

Foundations of **Psychology**



UNDERSTANDING PSYCHOLOGY

Human beings are biological organisms. Among various systems that run our body, the job of the nervous system is to control the functioning of the human body. It is built of nerve cells that transmit information to and from different parts of our body. It controls our sense organs and also our abilities to attend, perceive, think, learn, memorise, recall, feel and behave in the context of our environment. An immense need is felt to understand these diverse processes. The common man's perspective of Psychology is quite different from that of a trained psychologist. The scientific view considers that psychological research and studies will help us observe, describe, control, predict and improve human behaviour and emotions.

Most of our everyday life experiences are based on principles of Psychology, of which we may not be aware. For example, providing care to one's ailing grandmother explains that compassion and love are crucial. Another example may be that of a very hardworking girl who had to leave school due to financial constraints but was able to sustain her family by working part-time. Her positive behaviour helps her family in overcoming financial challenges. Some of you may (have high 'willpower') have an interest in human behaviour or a determination to learn , hence you joined this course. In order to manage time to study this subject, you may have to delay some of your needs or tasks that give you pleasure. This refers to self-control and is practised by many of you. Now, you can also think of such examples from your life. The subject matter of Psychology is vast and covers each aspect of human living.





After studying this lesson, learner:

- explains the need for the study of Psychology as a discipline;
- describes the nature of Psychology;
- states and explains that Psychology is both a Science and Social Science;
- discusses the evolution of Psychology;
- enumerates the relationship of Psychology with other disciplines; and
- describes the applications of Psychology.

1.1 NATURE OF PSYCHOLOGY

Psychology is a scientific study of all these experiences, behaviours and mental processes like knowing, thinking, reasoning, understanding etc. These mental processes are also part of human cognition. The study of Psychology is important as it helps improve the lives of people. It enables them to develop an insight into their thoughts and actions.

Human beings are endowed with the ability to think. This makes them different from many other organisms. Before starting this course you must have thought about whether you should study Psychology or any other subject. You must have discussed it with your family members or your friends. Similarly, every day you (may) have many other thoughts of some or the other issue in your life. For example, you must also have thought of what to wear when you were visiting your aunt for the weekend. Many such thoughts occur in your mind. This thinking leads us to behave in one or the other manner. This behavior can be (sometimes) observable, i.e. others can see our actions. For example, when you are playing a Cricket match everyone can see and know that you are playing. Thus, playing is an observable behaviour. On the other hand, when you are playing a game of Snakes and Ladder the persons around you may not come to know your next move as the behaviour is covert, ie it cannot be (known) seen by others. The past behaviors and thoughts will help you in forming your experiences. These experiences are also determined by external factors like climate, home, family, school, neighbourhood etc. Some of these factors may not be under your control. Your experiences are also very specific to you. For example, your experiences of weather conditions may be different in your village than that of your cousin's in her village. Your experiences may also be determined by your feelings and emotions which

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are an inherent part of your 'self'. Human beings try to know their own self and the environment around them.



Try to think of all that you did or thought yesterday. Enlist them under various subheadings of behaviour or mental processes.



- 1. The study of Psychology includes knowing more about
 - **Experiences** a.
 - Behaviour b.
 - Mental processes
 - All of the above d.
- 2. Thinking, reasoning, concentration and attention are included in
 - Human memory a.
 - Human cognition b.
 - **Human emotions**
 - Human experiences d.

1.1.2 Is Psychology A Natural Science Or A Social Science?



Mark the following statements as T for true and F for false.

- 1. Psychology studies human behaviour in the social context.
- 2. Psychologists study the effect of culture on perception.
- 3. Psychologists study how reward and punishment can affect behaviour.



- 4. Psychologists study the functioning of endocrine glands.
- 5. Psychologists study the effect of motivation on task performance.
- 6. Psychologists study the impact that physical injury has on feelings.
- 7. Psychologists study that hormonal changes affect emotions.
- 8. Psychologists study the functioning of the human nervous system
- 9. Psychologists study that socialization agents like school, family and peers affect a child's behaviour and learning.
- 10. Psychologists study the relationship between positive thinking and overall wellbeing.

The answer to all the above statements is 'True'.

Now let us know some Myths about Psychology

Myth: Psychology Majors Are Mind-Readers

Myth: Psychology Is Not Really a Science

You will be surprised to note that psychologists study the physiological functioning of the human body scientifically. They also study the effects of culture and society on a human being, also, in the most scientific manner. Psychologists are aware of the vast cultural and ethnic diversity. These differences are recognized and are included in the effort made by of psychologists to understand human behaviour. Human beings are studied in the social context to understand their interactions with one another on the basis of their culture. Culture is the man-made part of the environment. It influences humans over generations. Parenting and socialization practices influence the child rearing practices, behaviours, interpersonal relationships, attitudes and most of our attributes.

Thus, Psychology tries to navigate the pertinence of sociocultural (values) environment in understanding human experiences, emotions and actions. Therefore, Psychology is recognized as a Social Science.

Psychology is a systematized body of knowledge. In that, it has a scientific orientation. Scientific knowledge is gathered by conducting experiments, making systematic observations and measuring events. The data collected and recorded is open to objective verification, replication and analysis. Measurement and data collection in Psychology is not an easy task. The attributes being measured can be sometimes abstract. Thus, certain rules and controls are framed in order to get unbiased results.

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Experiments in Psychology are also based on a hypothesis. A hypothesis is a tentative statement which is to be proved through the research. (You will learn more about this in another chapter). This research also helps in predicting by summarizing and interpreting the results of research. Psychology is also considered a Natural Science as it uses the scientific methods. The scientific authenticity of much of the research undertaken throughout the various behavioral science fields is also much debated. But it is clear to us that Psychology is both a Science and a Social Science.



INTEXT QUESTIONS 1.2

- 1. Psychology is a natural science because it
 - a. is based on empirical, verifiable data
 - b. studies aspects of Biology
 - c. studies aspects of Physics
 - c. studies aspects of both Biology and Physics
- 2. Psychology is also a Social Science because
 - a. it studies various cultures
 - b. it studies various aspects of geographical conditions influencing a culture
 - it studies about human being in the social and cultural context, where it is difficult to gather data.
 - d. it is related very clearly to Sociology, Economics and Geography.

1.2 EVOLUTION OF PSYCHOLOGY

Early psychologists were encouraged to think that mental processes, behavior and experiences could be studied using scientific methods. Study of Psychology evolved from Philosophy about 150 years ago, when scientific thoughts led to experimental advances in the field of Psychology. The subject matter of interest to psychologists evolved over the years, as various schools of thoughts emerged with varying ideologies and theories. The following are the major schools of Psychology.



Structuralism

Structuralism was an early school of Psychology. The structuralists established that Psychology is the study of the structure of mind and consciousness (awareness). The method used by them to understand conscious processes was introspection. Through introspection the subject describes his/ her conscious experiences. The first psychological laboratory was established by William Wundt, a structuralist, in Liepzig, Germany in 1879.



ACTIVITY

Observe your parents, sibling, or someone from your neighbourhood. Enlist all that you can think about their mental processes and experiences. Now, talk to them to find out their own interpretations of their experiences and mental processes. In the next column write all that they tell you about the same.

Functionalism: This new field focused not on the structure of mind (structuralist view), but on its functions. Psychologists such as William James, John Dewey and James Angell proposed that Psychology as a discipline should focus on how behaviour functions and what a mind does rather than the components or structure of the mind. Thus, the term functionalism was used to represent this school of thought.

Gestalt perspective: The Gestalt school of Psychology was founded in Germany by Max Wertheimer and his colleagues Kurt Koffka and Wolfgang Kohler. The Gestalt school emphasizes that perception is organized into wholes. Our perception and understanding of objects are more meaningful than its smaller parts. In figure 2.1 (and) it is observed that the figure is not merely a collection of dots, but the shape of a square and a circle respectively. Thus according to the gestaltists the whole is much more than the sum of its parts.



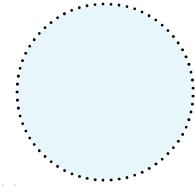


Fig. 1.1

ACTIVITY

Draw some shapes with dots and ask your friends about the names of those shapes. You will be surprised to know that though the figures are dots and have open surfaces, yet they are perceived as a whole.

Behavioristic perspective: This school of thought suggested that the study of Psychology should focus on observable behavior that can be observed and measured in a scientific manner. John B Watson was the first behaviorist. He proposed that one can gain an understanding of a behavior by studying and modifying the environment in which people operate. The processes involved in human learning are the basis of behaviorism. Learning by conditioning and reinforcement was studied by Skinner and Pavlov. You will know and study more about it in the chapter on Learning.

Psychodynamic perspective: Psychoanalysis was founded in Vienna, Austria by the psychiatrist Sigmund Freud. Freud elaborated on the theme of unconscious motivation. According to him, human behavior is a manifestation of the unconscious motives, needs and desires of which a person is not aware. Freud's contribution in areas of hypnosis and dream interpretation is of interest to many researchers.

Humanistic perspective: The humanistic perspective emphasizes on the person's sense of self. A person needs to enhance the understanding of self in order to achieve his/her ideal self. Carl Rogers and Abraham Maslow emphasized that the discrepancy between real self and ideal self can be reduced by understanding one's potential and striving towards self-actualization. These different approaches help us in understanding the development of study of Psychology.

Cognitive perspective: This perspective views human mind as an information processing system where the information, that we receive from the environment, is processed, transformed, stored and retrieved like in a computer. According to constructivists human mind is actively constructing itself through exploration into the physical and social world.

1.3 DEVELOPMENT OF PSYCHOLOGY IN INDIA

In the early twentieth century, Psychology was at a nascent stage. The Western influence was predominant due to the impact of Britishers on Indians. Most of the early Indian Psychologists were philosophers. The establishment of the first psychological laboratory in India at Calcutta in 1916, marked the beginning of Psychology as a discipline.

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Narendra Nath Sen Gupta was a Harvard-educated Indian psychologist and philosopher. Sen Gupta was also the founder of the Indian Psychological Association, and the founding editor of the first official Psychology journal in India, the Indian Journal of Psychology. Indian Psychologists also started looking for Indian theories of cognition. In 1934, Jadunath Sinha wrote a book on Indian theories of perception and another one on Cognition. Many books have appeared in the field of Indian Psychology.

There is a Journal of Indian Psychology published from Andhra University. Andhra University also has an Institute of Yoga and Consciousness. Many attempts are being made to integrate ancient Indian Psychology with modern Western Psychology.

INTEXT QUESTIONS 1.3

- 1. Structuralism states _____ as an important method of knowing about a person.
 - a. free association
 - b. introspection
 - c. hypnosis
 - d. dream interpretation
- 2. The humanistic perspective emphasizes on a person's need to
 - a. enhance the understanding of self.
 - b. perceive objects as a whole.
 - c. interpret one's dreams.
 - d. able to learn through imitation.

1.4 PSYCHOLOGY AND OTHER DISCIPLINES

Psychology, as a scientific study of mental processes, behavior and experiences in different contexts, cannot be studied in isolation. Its subject matter is based on other disciplines too. In fact no discipline can be studied in isolation, as all disciplines are interrelated. It will be interesting to know that Psychology being both a pure Science as well as Social Science, is well connected with all the disciplines that are of interest to educationists today. Psychology shares its knowledge with Sociology, Zoology Biology, Medicine, Neurology, Philosophy, Economics, Political Science, Law and Criminology, Computer Science, Architecture, Engineering, Mass Communication, Literature, Performing Art and Music. All disciplines gain and share knowledge from

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each other. They empower people to learn from others and better understand the world. The major disciplines linked to the field of Psychology can be studied below.

Sociology

Sociology is the study of how social, cultural and environmental factors influence a person. Factors related to group norms, leadership, attitudes, collective behaviour, sociocultural factors etc are interrelated. They help in developing and understanding of both Social Psychology and Sociology.

Economics

The study of Economics is more meaningful when human behaviour is understood. Understanding human wants (which may be infinite), consumer behaviour, savings, allocating funds for causes etc helps an economist understand decision making behaviour. Psychologists too need to have an in-depth awareness about levels of incomes, population, infrastructural reforms, poverty, income disparities, planning and other economic concerns. The choices one makes helps an economist to predict consumer sentiments and economic growth. Therefore, micro level economic behaviour is studied through an understanding of Psychology. Behavioural economics is an emerging subject that deals with this.

Political Science

Study of Psychology helps in understanding leadership behaviour, exercise of powers, voting behaviour, political conflicts, human rights, gender equality, discrimination, stereotypes, conformity and exercise of powers by governments. The practices followed by democrats, socialist, capitalist, or even dictators can be understood from a psychological perspective.

Philosophy

Psychology was born of Philosophy and the major concern of Philosophy was to know the nature of the human mind and how do humans behave in a particular manner. Until the end of 19th century Edward Titchener and other structuralists used experimental and observational methods to understand the various domains of human nature. Psychology, thus evolved as a discipline.

Medicine

Both Psychology and Medicine use scientific methods to understand human body, mind and behaviour. The mind and the body are inseparable for diagnosis, treatment and healthy healing. Most medical practitioners are aware about this aspect Thus, a



successful doctor takes assistance from clinical and counselling psychologist in treating patients suffering from chronic diseases like anxiety disorders, heart ailments, AIDS, cancer, paralysis etc. Therefore, the two disciplines are needed to function in harmony with each other.

Law and Criminology: Law seeks to regulate human behaviour, while Psychology seeks to understand human behaviour in a particular context. Knowledge of Psychology is applied to legal studies and studies of criminal behaviour. Psychology helps the legal professionals to develop an understanding of the social and cognitive principles such as eyewitness memory, jury bias, constructive memory, decision-making, trials, investigations, ethical codes and human rights, interviewing skills, punishment, parole, rehabilitation etc

Computer Science: Development in the field of Computer Science has aided in enhancing the knowledge of Psychology and its application. Similarly, the study of Psychology has been imperative in developing Computer softwares, HCIE (Human Computer Interaction Engineering) and AI (artificial intelligence). Computer engineers rely on research in Psychology and use research methods developed by psychologists in developing computer programs that mimic the human mind. Thereby enhancing the understanding of cognitive sciences.

Engineering and Architecture: Engineers are meant to design and develop products for use by human beings. Understanding human cognition and emotions helps them in being able to make the products user friendly. Architects too understand spaces from a psychologist's perspective. The connect between architects and engineers with human beings enhances the technological effectiveness of the design and its practical utility. Thus, designing and planning cities, roads, railway stations, malls, airports etc are done keeping in mind the behavior of people utilizing these facilities.

Music, Fine Arts, Dance and other Performing Arts: Psychologists aim at understanding and improving the behavior and performance of an individual. Studies have revealed that music and ragas heal the mind. The rhythms in music have a calming impact on human beings. Fine arts, drawing and painting and performing arts help a person vent out negative feeling. The person is able to identify his potential and live a more fulfilling life. Dance and Theatre is therapeutic and is widely used by psychologists. It enables a person to develop an understanding of onself.



INTEXT QUESTIONS 1.4

Fill in the blank choosing the correct option.

- 1. Edward Titchener and others structuralists usedand observational methods to understand the various domains of human nature.
 - a. Case study
 - b. Interview
 - c. Questionnaire
 - d. Experimental
- 2. A successful doctor takes assistance from in treating patients suffering from chronic psychological disorders.
 - a. Clinical and counselling psychologist
 - b. Organizational psychologist
 - c. Forensic psychologist
 - d. Educational psychologist



ACTIVITY

Talk to experts from any two disciplines. Compare and enlist their areas of study. Find the human influence and relationship of the enlisted components with Psychology.

1.5 APPLICATION OF PSYCHOLOGY

The theories developed from ardent research in Psychology are applied and utilised in day to day life situations and circumstances. The study of Psychology is helpful in knowing and understanding a vast array of human thoughts, emotions and behaviours. In the practical situations these theories blend with the requirements of everyday living. Study of Psychology can prepare one for developing an understanding of human beings in different areas and professions. Over the years, as this scientific study of Psychology has grown, it has given rise to various subfields where people work. The following are some of the areas where psychologists work.

Clinical Psychology

Clinical Psychology deals with the causes, diagnosis and treatment of psychological disorders. Clinical psychologists use standardized tests as an aid to diagnose these



disorders. Unlike psychiatrists they do not have medical degree and cannot prescribe medicines to treat the disorders. They have a degree in Psychology and are trained to provide psychotherapy which involves helping clients learn to make choices, so that they can cope with troublesome thoughts ,feelings and behaviours. The aim of Psychotherapy is to alleviate the client's distress.

Counselling Psychology

Counselling psychologist helps people deal with issues that they face ,such as choosing a career, marriage, raising a family, performing at work etc. These problems do not involve psychological disorders. They provide vocational testing to help people decide which occupation best suits their abilities and interests. They deal with people who have milder emotional and personal problems. They sometimes provide psychotherapy but may have a more limited knowledge of therapeutic techniques than clinical psychologists.

Educational and School Psychology

Educational psychologists study all aspects of the educational process. They apply principles of learning, perception and motivation to the curriculum to deal more effectively with the learning situations. Thus, much of the work of educational psychologists is devoted in areas of curriculum planning, teacher training and instruction design. They plan and devise a curriculum that is based on the student's abilities and needs. Moreover, this suggested curriculum and teaching methodology is inclusive, student friendly and helps in generating interest of the students. Educational Psychology may include School Psychology where Psychologists work with educators, and sometimes families of students, devising ways to improve the cognitive, emotional and social development of children at school. They are devoted to counselling children, in elementary and secondary schools, who have academic, emotional or behavioural problems.

Developmental Psychology

Developmental psychologist examines how people grow and change from the moment of conception (through) till death. The developmental changes take place in physical, motor, cognitive, emotional, behavioral, social, and linguistic domains through the lifespan. These changes are of interest to the Developmental Psychologists. They suggest strategies through counselling to alleviate problems at any developmental stage. They research and teach the development of mental processes and behaviour as per the individual's (with) age and experience.

Social Psychology

The presence of other people, with whom we may or may not interact with, affect us

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significantly. Social Psychology studies all aspects of social behaviour and social thought. How and what we think when we interact with others determines one's adjustment patterns, self-esteem and self worth .It is the study of how people's thoughts, feelings and actions are influenced by others. Social psychologists deal with topics such as interpersonal processes, aggression, intergroup conflict, attitudes, stereotypes, prejudice and discrimination, self-concept, social cognition, social influence, group processes, polarisation etc

Industrial/Organisational Psychology

Industrial/Organisational Psychology is concerned with the Psychology of the workplace. Various intelligence and aptitude tests are used by companies in their hiring and placement programs. All aspects of work settings like leadership, communication within the organisation, supervision of personnel, productivity, interpersonal and intergroup relations, cause of industrial strife, counselling employees, allocating work, managing team morale, goal setting, motivational and emotional concerns, job design etc are assisted by organisational psychologists at work place. In order to improve the conditions of work setting and enhancing the quality of work, various interventions for organisational development take place.

Community Psychology

Community psychologists help the community and the institutions in alleviating problems related to physical and mental health as well as community problems like lack of employment, social discrimination, participation in group decisions, health promotion, child rearing practices, encouraging positive interactions, and participation in community programs. They reach out to the community to help through various rehabilitation programs like care of elderly, support to the physically or mentally challenged, or even for de addiction programs. They help all those affected because of their sufferings, and may have lost hope.

Environmental Psychology

Environmental psychologists consider the relationship between people and their physical environment. The physical factors like land, vegetation, climate, crowding, pollution, humidity, natural disasters etc. play an imperative role in a person's day to day functioning. Perceiving the environment as respectful, helps in establishing positive attitude towards the environment. This prevents any further exploitation of the same. Thus, the conditions of living and work improve with the rational and sustainable use of environmental products.



ACTIVITY

Notes

Find any two professionals and interview them to know (of) their (psychological) viewpoint, related to use of Psychology in their professions. Enlist your findings.

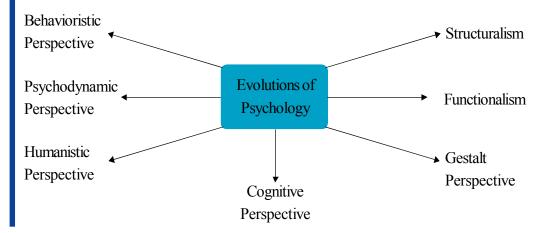


ACTIVITY 1.5

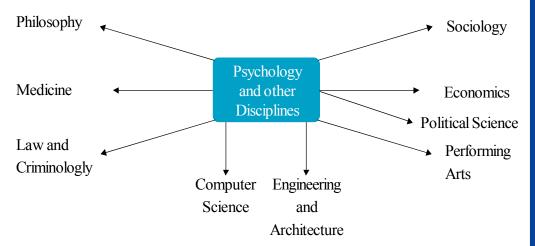
- 1. The ecological consequences of human actions can best be known by
 - a. Counselling Psychologist
 - b. Clinical Psychologist
 - c. Social Psychologist
 - d. Environmental Psychologist
- 2. are able to help alleviate the ill effects of substance use and abuse. They also help in rehabilitation after de addiction programs.
 - a. Social Psychologist
 - b. Developmental Psychologist
 - c. Community Psychologist
 - d. School Psychologist

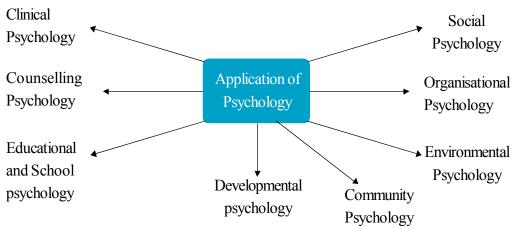


WHAT YOU HAVE LEARNT



Understanding Psychology





TERMINAL EXERCISE

- 1. What is the nature of Psychology as a discipline?
- 2. Is Psychology a Natural Science or a Social Science? State reasons for your answer.
- 3. How is the behavioural perspective different from the structuralist and functionalist viewpoints.
- 4. 'In India attempts are being made to integrate ancient Indian Psychology with modern Western Psychology'. Explain the statement with reference to development of Psychology in India.
- 5. Explain the evolution of Psychology from the late nineteenth century to the modern time.
- 6. How does Music, Fine Arts, Dance and other Performing Arts influence our behaviour and cognition?

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- 7. 'The subject matter of Psychology is based on other disciplines and vice versa'. With reference to this statement, explain the relationship between the following.
 - a. Psychology and Engineering b.Psychology and Computer Science
- 8. Enumerate the relevance of Psychology in various other disciplines that you study.
- 9. Explain the role that Psychologists play in hospitals and organizations.
- 10. What is the area of work of educational and school psychology?



ANSWERS TO INTEXT OUESTIONS

1.1

- 1. d. All of the above
- 2. b. Human cognition

1.2

- 1. a. is based on empirical, verifiable data
- 2. c. it studies human beings in the social and cultural context, where it is difficult to gather data.

1.3

- 1. b. introspection
- 2. a. enhance the understanding of self.

1.4

- 1. d. Experimental
- 2. a. Clinical and counselling psychologist

1.5

- 1. d. Environmental Psychologist
- 2. c. Community Psychologist