2

Psychological Processes :
An Introduction

2.1 Introduction

In our everyday life we try to achieve various goals through different activities, receive information from our environment, learn about many things, perceive people and objects, think about various issues, plan and take decisions, feel motivated to undertake activities or to withdraw from those which we don’t like. However, a moment’s reflection will make it clear that from the very beginning of life all of us exist as a part of a system made of person and environment. The environment consists of objects, people, physical structures, social activities etc.

In this lesson we are going to learn about the concept of human being as a part of system and the various approaches for understanding the psychological processes.

2.2 Objectives

After completing this lesson you shall be able to:

- recognize human behaviour as a product of person-environment system,
- explain different levels of psychological processes;
- appreciate different domains of psychological processes;
- recognize the basis of individual differences and commonalities.
2.3 Human Being: A Systemic View

We have already read in the previous lesson that as a modern discipline psychology primarily tries to understand and explain the various psychological processes involved in making human actions possible. If we pay attention to any simple behaviour or activity we will immediately notice that even seeing an object or a person and recognizing it involves a series of activities on our part. We find that the object to be seen must be in contact with our eyes and the physical effect must get into our eyes in some form. We must attend to the object, and relate it to our past experiences and interpret it. Psychology specializes in understanding all the processes like sensory-perceptual, learning, memory, motivation, personality etc. and applying the knowledge for the betterment of human life. Human beings exist as a part of a Person-Environment system. This is a living system which shares certain properties. Some of them are as follows:

- We grow and develop. In other words we function as a entity or structure. We are, therefore, dynamic and not static.

- We exist in an exchange relationship with our environment. Thus we receive energy or the resources from environment (e.g. nutrition, information, support, and encouragement) and contribute to the environment through our activities (e.g. services, cooperation, help etc.)

- A feedback system operates that regulates the relationship between input from environment and behavioral output. For instance when temperature goes down we make effort to feel warm. Thus the system is self-regulating. It monitors its activities and takes appropriate action to promote, stop or modify an ongoing activity depending on the feedback. The system has mechanisms to detect the changes that are desirable or undesirable and takes steps accordingly.

- The human and environment, both components of the system, work in an interdependent manner. This implies that one determines the other and no one is free or independent. For example the quality of environment depends on our behaviour towards environment (e.g. keeping the environment clean, controlling pollution, having proper system of waste disposal etc.). On the other hand, our health and well being depends on the quality of environment. The two are interdependent. We can be healthy only if our environment is healthy.

We must remember that human beings are not machines. They, of course have created machines, which perform many activities and mimic many aspects of human behaviour. For instance the computer undertakes marvelous feats and outperforms human beings on many tasks in complexity and speed. But a computer works on the basis of the programme or instructions given to it. It lacks the creativity, dynamism and self awareness that happen to be the hallmark of human behaviour.
2.4 Levels of Psychological Processes

We are born in a family, which exists before our birth. This family has a structure and operates within certain norms that are culturally governed. As a neonate a child has a body equipped with mechanisms to undertake a limited set of activities. The child has potentialities to grow and develop. With advancing age child’s capacities grow and she changes from a dependent being to a competent and accomplished person, provided that there is support from the environment. As a person we undertake a variety of interrelated activities. Human behaviours and activities vary in nature, complexity and duration. They may be physiological, linguistic or motor in nature. They may involve one aspect of a person, the whole person, a group or an organisation. One way to classify them is to put them in terms of distinct activities that emphasize different levels of functioning as given below.

Physical and Physiological Activities
We are always engaged in different types of bodily activities, such as breathing, consuming food, drinking water, excretion. Our body has an internal environment. The various activities that take place inside the body are related to various organs (e.g. brain, heart, lever). These activities should be in proper order if we have to function properly. Thus blood circulation, digestive activities, and brain activity must take place on a continuous basis and regulate the functioning of the organism. Brain activities are related to almost all psychological processes including thinking, imagination, memory, perception, emotion etc.

Motor Behaviour
The visible human behaviour is largely in terms of motor activities and verbal responses. When we walk, run jump, sit and work on table we are showing various types of motor behaviour. Psychologists often use the term ‘response’ to refer to this kind of behaviour.

Psychological Processes
While performing any kind of activity we use various processes like thinking, remembering, problem solving, reasoning etc. Thus whether you study a lesson, view a cinema, talk on a topic, we are using psychological processes of which we may or may not be aware.

Language and Communication
We communicate with others and convey your intentions and meanings through language and gestures. We are related to other persons and objects present in our environment through the process of communication. Use of language, which is symbolic in nature, is one of the main characteristic of being human.

Interpersonal Behaviour
We interact with fellow beings and make efforts to achieve goals. We like and dislike others and cooperate with them and develop negative attitude and prejudice. It may lead to discriminatory behaviour. The people with whom we live and interact have tremendous influence on our behaviour. We try to emulate and conform to them and obey the orders of elders.
Group and Intergroup Level Behaviour

We live in group. Groups and the social life emerging from participating in group is significant for human life. It occurs in many settings. Beginning with family it encompasses school, neighbourhood, professional groups, organizations, and communities etc. Social interaction can take different forms such as cooperation and competition and have significant consequences for our behaviour at individual and group levels.

INTEXT QUESTIONS 2.1

Write True or False :

1. Seeing an object or person involves a series of activities.
2. Human being is static.
3. The humans exist in an exchange relationship with the environment.
4. The feedback system is not self regulated.
5. Our health and wellbeing depends on the quality of the environment.
6. Human behaviour and activities are same in nature.
7. Social Interaction have significant consequences for our behaviour.

2.5 Domains of Psychological Processes

When we talk about “psychological” we usually refer to certain processes which involve joint contribution of mental, physical, social and physiological activities. Sensation, perception, learning, memory, thinking, motivation and emotion are considered as key psychological processes. By process we mean an ongoing activity that takes place in relation to the individual. They are not something static or physical in nature. As we will learn in other lessons these processes are subject to change and modification. Also, they are not isolated but interrelated. Almost all processes invariably involve other processes.

For instance when we are talking to a person we perceive him/her, use memory while referring to specific information, and may feel the positive emotion of love and affection, and become motivated to continue the association with him/her. This division of psychological processes is for analytical convenience and communication purposes.

The psychological processes are emergent in nature as they unfold in the course of human-environment interaction. They are available and accessible largely to the person who is experiencing them. However, in different degrees they are also amenable to observation by other persons. Understanding psychological processes often appears as a challenge as well as a mystery. Yes, it is. But psychologists are not magicians. They are scientists and use a variety of methods, tools and techniques to study the psychological processes. They try to use scientific approach, which can provide dependable knowledge about these processes. They work on the assumption that it is possible to develop theories and principles that can describe, control and predict human behaviour.
2.6 Approaches to understanding Psychological Processes

The goal of the discipline of psychology is to provide understanding of and getting insight into various psychological processes. As noted earlier these processes are not always apparent like physical objects. Also, these processes are internal to the person who is experiencing them. This makes them personal and subjective. Also, they change with time and take place at different levels of awareness. All this makes the scientific study of psychological processes quite exciting and challenging. As scientists psychologists use methods that can generate relevant data to develop principles and theories about human behaviour.

In order to achieve this goal psychologists adopt several approaches that may be grouped in three main categories i.e. experiential, observational and experimental. Let us examine these approaches in some detail.

Experiential Approach

This approach considers the experiences of people as authentic accounts of their subjectivity. All psychological processes are experienced by people and, therefore, accessible to those individuals. The people can report their own experiences of various types. The reason is that these processes are open to the scrutiny of that person. Early psychologists used introspection as an important method to study various processes like memory, perception and thinking. During contemporary period experiential approach is used in “learning by doing” and “think a loud protocols”. The studies on Yogic experiences is an other example of the use of this approach.

Observational Approach

As noted earlier psychological processes can be subjected to observations by other persons to different degrees. The observation is considered scientific and provides the data based on our sensory experiences through eyes, ears, nose, touch. We learn about the world through these experiences. The observations can be done by psychologists as outsiders or as participants / insiders. The participant is member of a group and observes the behaviour from the inside. The observations are often supplemented by instruments. It may be noted that ‘observation’ means recording of certain happening. The experiential approach relies on self observation. We are at the same time objects and subjects both. For instance we observe ourselves and say that we have headache or we are happy. We can work in the mode of a witness and observe the happenings inside us. The two important modes of observation are participant observation and non-participant observation. In participant observation the observer becomes member of the group and observes the behaviours of group members as an insider. Thus a psychologist may go to a village community or a tribal community and join it as one of its members and make observations of the life of the people. Such observations are very helpful because they are made by a knowledgeable
person and also by one who is an insider. The non-participant observation is made by a person who is external to the group. The non-participant observation is done from outside. Thus when we observe children playing and collaborating in a game, it will be called non-participant observation. We can guess the various problems that an outsider may face while observing a group.

**Experimental Approach**

This approach uses deliberate or intentional manipulation of certain conditions and then tries to observe the changes taking place in the behaviour of interest. For instance a psychologist may like to study the impact of mood on memory. He wants to find the answer of the question about the possible effect of being happy and sad on learning a poem. He develops the idea that positive mood helps to learn and retain the material. Thus he will create good mood in the learner and also ask him to learn and test the memory. He will compare the performance with the performance of another's person under neutral mood condition following the same material and procedure. The experimenter will compare the performance of the two groups. If the first person recalls better he may conclude that positive mood helps to remember. Now let us try to understand how an experiment is conducted.

**Doing an Experiment**

*An experiment is considered to be the most scientific and dependable approach.* The experimenter begins his work with a problem. After confronting a problem the experimenter tries to find out the answer and develop a hypothesis. Then s/he plans the experiment and chooses a design. In simplest experiment experimenter creates two conditions i.e. experimental group and control group. The experimental group is one in which the causal condition or independent variable is created. The control group does not get exposure to it. The two group perform on the task. The performance is called dependent variable. Once performance is measured the experimental and control groups are compared. If the two groups differ one can safely conclude that the difference is due to the cause or independent variable. Knowing the effect of independent variable helps us to solve the problem with which the experimenter started the study.

Let us take an example to clarify the above concepts. An experimenter wants to know the effect of reward on learning. S/he will consider reward as independent variable and learning (number of correct responses made) as dependent variable. Suppose his/her hypothesis is that reward enhances learning. The experimenter chooses a group of students and divides them into two groups as follows:

<table>
<thead>
<tr>
<th>Experimental Group</th>
<th>Reward</th>
<th>Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Group</td>
<td>No Reward</td>
<td>Learning</td>
</tr>
</tbody>
</table>
If the participants of experimental group does better than the control group it can be said that reward has positive effect on learning.

**Psychological Instruments**

While doing psychological studies investigators use a variety of instruments and techniques. Some of the frequently used ones are as follows:

1. **Psychological Tests**: These tests are standardized tools to measure ability, aptitude, personality etc. They are very frequently used to asses individual differences. Some tests are objective and some are projective in which question are put indirectly.

2. **Questionnaires**: They are designed for specific purposes. They deal with selected issues and respondents give open or closed responses. The open response are verbatim and closed response are in terms of predefined categories.

3. **Interview schedule**: They involve face-to-face interaction. The interviewer presents question to which the interviewee responds. The responses are then analyzed.

4. **Rating Scales**: These are quantitative in nature. They are frequently used in attitude measurement. For instance one may ask some person to rate a political ideology on a 5 point scale ranging from strongly agree (3), Agree (4), Neutral (3), Disagree (2) and Strongly disagree (1).

**2.7 Understanding Commonalities and Differences in Behaviours**

If you observe people you will immediately notice that they are different as well as similar. While everybody has similar body organs and apparent features they are also different. The same is true about psychological processes. As human beings, if there is no abnormality, all of us can do many things such as learn, think, remember, solve problems, plan etc. However, if we analyze these processes we will notice that people differ in various degrees from each other in all these processes. In everyday life people try to negotiate with the similarities and differences in their own personal ways. Thus our understanding of a friend or another person will depend on the way we know the extent to which he/she is similar and different.

Psychology also attends to the problems of commonalities and differences in behaviour and various psychological processes. For instance the study of commonalities as done in cognitive psychology and social psychology tries to develop general principles that apply to cognitive and social processes in general. They use expressions in which variables and constructs are related without any reference to a person. In contrast, the areas of applied nature like counseling, clinical psychology and psychological assessment focus on the individual person. Traditionally the fields of psychology that dealt with differences constituted what is known as **differential psychology** and the areas which deal with similarities is
knows as experimental psychology. Now these terms are substituted by specific field and their is greater use of various methods in both kinds of areas. However, the concern for generalization and understanding the individual still remain the main concern.

INTEXT QUESTION 2.2

1. Name any two key psychological processes.

2. What is the focus of the experiential approach?

3. Who can be non-participant observer?

4. What are Psychological tests?

2.8 What you have learnt

- Psychology specializes in understanding all the processes like sensory-perceptual, learning, memory, motivation, personality etc. and applying the knowledge for the betterment of human life. As a living organism human beings exist as a part of a Person-Environment system.

- The human and environment, both components of the system, work in an interdependent manner.

- As a person we undertake a variety of interrelated activities. Human behaviours and activities vary in nature, complexity and duration

- The psychological processes are emergent in nature as they unfold in the course of human-environment interaction

- Scientists use a variety of methods, tools and techniques to study the psychological processes. In order to achieve this goal psychologists adopt several approaches that may be grouped in three main categories i.e. experiential, observational and experimental. While doing psychological studies investigators use a variety of instruments and techniques

- While everybody has similar body organs and apparent features they are also different. The same is true about psychological processes. People differ in various degrees from each other in all these processes.
2.9 **Terminal Exercise**

1. Write a short note on the system view of human being.
2. Explain the levels of Psychological Processes.
3. Describe any two approaches towards understanding the Psychological Processes.

2.10 **Key to Intext Questions**

2.1

1. True
2. False
3. True
4. False
5. True
6. False
7. True

2.2

1. Sensation, perception, learning, memory, thinking, motivation and emotion (any three)
2. It considers the experiences of people as authentic accounts of their subjectivity.
3. Any person who is external to the group.
4. Psychological tests are standardized tools to measure, ability, aptitude and personality etc.