- ❖ Conduct a study to assess the characteristics and mental health of a child with the help of drawings.

Self-Assessment

1. What are the visual methods available for data collection?
2. Discuss photographs and drawings as a tool for data collection?
3. What are the key differences between auto-photography and photo elicitation?

4. Discuss steps involved in collecting photographs.
5. What are the strengths and limitations of photography?
6. What are the advantages of drawings as a tool for data collection?

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LESSON 6

RESEARCH REPORT WRITING

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Learning Objectives

On completion of this lesson, learners will be able to

- Explain the significance of a research report.
 - Narrate the various steps involved in writing a research report.
 - Identify the key elements in formatting a research report.
 - Write an appropriate title for a research report.
 - Describe the nature of the content to be included in each section of a research report.
 - Describe the general precautions to follow for writing research report.
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What is a research report?

A research report is not done or conducted for the research sake or for the satisfaction of the researcher. The study must have certain social value, so that when the research study is completed the findings must be available to all for its utilisation. Therefore, the whole work done must be presented in the form of a report. The purpose of research report is to tell the readers the problem investigated, the method used to solve the problem, the result of the investigation and the conclusion inferred from the results. The researcher is to report as clearly as possible, what has been done, why it has been done, the outcome of the study and his conclusion. Further, the report of an investigation not only serves to record and communicate the procedure and the result but it also fulfils an important function in the process of research. In the act of writing, if it is well done, the researcher refines his thinking, and the detailed record facilitates the critical testing of the work done. Thus, an investigator should not consider that he has completed his task until a complete report has been prepared. If he is interested in communicating his work to others, the report must be well written in order to fulfil the purpose effectively. Hence, writing research report is not an easy task. Writing a good research report is possible only when the researcher possesses the knowledge of procedures, rules and principals involved in writing research report. This chapter emphasizes the importance of effective reporting of educational research and outlines the major elements to be considered in such writing.

Format of the Research Report

John W. Creswell (2012) suggested that a research report is a completed study that reports an investigation or exploration of a problem, identifies questions to be addressed, and includes the collection and analysis of data, and interpretation of the data by the researcher. It is composed for audiences, varies in length and format, and differs for quantitative and qualitative research.

The Front, Body, and Back Matter of a Quantitative Study	
<p>Front Matter Title page Abstract of the study (optional)</p> <p>Body of the Paper Introduction Statement of the problem Purpose statement Research questions or hypotheses Theoretical or conceptual explanation</p> <p>Review of the Literature Review of the previous research Summary of major themes How present study will extend literature</p> <p>Methods Sample and site Access and permissions Instruments and their reliability and validity Interventions (if used) Procedures of data collection Analysis of the data</p>	<p>Results Descriptive analysis of all data Inferential analysis to address questions/hypotheses Tables and figures to display the data</p> <p>Discussion Summary of major results Relationship of results to existing studies Limitations of the study Implications for future research Overall significance of the study</p> <p>Back Matter References Appendices (e.g., instruments, key questions)</p>

Source: Creswell, 2012

The Front, Body, and Back Matter of a Scientific Qualitative Structure	
<p>Front Matter Title page Preface and acknowledgments (optional) Table of contents (optional) List of tables (optional) List of figures (optional) Abstract of the study (optional)</p> <p>Body of the Paper Introduction Statement of the problem Purpose statement Research questions</p> <p>Procedures Rationale for qualitative approach Sample and site Access and permissions Data-gathering strategies Data analysis approach</p>	<p>Findings Description of site or individuals Analysis of themes</p> <p>Discussion Major findings Comparison of findings with existing studies Limitations Implications for future research Overall significance of the study</p> <p>Back Matter References Appendices (e.g., figures, interview, or observational protocols)</p>

Source: Creswell, 2012.

It is quite clear from the above that the structure of a quantitative report follows a standard format: introduction, review of the literature, methods, results, and discussion whereas a qualitative report can be presented in alternative formats. However, the most common format developed by several universities comprise of three broad sections: (A) Preliminary Section; (B) The Main Body; and (C) The Reference Section. The detail structure is as follows:

A. Preliminary Section

- The title page
- Acknowledgements
- Table of contents
- List of tables
- List of figures
- Abstract

B. The Main Body of the Report

Introduction

- Definition of the problem
- Analysis of previous research
- Relation of present problem to previous research
- Statement of research objectives
- Significance of the problem
- Delimitation of the study
- Research questions
- Operational definition of terms

Methodology

- Participants
- Procedures employed
- Sources of data
- Data gathering instruments

Analysis and Interpretation

- Presentation of data
- Analysis of data
- Discussion

Summary and Conclusion

- Findings and conclusions with their implications
- Suggestions for further research

C. The Reference Section

- References
- Appendixes

A. Preliminary Section: The above format summarizes that the preliminary section of the report includes title, acknowledgements, table of content, list of tables, list of figures and abstract. The title of the report describes the purpose of the study as clearly as possible. The acknowledgments page allows the writer to express appreciation to persons who have contributed significantly to the study. The table of contents is an outline of the report that indicates the page on which each major section and subsection begins. The list of tables and figures also indicates the page on which tables and figures is presented. There also an abstract ranging from 100 to 500 words that describe the most important aspects of the study, including the topic, the type of participants and instruments, the design, the procedures, and the major results and conclusions.

B. The Main Body of the Report: The main body of the report starts with an introduction and includes a well-written description of the problem, a review of related literature which deals with analysis of previous research and relation of present problem to previous research, a statement of the research objectives, hypothesis, delimitations and definition of key terms.

The method section includes a description of participants, instruments and procedure employed for data collection. The description of participants includes a definition and description of the population from which the sample were selected, why they were selected, and a detailed description of the method used in selecting the sample. The description of each instrument indicates the purpose of the instrument, its application, and the validity and reliability of that instrument. The procedure section describes the steps that the researcher followed in conducting the study, in chronological order, in sufficient detail.

The results section describes the statistical techniques or qualitative interpretations that were applied to the data and the results of these analyses. Tables and figures are used to present findings in summary or graph form and add clarity to the presentation.

In summary and conclusion section each research finding or result should be discussed in terms of its relation to the original research question and its agreement or disagreement with previous results obtained in other studies. The researcher should also discuss the theoretical and practical implications of the findings and make recommendations for future research or future action.

C. The Reference Section: The final reference section of the report lists all the sources that were cited in the report. The required style manual will guide the format of various types of references. It also includes appendices that include information and data that are pertinent to the study.

Precautions for Writing Research Reports

In addition to understanding the structure of a study, a researcher should take care of following key points while preparing a research report.

Use language that reduces bias: A research report needs to be sensitive and respectful of people and places.

Use appropriate research terms: In the field of research, certain terms need to be included to convey the understanding of research.

Use of simple terminology: Abstract terminology and technical jargon should be avoided in a research report. The report should be able to convey the matter as simply as possible.

Write and report the findings ethically: Although much ethical discussion is focused on the data collection process, however, an equally important aspect of ethical research practices resides in the writing and report phase of inquiry. Ethical reporting and writing research is that it needs to be honestly reported, shared with participants, not previously published, not plagiarized, not influenced by personal interest, and duly credited to authors that made a contribution.

Employ a point of view: A research should also use an appropriate point of view as it varies in quantitative and qualitative research.

Balance research and content: A report should include a balance between conveying knowledge about research and knowledge about the subject matter of the study.

Interconnect parts of a study: Another writing strategy used in research is to interconnect the sections of the research report so that it will ensure the consistency and provide reader a better understanding.

Key Points

- ✓ A research report is a completed study that reports an investigation or exploration of a problem, identifies questions to be addressed, and includes the collection and analysis of data, and interpretation of the data by the researcher.
- ✓ The purpose of research report is to tell the readers the problem investigated, the method used to solve the problem, the result of the investigation and the conclusion inferred from the results.
- ✓ The most common format for writing a research report developed by several universities comprise of three broad sections: preliminary section; the main body; and the reference section.

- ✓ The preliminary section of the report includes title, acknowledgements, table of content, list of tables, list of figures and abstract.
- ✓ The main body of the report starts with an introduction to the problem and includes complete methodology, results, and summary and conclusion.
- ✓ The reference section of the report lists all the sources that were cited in the report.
- ✓ In addition to understanding the structure of a study, a researcher should take care of few key points while preparing a research report such as uses of language, appropriate research terms, ethical writing etc.

Do and Learn

- ❖ Selected some completed study, and analyse it in terms of desirable standards for reporting research, as developed in this chapter.
- ❖ Find a research report and develop an outline of the major elements.

Self-Assessment

4. Describe, in brief, the layout of a research report.
5. What points will you keep in mind while preparing a research report? Explain.
6. Explore why writing, and especially good writing, is important to social research.
7. List out the precautions a researcher should follow while writing a research report.

References and Suggested Readings

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