CHAPTER ONE
ESSENCE OF PSYCHOLOGY

Chapter Overview

This chapter tries to acquaint students with the concept of psychology. The specific contents addressed in the chapter are definition of psychology and related concepts, goals of psychology, historical background and major perspectives in psychology, branches/subfields of psychology, and research methods in psychology.

Learning Appetizers

A psychologist once asked a group of university freshmen to tell him who they think a psychologist is. Some say „someone who reads the palm of an individual and tells the behavior of a person", others said „someone who is a fortune teller", the rest said, „a person who can understand what someone is thinking about at a certain time." What about you? You just explore these views as you proceed through the discussions in this chapter.

The word "psychology" is derived from two Greek words ***'psyche'*** and ***_logos"***. ***Psyche*** refers to mind, soul or sprit while ***logos*** mean study, knowledge or discourse. Therefore, by combining the two Greek words the term "psychology" epistemologically refers to the study of the mind, soul, or sprit and it is often represented by the Greek letter Ψ (psi) which is read as ("sy"). Psychologists define psychology differently based on their intentions, research findings, and background experiences. Nowadays, most of them agree on the following scientific definition of psychology.

Psychology is the scientific study of human behavior and the underlying mental.

In the above definition, there are three aspects; science, behavior and mental processes:

- **Science**: psychology uses scientific methods to study behavior and mental processes in both humans and animals. This means psychologists do not study behavior with commonsense rather they follow scientific procedures and use empirical data to study behavior and mental processes.

- **Behavior**: refers to all of our outward or overt actions and reactions, such as talking, facial expressions, movement, etc. There is also covert behavior which is hidden, non-observable and generally considered as a mental process

- **Mental processes**: refer to all the internal, covert activities of our minds, such as thinking, feeling, remembering, etc.

1.2. Goals of Psychology

Description: Description involves observing the behavior and noticing everything about it. It is a search for answers for questions like _What is happening?' _Where does it happen?' _To whom does it happen?' And _under what circumstances does it seem to happen?. For example, a teacher might notice that a young freshman girl in his/her general psychology classroom is

behaving oddly. She is not turning to her homework, her results are slipping badly, and she seems to have a very negative attitude toward the course.

Explanation: **Why is it happening**? Explanation is about trying to find reasons for the observed behavior. This helps in the process of forming theories of behavior (A theory is a general explanation of a set of observations or facts). For instance in the above example, to find out why the girl is doing all those things, the teacher would most likely ask her parents about her home background, her friends and the like and may come to an understanding that this girl was behaving the way she did because she was given attention (in a way reward) by other people when she used to behave oddly.

Prediction: prediction is about determining what will happen in the future. In the above example, the case of the freshman girl, the psychologist or counselor would predict (based on previous research into similar situations) that this girl may never be able to reach her full learning potential.

Control: **How can it be changed?** Control or modify or change the behavior from undesirable one (such as failing in school) to a desirable one (such as academic success). In the example above, certain learning strategies can be used to help the girl so that she will be successful in her academic endeavor. Control can also be used in the sense that a psychologist tries to check out the effects of certain undesirable factors in examining the relationship between two or more behaviors. For example, in studying the relationship between intelligence and academic performance in freshman courses, a psychologist needs to control the effect of socio-economic status of the family.

1.3. Historical Background and Major Perspectives in Psychology

Psychology is a relatively new field in the realm of the sciences, only about 125 years old. It began as a science of its own in 1879 in Leipzig, Germany, with the establishment of a psychology laboratory in the University of Leipzig by Wilhelm Wundt. Wundt developed the technique of objective introspection to scientifically examine mental experiences. With such newer orientation to the study of human subjective experiences that were previously under the field of philosophy alone, psychology then begun as an independent field of study and with Wundt as its founder or "father of modern psychology.‖ Once psychology begun to use the scientific method, it then went through successive developments in which different schools of thought emerged at different times. These schools of thought can be categorized as old and modern as described below.

1.3.1. Early schools of psychology

A school of thought is a system of thinking about a certain issue, say, for example, about human behavior or mind. You may, for example, think that human behavior is all the result of inheritance, or you, may, instead, say it is all the result of interaction with the environment. The

first system of thinking takes a biological approach and the later takes an environmental approach. But, what is common in both is there is a tendency to give general, systematized approach of explaining phenomena.

Surly, psychology, as a discipline, is embedded in different systems of thought from its inception. These systems of thought were very broad in the early years of psychology and, therefore, we call them schools of thought‘.

There are five *such* early schools of psychology.

Structuralism- structuralism views psychology as a study of structure of mind. It is an expansion of Wundt‘s ideas by his student named Edward Titchener (1867-1927). Titchener is the founder of structuralism. The goal of structuralists was to find out the units or elements, which make up the mind such as; sensations, images, and feelings. The best-known method used by them was introspection ―looking inward into our consciousness‖. It is a procedure aimed at analyzing the mental experience into three basic mental elements: images, feelings, and sensations.

Analyzing mental structure alone was found to serve little purpose in helping humans deal with the environment. Hence, a new school of thought emerged to study this functional value of human mind-functionalism.

Functionalism- functionalism views psychology as a study of *function of the mind.* The founder of this school of thought is William James (1848-1910), who was the first American psychologist and the author of the first psychology textbook. Unlike Wundt and Titchener, James focused on how the mind allows people to function in the real world; how people work, play, and adapt to their surroundings, a viewpoint he called functionalism. He developed many research methods other than introspection including questionnaires, mental te*s*ts and objective descriptions of behavior. Generally, according to functionalists, psychological processes are adaptive. They allow humans to survive and to adapt successfully to their surroundings.
Examining human mind in terms of its structural elements and functions were, however, found to be simplistic to understand the complex human being. It was believed that human mind is more than the sum of sensations as well as adaptive functions. Hence, a new school of thought was emerged to examine mind in a holistic manner-Gestalt Psychology.

Gestalt psychology: Gestalt psychology views psychology as a study of the whole mind. Max Wertheimer and his colleagues founded this school of thought in Germany in the 20th century. Gestalt psychologists argued that the mind is not made up of combinations of elements. The German word ***"gestalt"*** refers to ***form, whole, configuration or pattern.*** According to them, the mind should be thought of as a result of the whole pattern of sensory activity and the relationships and organizations within their pattern. In brief, the gestalt psychologists

acknowledge *consciousness*. They held that "the whole is greater than the sum of its parts. Means mind is greater than its parts (images, sensations, and feelings).
Generally what is common to all the three schools of though is the fact that they all try to examine the human mind; which is an internal, no-visible, and hidden experience of human beings. Although it could be useful to understand this experience, it was believed that this subjective, private experience can‘t be observable, measurable, and hence can‘t be studied scientifically. Hence, for psychology to become scientific, it needs to get rid of dealing with subjectivity in all its forms and rather focus on studying behavior. This has led to the birth of a new paradigm of thought about psychology called behaviorism.

Behaviorism: behaviorists view psychology as a study of observable and measurable behaviors. John B. Watson is the founder of behaviorism. Other proponents include E. Thorndike and F. Skinner. For Watson, psychology was the study of observable and measurable behavior and nothing more about hidden mental processes. According to Watson, we cannot define consciousness any better than we can define the soul; we cannot locate it or measure it and, therefore, it cannot be the object of scientific study.
As to Watson, behaviorism had three other important characteristics in addition to its focus on behavior; conditioned response as the elements or building blocks of behavior, learned rather than unlearned behaviors, and focus on animal behavior. He believed that all behaviors are learned but not inherited and learners are passive and reactive (they are not initiating their learning but they respond when the environment stimulates them).
All the four schools of thought discussed so far were focusing on human mind and behavior as conscious experiences. But, an opposition to this assertion came from a physician in Vienna who, after working with so many patients, realized that human functioning was basically explained by more powerful forces which were not accessible to our consciousness. Hence, this lead to the formulation of a new school of thought in psychology called Psychoanalysis.

Psychoanalysis: psychology studies about the components of the unconscious part of the human mind. Sigmund Freud (1856-1939) is the founder of this school of thought. He was the most controversial and most popular in the study of behavior and mental processes. As a physician, Sigmund Freud became convinced that some of the physical illnesses of his patients didn‘t have medical or bodily causes; but non-physical or emotional causes. He called these kinds of illnesses as ‗hysteria‘ or conversion reaction to indicate the conversion of emotional problems into bodily problems. He also underscored that that conflicts and emotional traumas that had occurred in early childhood can be too threatening to be remembered consciously and therefore they become hidden or unconscious and then will remain to affect later behavior.
Freud argued that conscious awareness is the tip of the mental iceberg beneath the visible tip lays the unconscious part of the mind. The unconscious which is the subject matter of psychoanalysis contains hidden wishes, passions, guilty secrets, unspeakable yearnings, and conflict between desire and duty. We are not aware of our unconscious urges and thoughts and they make

themselves known in dreams, slip of the tongue, apparent accidents and even jokes. He used clinical case studies (hypnosis and Dream analysis) as a method.

1.3.2. Modern schools of psychology

The early schools of thought have generally laid the foundation for further developments in psychology as a science. They opened a door for taking multiple perspectives in explaining human behavior and mental processes.

Note that an important lesson learned from early psychological thoughts is that there are different ways of explaining the same behavior. Hence, modern psychologists tend to examine human behavior through several views. The views that predominate today are psychodynamic, behavioral, humanistic, cognitive, biological, and sociocultural perspectives. These views reflect different questions about human behavior, different assumptions about how the mind works, and different kinds of explanations why people do and what they do. The schools are presented below.

Psychodynamic perspective - It has its origins in Freud's theory of psychoanalysis, but many other psychodynamic theories exist. This perspective emphasizes the unconscious dynamics within the individual such as inner forces, conflicts or instinctual energy. The psychodynamic approach emphasizes:

- The influence of unconscious mental behavior on everyday behavior
- The role of childhood experiences in shaping adult personality
- The role of intrapersonal conflict in determining human behavior

Psychodynamic perspective tries to dig below the surface of a person's behavior to get into unconscious motives; psychodynamists think of themselves as archaeologists of the mind.

Behavioral Perspective- It emphasizes the role learning experiences play in shaping the behavior of an organism. It is concerned with how the environment affects the person‘s actions. Behaviorists focus on environmental conditions (e.g. rewards, and punishments) that maintain or discourage specific behaviors. The behavioral perspective is sometimes called the *"black box" approach in psychology* because it treats the mind as less useful *in understanding human behavior* and focus *on what goes in to and out of the box*, *but not on the processes that take place inside* This means, behaviorists are only interested in the effects of the environment (input) on behavior (output) but not in the process inside the box.

Humanistic Perspective-According to this perspective, human behavior is not determined either by unconscious dynamics or the environment. Rather it emphasizes the uniqueness of human beings and focuses on human values and subjective experiences. This perspective places greater importance on the individual‘s free will. The goal of humanistic psychology was helping people

to express themselves creatively and achieve their full potential or self-actualization (developing the human potential to its fullest).

Cognitive Perspective- it emphasizes what goes on in people's heads; how people reason, remember, understand language, solve problems, explain experiences and form beliefs. This perspective is concerned about the mental processes. The most important contribution of this perspective has been to show how people's thoughts and explanations affect their actions, feelings, and choices. Techniques used to explore behavior from a cognitive perspective include electrical recording of brain activity, electrical stimulation and radioactive tracing of metabolic activity in the nervous system.

Biological Perspective- it focuses on studying how bodily events or functioning of the body affects behavior, feelings, and thoughts. It holds that the brain and the various brain chemicals affect psychological processes such as learning, performance, perception of reality, the experience of emotions, etc. This perspective underscores that biology and behavior interact in a complex way; biology affecting behavior and behavior in turn affecting biology. It also emphasizes the idea that we are physical beings who evolved over a long time and that genetic heritage can predispose us to behaving in a certain way. In a manner that our eyebrows evolved to protect our eyes, we may have evolved certain kinds of behavior patterns to protect our bodies and ensure the survival of our species.

Socio-cultural Perspective- It focuses on the social and cultural factors that affects human behavior. As a fish cannot leave without water, human behavior cannot be understood without sociocultural context (the social and cultural environment) that people "Swim" in every day. For instance, social psychologists examine how group membership affects attitudes and behaviors, why authority and other people (like spouse, lovers, friends, bosses, parents, and strangers) affect each of us. Cultural psychologists also examine how cultural rules and values (both explicit and unspoken) affect people's development, behavior, and feelings. This perspective holds that humans are both the products and the producers of culture, and our behavior always occurs in some cultural contexts.

1.4. Branches/Sub Fields of Psychology

The areas where psychologists join to work depend all on the type of field of study they pursue in a university. Accordingly, psychology has become a very diverse field today that there are different branches (or sub fields) which psychologists can pursue to study. Below are some of the branches of psychology.

Developmental psychology – It studies the physical, cognitive and psychological changes across the life span. It attempts to examine the major developmental milestones that occur at different stages of development.

Personality Psychology – it focuses on the relatively enduring traits and characteristics of individuals. Personality psychologists study topics such as self-concept, aggression, moral development, etc.

Social Psychology –deals with people's social interactions, relationships, social perception, and attitudes.

Cross-cultural Psychology - examines the role of culture in understanding behavior, thought, and emotion. It compares the nature of psychological processes in different cultures, with a special interest in whether or not psychological phenomena are universal or culture-specific.

Industrial psychology – applies psychological principles in industries and organizations to increase the productivity of that organization.

Forensic psychology - applies psychological principles to improve the legal system (police, testimony, etc..).

Educational Psychology - concerned with the application of psychological principles and theories in improving the educational process including curriculum, teaching, and administration of academic programs.

Health Psychology - applies psychological principles to the prevention and treatment of physical illness and diseases.

Clinical Psychology*:*-is a field that applies psychological principles to the prevention, diagnosis, and treatment of psychological disorders.

Counseling Psychology*:* - is a field having the same concern as clinical psychology but helps individuals with less severe problems than those treated by clinical psychologists.

1.5. Research Methods in Psychology

A. Definition of terms

Before getting into research methods, it is important to start with discussion of scientific method. At the beginning of this chapter, we said that psychology is the scientific study of behavior and mental processes. This means, in psychology, researchers want to see only what is there, not what their biases might want them to see. Researchers do this by using the scientific method (a system for reducing bias and error in the measurement of data). Hence, before discussing the types of research methods; we try to see the following terms.

- ***Scientific method*** - a process of testing ideas through systematic observations, experimentations, and statistical analysis.

- ***Theory*** - is an integrated set of principles about observed facts that is intended to describe and explain some aspects of experience.

- ***Hypotheses*** - is a tentative proposition about the relationship between two or more variables or phenomena. E.g. Males have high self - confidence in making decisions than females.

B. Major types of research methods

Although all psychologists pursue the same scientific method, there is, however, diversity in what psychologists do to achieve the different objectives and goals. Hence, there are three major types of research methods: descriptive, correlational and experimental research methods.

Descriptive research - in this type of research, the researcher simply records what she/he has systematically observed. Descriptive research methods include naturalistic observation, case studies, and surveys.

i. Naturalistic observation: is a descriptive research method in which subjects are observed in their natural environment to get a real (not artificial) picture of how behavior occurs. Limitations of naturalistic observation are observer effect (animals or people who know they are being watched may behave artificially) and observer bias (the researcher may not observe systematically or he/she may observe behaviors he/she wants to observe and ignores others).

ii. Case study: is a descriptive technique in which an individual is studied in great detail. Its advantage is that it provides tremendous amount of data about a single case or individual.

The disadvantage of case study is that the researchers can‘t apply the results to other similar people, which means what researchers find in one case can‘t necessarily apply or generalize to others.

iii. **Survey:** is a descriptive research method used to collect data from a very large group of people. It is useful to get information on private (covert) behaviors and it addresses hundreds of people with the same questions at the same time. Its disadvantage is that it needs a careful selection of a representative sample of the actual population.

Correlational research - is a research method that measures the relationship between two or more variables. A variable is anything that can change or vary –scores on a test, the temperature in a room, gender, and so on. For example, a researcher might be curious to know whether or not cigarette smoking is connected to life expectancy.

Though correlation tells researchers if there is a relationship between variables, how strong the relationship is, and in what direction the relationship goes, it doesn‘t prove causation (which means it doesn‘t show the cause and effect relationship). This means, for example, that if there is a relationship between smoking and lung cancer, this doesn‘t mean that smoking causes lung cancer.

Experimental Research: it is a research method that allows researchers to study the cause and effect relationship between variables. In experimental research, a carefully regulated procedure in which one or more factors believed to influence the behavior being studied are manipulated and all other factors are held constant. Experiments involve at least one independent variable and one dependent variable. The independent variable is the manipulated, influential, experimental factor. The dependent variable is the factor (behavior) that is measured in an experiment. It can change as the independent variable is manipulated.

For example, a researcher may need to know whether or not class size has an effect on students‘academic performance and hypothesizes as ―do students in small class size have better academic performance than students in large class size?‖ In this question, the researcher has two variables: ***class size,*** which is the independent variable to be manipulated and ***students‟ performance*** which is the dependent variable to be measured while class size is changed.
Experiments also involve randomly assigned experimental groups and control groups. An experimental group is a group whose experience is manipulated. In our example, the experimental group is students who are assigned in small class sizes. A control group is a comparison that is treated in every way like the experimental group except for the manipulated factor (class size). The control group serves as a baseline against which the effects of the manipulated condition can be compared. In this example, the control group is the group of students who are assigned in large class sizes.

Although experimental research is useful to discover causes of behaviors, such research must be done cautiously because expectations and biases on the part of both the researcher and participants can affect the results.

C. Steps of scientific research

Step one - Defining the Problem - noticing something attention catching in the surrounding for which one would like to have an explanation. For example, you may notice that children seem to get a little more aggressive with each other after watching practically violent children‘s cartoon videos. You wonder if the violence in the cartoon video could be creating aggressive behavior on the children. Hence, you may raise a research problem focusing on the effect of aggressive videos on children‘s behavior.

Step two - Formulating the Hypothesis - after having an observation on surroundings (perceiving the problem), you might form an educated guess about the explanation for your observations, putting it into the form of a statement that can be tested in some way. For our example above, you might formulate a hypothesis ―children who watch violent cartoons will become more aggressive than those who watch non-violent cartoons‖.

Step three - Testing the Hypothesis - at this step, the researcher employs appropriate research methods and collects ample data (information) to accept or reject the proposed statement. For instance, in the above example, the data will be gathered from children who watch aggressive videos and from those who do not watch aggressive videos and make comparisons between the behaviors of the two groups to determine whether watching aggressive video makes children more aggressive.

Step four - Drawing Conclusions - this is the step in which the researcher attempts to make generalizations or draw implications from tested relationship

Step five - Reporting Results - at this point, the researcher would want to write up exactly what she/he did, why she/he did, and what she/he found. So that, others can learn from what she/he has already accomplished, or failed to accomplish. This allows others to predict and modify behavior based on the findings.

Summary

- Psychology is a science of behavior and mental process.

- Psychologists aim at describing, explaining, predicting and controlling behaviors.

- Though Psychology as a scientific field began in 1879 in Germany, it has gone through different phases.

- The perspectives of psychology are generally classified as early and modern. Early psychology was considered schools of ―isms‖ which include structuralism, functionalism, behaviorism, and, in fact, Gestalt psychology and psychoanalysis. Modern perspectives of psychology have emerged from these early psychological thoughts. These modern perspectives that are used to describe and explain behavior and mind are …..(please list).

- The knowledge of Psychology can be applied in different contexts such as health, education, business, law, and the like.

- Psychologists study behavior using three major types of research methods; descriptive, correlational, and experimental.

- In employing the different types of research methods, psychologists are expected to follow five basic steps in conducting research.

Discussion Questions

1. Compare and contrast the five early schools of thought in psychology.

2. Compare and contrast the modern psychological perspectives.

3. Please reflect on the relationship between the goals of psychology and the three types of research methods using examples.

4. Mention the steps of conducting research in psychology.

5. A psychologist is interested in exploring the effect of tutorial support on students‘academic performance and assign students into two groups. Students in group one get the tutorial support and those in group two do not. In this example, what is the
a) Dependent variable

b) Independent variable

c) Control group

d) Experimental group