

A CONCISE TEXTBOOK ON

# HUMAN Psychology

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BHMS, MD (Hom) Psychiatry



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## **Human Psychology**

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# Publisher's Note

Since a long time, there was a dire need for a book on psychology which can quench the thirst of all of them aspiring to understand this subject of human psychology.

“A Concise Textbook on Human Psychology” by Dr. Sarabjeet Kaur is a basic book for all who want to know and understand the science of human behavior.

The author has carved the subject very well beginning from the basic functionality of working of different parts of brain which determine the human psychology. She subtly enters the arena of human behavior and covers various aspects like Learning, Memory, Intelligence and Emotions while maintaining a link from one chapter to another. The reader will appreciate the beautiful link she establishes while explaining the finer details of brain function and how they work in response to external stimulation and generate varied ways of reaction.

It is a book for all to have who want to understand human psychology and use the benefit of this knowledge about the complex human behavior. We thank the author for her untiring efforts and dedication, for giving this shape to the book.

**Kuldeep Jain**  
CEO, B. Jain Publishers

# Foreword

I am delighted to write a foreword to the book “A Concise Textbook on Human Psychology” As most psychologists, I am passionate about the study of psychology, since I was introduced to the subject when I was 14 years old. The first book that I read on the subject, by an international author, was one of the most extraordinary and absorbing books which served as a foundation for my passion. Today, after having been in this field for over thirty years, training and guiding students, the search for a comprehensive and integrative book by an Indian author on the subject is most welcome.

Dr. Sarbjeet Kaur covers so much information creatively, with invented approaches and new speculation that give insight and wisdom even though the principles remain the same. The book is easy to read and simply makes perfect sense. It would be hard for anyone to disconnect the wisdom found in every chapter. This concise volume is packed with information boxes, illustrations, diagrams and figures which will help simplify the students learning process. The last chapter on “Dreams and Dreaming” is a unique feature and should go a long way to help the readers understand the subject thoroughly, a major tool in psychotherapy.

“A Concise Textbook on Human Psychology” is a good integrative text book and reference book covering the entire gamut of the basic knowledge of psychology. It would also be of great help to the teachers, trainers and a broad spectrum of colleges teaching psychology as a part of their subject curriculum.

I am confident that all will benefit by keeping a copy of this book. I congratulate Dr. Sarbjeet Kaur for this fine contribution and commend this book for all those who enter the field of psychology.

**Dr. Deepali Kapoor**

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# Preface

A concise textbook on human psychology has emerged as a result of my deep interest in the subject of human psychology. The main purpose of this book is to help the readers understand the subject of Psychology in better and easier way. Psychology deals with many problems of everyday life and many other things that a person experiences during his lifetime. After going through this book the reader will be in a position to know the cause of those problems and also he will be able to rectify some of the problems, and clear his doubts too.

## WRITING FOR A BROAD RANGE OF STUDENTS

I wanted to write a book that students would actually enjoy reading, and I hope the book might find its way into the hands of students from a broad spectrum of colleges. This book would be of immense help to the undergraduates as well as the postgraduate students having psychology as one of their subject.

## KEEPING PACE WITH EMERGING KNOWLEDGE

In this book I have attempted to bring readers up-to-date information about this rapidly changing discipline (psychology). Psychology, like other areas of knowledge, has its classic theories and studies which form the basis for the much current work. Students should know about these too, and I have not neglected them.

## RESEARCH FOCUS

This book takes psychological science seriously. A student should come out of an introductory psychology class not only with a sense of the basic questions and frameworks for answering them but also with an appreciation for how to obtain psychological knowledge.

## INTEGRATIVE APPROACH

Solo-authoring an introductory text is probably presumptive evidence of mental instability (and is clearly a cause of it as well), but I could not have produced this book any other way. As one psychologist puts it, (Holt, 1976), the human psyche is not the handiwork of an obsessive-compulsive God who created cognition on one day, affect on another, motivation on another, and so forth, and made sure that they all stayed neatly in their own territories. Too often our efforts to classify and label, lead us to try to separate the inseparable. The integrative bent of the book stems primarily from the clinical and experimental perspectives as well as the concepts and methods from various psychological traditions. Although the chapters are integrated with one another, each chapter can stand on its own and be understood independently of the others.

## ORGANIZATION

The chapters have been organized in a way that would be convenient for the students to follow. A separate chapter on “The Concept of Mind and Schools of Psychology” is introduced for the convenience of the students. Also the last chapter on “Dreams and Dreaming” has been added in this book which will prove quite helpful for the students. All contributors of information on psychology have been given due credit but wherever it has been missed or overlooked I accept my folly for same.

## ILLUSTRATION AND DESIGN

Tremendous care has been taken to select and design only those figures and tables that actually contribute to the text and that do not just make the pages look less ominous. The same is true of photo selection; images that would provoke thought have been only added. In some chapters, few informative boxes are also used. Pay attention to the illustrations, tables, and the boxes too, because they are as important as the corresponding discussions in the text.

## ANNEXURE

At the end of the book annexure (I to V) are provided. These are added not to increase the bulk of the book; rather they are quite informative for the readers and each reader must go through them.

This book is my first work as an author and I have tried my best to convey the right information in a simplest form and in required details. This book has underwent checking several times by me and by editorial team but some mistakes might remain. While reading if you find any mistake or have any suggestions, I'll be grateful to receive the feedback from you end and the mistakes can be rectified in future editions.

### DR. SARABJEET KAUR

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## Acknowledgement

I acknowledge with thanks, to the B. Jain Publishers (P) Ltd., and especially Dr. Rohit Jain for giving me this opportunity. I appreciate their patience and suggestions for making this work possible.

I would also like to mention the name of my best friend and guardian Mr. Davinder Paul Singh Viridi for motivating me to do this piece of work, without his motivation and suggestions this work would never have been possible.

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# Psychology: An Introduction

## ORIGIN OF THE WORD “PSYCHOLOGY”

### PSYCHOLOGY AS A SCIENCE

- Experimentation and observation
- Based on principles and laws
- Concepts and terms
- Applied value

### HISTORY OF PSYCHOLOGY

- Pre-socratic philosophers
- Greek philosophers
- Aristotle
- Beginning of modern psychology
- Physiology and the mind
- Academic psychology
- Diversification of psychology

### RESEARCH METHODS IN PSYCHOLOGY

- Case Studies
- Naturalistic observations
- Survey research
- Quasi-experiments and correlational studies
- Experimental method
- Systematic observation
- Clinical method

### VARIOUS SUB-FIELDS OF PSYCHOLOGY

- Clinical psychology
- Counselling psychology
- Experimental psychology
- Physiological psychology
- School and educational psychology
- Industrial psychology
- Organizational psychology
- Developmental psychology
- Social psychology
- Community psychology

### RELATED DISCIPLINES AND PRACTICES

- Psychiatry
- Psychoanalysis
- Philosophy

# Psychology : An Introduction

**Psychology** deals with many problems of our everyday life and with many things we have already experienced. Earlier, psychology concentrated on the study of sensory processes, perception, simple learning and memory. Gradually, however, this field expanded to the point that it now covers a range of topics broad enough to touch the lives of all of us. Psychology gives us a rational basis for understanding what we and others do. Psychology is gradually nearing the goal of understanding human behaviour.

Hence, *psychology* was called as the study of conscious behaviour. But this was also criticised when psychoanalysis pointed out that we must try to study *unconscious* processes because they control our behaviour to a very great extent. Finally, Psychology was defined by **John B. Watson** as the scientific study of human and animal behaviour.

**Definition: Psychology is the scientific study of human and animal behaviour.**

## ORIGIN OF THE WORD “PSYCHOLOGY”

The word “Psychology” was formed from two Greek words. The first, “Psyche”, originally meant “breath” but later acquired the additional meaning “soul”, because breathing was thought to indicate that the soul had not yet left the body, and later still (during the seventeenth century) broadened further in meaning to include “mind”. The equivalent Latin word “anima”, from which the English words “animal” and “animate” are derived, also started life meaning “breath” and later evolved the additional meaning “mind”. The second Greek word, “logos”, originally meant “word” and later expanded in meaning to include “discourse” and eventually “science”. According to its Greek roots, therefore, psychology is literally the “science of the mind”.

Later, scientists criticised this because mind could not be observed or experimented upon.

## PSYCHOLOGY AS A SCIENCE

A science is a body of systematized knowledge that is gathered by carefully observing and measuring events. *Erismann* asserted that the natural sciences such as physics or biology, were concerned with explanations, whereas psychology, when attempting to grasp central phenomena of the mental life, had recourse to comprehension or understanding. *Psychology* deals with actual experience and sets out to study this experimentally with exact methods.

Psychologists do experiments and make observations which others can repeat; they obtain data which can be verified by others too. Psychology is a science as it uses the scientific methods, principles and explanations to explain human and animal behaviour. Because it is a science, psychology, is not limited to intuition; it searches the facts.

*Psychology is a science, therefore, it follows*

some general characteristics of science which are as follows:

### Experimentation and observation

In Psychology, the whole data is gathered by experimentation and observation; no reliance is placed on intuition, opinion or belief. Psychologist does experiments, makes observations which others can repeat and verify. Therefore, psychology being empirical is science.

### Based on principles and laws

Experimentations and observations are necessary but they are of little use if they do not make some sense. They must be capable of being summarized by some principles and laws. As psychology is based on certain principles and laws, the whole data is collected and summarized accordingly; so, it is called a science.

### Concepts and terms

Another important characteristic of science is definition of the terms and concepts used. Concepts and terms should not be vague and abstract. They should convey the same meaning to all the psychologist. Psychology, as a science, uses operational definition of terms.

### Applied value

As all sciences have application in our day-to-day lives in some or the other ways; psychology should also help us to solve everyday life problems. Since, the knowledge of psychology is being applied, today, to each and every activity of human being in the areas of health, industry, school and education; we can very well say that it has applied value in our lives like other sciences. Knowledge of psychology is being increasingly applied but it requires skill and considerable experience.

## HISTORY OF PSYCHOLOGY

Although psychology has been recognized as an independent discipline for little more than a century, psychological speculations and practices can be found in the records of most ancient civilizations. The **Ebers papyrus**, an *ancient Egyptian document* devoted to medical matters dating from before 1500 BC, for example, describes practices strikingly similar to modern hypnosis.

In the history of **Herodotus**, the *world's first history book*, which was completed in about 429 BC. According to Herodotus, the experiment was performed by the ancient *Egyptian Pharaoh Psammetichus*, I in the seventh century BC to determine whether human beings have an inborn capacity for speech, and if so, which particular language is innate. He ordered two infants to be brought up in a remote place by a shepherd who was forbidden to speak in their presence. After two years the children began to speak, and the word that they repeated most often was *becos*.

*Psammetichus* concluded that the capacity for speech is inborn and that the innate, natural language of human beings in *Phrygian*.

*Psammetichus's* experiment was certainly poorly designed and methodologically unsound, but what is striking is that it was a psychological experiment none the less; in its conceptual structure and methodology it is strikingly similar to the highly regarded experiments of **William H. Thorpe**, who reared birds in isolation from members of their own species in order to discover the innate features of their songs.

Psychology existed for a long time as a branch of Philosophy that was called "*mental philosophy*". During the eighteenth and nineteenth centuries, developments in the biological sciences began to suggest empirical approaches to some of the problems of mental philosophy and towards the end of the period psychology finally reached maturity and gain its independence as a separate discipline in its own right.

## Pre-socratic philosophers

The first systematic investigations of psychological problems were carried out in ancient Greece by the *pre-socratic philosophers* of the sixth and fifth centuries BC. They did not have any concept of an individual soul or mind, but they were the first to understand that the brain plays an important role in mental experience. In particular, they understood that our eyes cannot see and our ears cannot hear without the help of our brains, and by contributing this crucial insight the pre-socratics paved the way for the scientific study of sensation and perception.

The pre-socratics were also the first to develop a theory to explain the fact that people differ from one another not only physically but also psychologically, that is, not only in appearance but also in temperament, or what psychologists now call *personality*.

## Greek philosophers

They established two more or less discrete philosophical approaches to psychology. One approach emphasized reason, logic, thought, theory, innate knowledge and a mind distinct from the body.

The other approach emphasized observation, experimentation, environmental learning and unity of body and soul. Much of all future psychology has fallen into one of these two camps.

## Aristotle

The views of Aristotle cannot be assigned to either camp. **Aristotle** was a theorist as well as an observer. **Watson** considers him to have been the first psychologist because he tried to present a systematic and integrated view of the function of human mind.

Aristotle thought that form cannot be separated from matter—that a bronze statue, for instance, must have matter in order to have form and vice

versa. This unifying concept is present in Aristotle's view of the "*psyche*", often interpreted as "*soul*" or "*mind*". Aristotle's "*soul*" includes matter as well as the functioning of the mind. Aristotle's "*psyche*" did not have any religious or supernatural properties.

## Beginning of modern psychology

**Descartes** introduced his dualistic concept of man. He said that the mind or soul is located in the brain, though it has no substance. The body, on the other hand, was thought to have substance, or "*extended*" qualities which, like machines, followed mechanical laws. Descartes further believed that mind can influence the body and the body can influence the mind. He attempted to describe the physiological mechanisms of this interaction. Descartes is often called the first modern psychologist, because psychology would have remained speculative without the introduction and the recognition of physiological factors.

## Physiology and the mind

**Pierre Flourens** demonstrated that certain parts of the brain are directly responsible for certain behavioural functions.

The studies of sensory receptors, nerves, and muscles also contribute much to the understanding of human feelings, thoughts, and activities. **Du Bois-Raymond** demonstrated in 1849 that neural activity is measurable and that it is accompanied by an electrical impulse and **Helmholtz** showed in 1850 that neural conduction requires a specified time. Physiology brought not only physiological data but the scientific method in general to psychology.

## Academic psychology

In 1879 the first psychological laboratory was founded by **Wilhelm Wundt** at the *university of*

*Leipzig*. Wundt was trained in medicine, physiology and philosophy. He tried to investigate the mind by studying its conscious content and more specifically the elements of sensation, such as intensity, duration and locality. His preferred method was that of “*introspection*”, in which an individual describes his sensations and feelings in discrete, technical terms. Wundt’s laboratory became the center of psychological activities. Students came to him from all over the world to investigate problems related to visual perception, hearing, touch and taste, reaction time, word associations and so on.

## Diversification of psychology

Unity in psychology was short-lived and existed perhaps only in the early days at Wundt’s laboratory. Other psychological schools were soon to follow which emphasized different methods for studying the mind.

Certain psychological schools and systems which evolved around the turn of the century differed not only in methodology, but about the purpose of psychology itself.

There were other applied systems of psychology which contributed to its great diversification. Applied areas such as conditioning, psychoanalysis and mental testing have provided, perhaps as by-products, many psychological theories. In some areas, the theories may have overshadowed experimental verification. Some psychologists feel that their science has been “*oversold to an over-willing public.*”

## RESEARCH METHODS IN PSYCHOLOGY

The fundamental aim of research in psychology is to discover and understand the nature, functions and phenomena of behaviour and mental experience. Research in psychology, as in any other sci-

ence, always begins with a question that needs answering; provided that it relates to behaviour or mental experience and is an empirical question that can be tackled by collecting objective evidence, it is a legitimate problem for psychological research. What follows is a brief outline of the main research methods used in psychology.

## Case Studies

A **case study** is a relatively primitive research method. In psychology, it involves a detail investigation of a single individual, or occasionally a single social organization. The data reported in *case studies* may be derived from interviews, diaries, case histories, medical records, questionnaires and other psychometric tests or direct observations of behaviour. The findings of case studies can be interesting and valuable, but they often suffer from problems of generalization because individual’s response to a particular treatment is not necessarily the same as another’s. The accumulation of evidence from a number of case studies, especially if they are reported by independent investigations, can sometimes mitigate this problem.

## Naturalistic observations

**Naturalistic observations**, are widely used in ethological research and less commonly, in certain areas of developmental and social psychology. They involve careful observations and recordings of the behaviour of animals or people in their natural habitats. *Naturalistic observations* are generally non-interactive; in this, the investigator tries to avoid influencing the behaviour that is being observed. It yields important findings about everyday behaviour in natural environments, and it can sometimes serve as a useful corrective to the findings of artificial laboratory studies.

## Survey research

**Survey research** is useful for investigating psy-

chological phenomena in specific sections of a population or in different populations. It is used, in particular, to answer questions about the incidence, prevalence and distribution of mental disorders, behaviour patterns, attitudes, opinions, beliefs and personality characteristics. The most common sources of data in survey research are *interviews* and *questionnaires*. To ensure that the individuals studied are truly representative of the population groups to which they belong, survey researchers use sophisticated methods of sampling. The ideal method of sampling, from a theoretical point of view, is simple random sampling, in which every member of population has an equal chance of inclusion. In practice, simple random sampling is seldom used because of the difficulty in compiling a sampling frame and the further problem of persuading all of the selected subjects to participate in the survey. As a consequence, the most common sampling technique in psychological survey research and also in market research and opinion polling, is quota sampling. This involves selecting individuals more or less arbitrarily to fill predetermined quotas, matching the proportions in the population at large according to age, sex, social class or whatever criteria are thought to be important for research.

## Quasi-experiments and correlational studies

**Quasi-experiments** resemble controlled experiments. They are designed to answer questions about cause and effect, but they lack the full control of conjectured causes and extraneous variables that is characteristic of controlled experiments. Correlational research focuses on non-causal questions about the relationship between variables—intelligence and creativity, introversion and self-esteem, gender and verbal ability and so on. Both of these research methods focus on the relationship between two or more factors over which the investigator has imperfect or non-existent control.

Neither of these research methods can conclusively settle questions about cause and effect, but valuable information about the relationship between variables can often be obtained, and it is sometimes reasonable to draw tentative inferences about probable causal effects from quasi-experiments.

## Experimental method

In **experimental method**, observations take place under controlled conditions. Every experiment is an attempt to discover relationships among certain conditions or events that can change. The *essence of experimental method* is:

1. The experimenter changes or varies the events which are hypothesized to have an effect on the observation.
2. He keeps other conditions constant.
3. He looks for an effect of the change or variation on the system under observation.

Thus, an experimental method aims at establishing cause-effect relationship.

Some important concepts used in experimental method are:

### Subject

The man or animal on which the experiment is performed is called the **subject**.

### Experimenter

The person who conducts experiment is called **experimenter**.

### Variables

A **variable** is an event or condition which can have different values. Variables are of two types:

- (a) Independent variables
- (b) Dependent variables

### *Independent variables*

These are conditions set or selected by an experimenter to see whether they would have an effect on behaviour. This factor is increased, decreased

or withdrawn by the experimenter, e.g., stimulus presented, a drug administered, a new method of training business managers and so on.

### *Dependent variables*

The effect of independent variable is called as the dependent variable or changes that comes about as a result of the changes in the independent variable is called as the dependent variable. Dependent variable is the behaviour of the person and animal in the experiment, it might be the response of the person to the stimulus, a change in behaviour after administration of the drug.

In doing experiments, hypotheses are formulated about the effect of one thing on another, the independent variable is one expected to produce changes in the dependent variable.

### **Controls**

In an experiment, it is important that only the specified independent variables be allowed to change. Factors other than the independent variable which might affect the dependent variable must be held constant.

In an experiment we must control conditions, which would give misleading results. Scientists must be very careful to control their experiments adequately. This is often difficult in psychology because so many factors can influence the behaviour that is being studied. In interpreting experiments, it is important to look for uncontrolled factors which might have affected the results.

There are two kinds of variables which needs to be controlled:

- (a) Conditions
- (b) Characteristics of the group

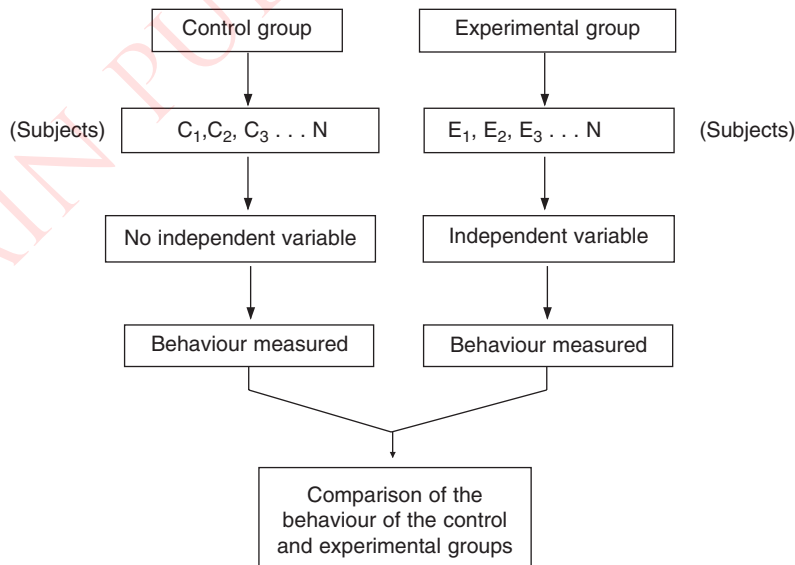
### *Conditions*

One has to control the conditions under which experiments are being performed.

### *Characteristics of the group*

The characteristics of the group which are relevant has also to be controlled. The characteristics that are relevant in most psychological experiments on human beings are intelligence, age, sex and personality of the subject.

1. **Control group design:** In this design, the



**Fig. 1.1 Control group design**



experimenter selects two similar groups called as the *Experimental group* and the *control group*. In the experimental group Independent variable, is introduced, there is deliberate manipulation of the Independent variable. In the control group the behaviour is observed under normal conditions, no deliberate manipulation of the variable is seen. When a control group design is used, the groups should be equivalent in every way except for the independent variable. This type of design study large group of subjects.

2. **A-B-A Within-Subject Experimental design:** To make sure that the independent variable produced the change in the behav-

iour, it is often a good idea to see what happens when the independent variable is removed after it has been introduced. The behaviour should go back to *baseline* levels if the independent variable did, in fact, produced the observed changes. This is called an A-B-A within-subjects experimental design. The first 'A' is the baseline condition without the independent variable and the last 'A' refers to the final test of the behaviour without the independent variable. This design is a good one to use when the independent variable does not have a long lasting effect.

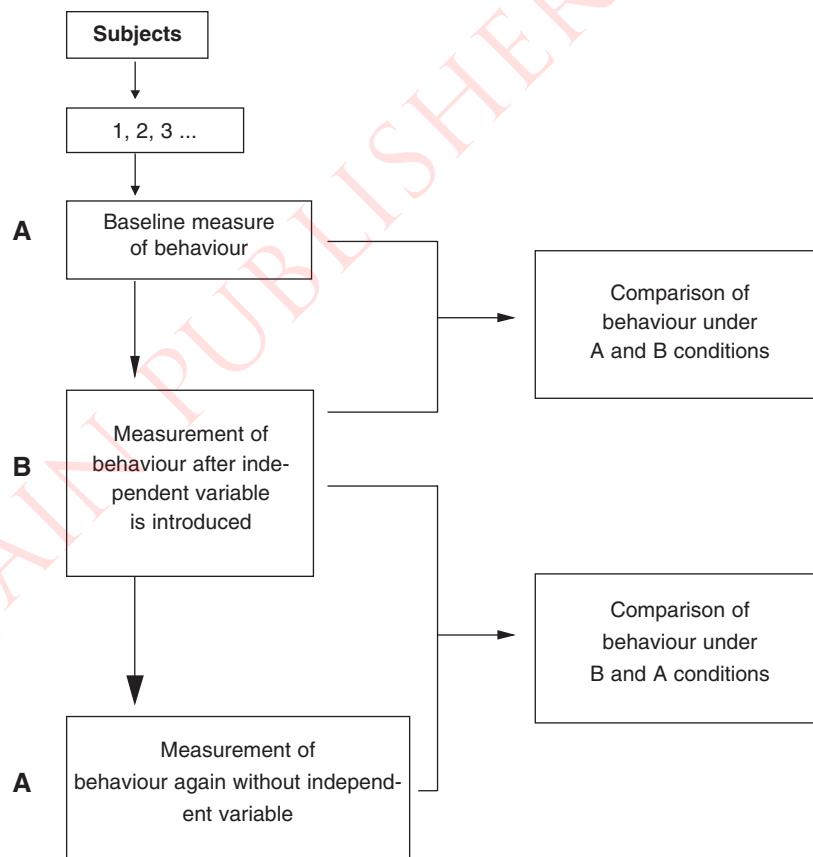


Fig. 1.2 A-B-A within subject experimental design



### Limitations of the experimental method

1. This method *cannot* always be used, especially if the experiment might be dangerous for the subjects.
2. The method is restricted in its application. The conclusions derived from an experiment may be limited to the artificial experimental situation—they may not apply to “*natural*” situations or even to other experimental situation.
3. The method sometimes interferes with the very thing it is trying to measure.

### Systematic observation

In this method, researchers do not willfully manipulate the independent variable. Instead, they capitalize on variations that occur naturally. Using this method, the psychologist makes the most *systematic* study of the behaviour that occurs naturally. Many facts of human as well as animal behaviour are learned in this fashion. After making a number of observations, the psychologist can, using certain rules of logic, try to infer the causes of the behaviour being studied.

This method is definitely *not* a substitute for an experimental method but is often applicable where experimentation is impossible. This method can be applied with great ease in studies of public opinion, the effects of advertisement and other mass communication systems on consumer preferences and many other social problems and even in determining the role of such factors as hereditary and environment. For instance, using questionnaires, surveys and interviews, psychologists might study the changes in behaviour patterns of men and women caused by the mass communication. The method of systematic observation tells us what people do and how they differ in their behaviour. The psychologist who uses the method of systematic observation may also seek to find out what causes the observed behaviour, so that he

can answer questions about why things happen.

Suppose, for instance, that a psychologist wants to find the general cause of the severe behaviour disorder known as *schizophrenia*. Symptoms of schizophrenia include *bizarre* or strange patterns of thought and behaviour, inappropriate emotional responses and perhaps hallucinations and delusions. Suppose psychologists who are studying schizophrenia hypothesize that its cause is to be found in the way children are reared by their parents. Using the method of systematic observation, the researchers will probably try to test this hypotheses by comparing the ways in which schizophrenic and normal people were reared. To do this, they will match normal and schizophrenic groups on as many factors—such as age, sex, socioeconomic status, years of schooling, intelligence and so on. Then they look for differences in the rearing practices used by the parents of the “*normals*”. Using precisely this type of strategy, psychologists have found differences; but these differences do not, by themselves, establish causation. All that has been established so far is that differences in rearing go along with schizophrenia. Other factors and their interaction with rearing may be the cause.

### Limitations of systematic observation

1. Full control over independent variable is not possible as in the case with the experimental method. Experimenter cannot manipulate the independent variable as per his desires.
2. There is greater possibility of the impact of extraneous variables. If this occurs results would be greatly effected.
3. It tells us what is happening but not why or how a certain type of behaviour occurs. It tells us nothing about cause-effect relationship.

### Clinical method

The clinical method is ordinarily used only when

people come to psychologists with personal problems. For example, little child refuses to eat, cries all the night and generally makes life miserable for his parents. Problems like these and other kinds too bring people to the clinical psychologist.

The psychologist may administer tests of various kinds—intelligence tests, interest tests, tests of emotional maturity, personality tests and other tests. From these tests and from the biographical information, the psychologist will try to diagnose the problem and treat, or remedy, the difficulty. The tests, the diagnosis and the remedy will differ from case to case. As a method, it combines features of clinical observation, experiment and systematic observation.

**Limitations of clinical method**

1. Clinical observation does not often provide much scientific information.
2. It is usually too subjective, casual, uncontrolled and lacking in precise measurement.
3. In clinical method, what appear to be cause

and effect in one case may not be in another.

4. Even in a single case, it is extremely difficult to sort out the significant causal factors with certainty.

**VARIOUS SUB-FIELDS OF PSYCHOLOGY**

Psychologists hold an almost endless and pretty varied variety of jobs. Many of them teach in colleges or universities. Some work in hospitals, some in schools, some in penal systems and some psychologists are employed in industry. According to American Psychological Association there are more than 40 subdivisions of psychology. Some of the most commonly known sub-fields are as follows :

**Clinical psychology**

This is one of the largest subfields of Psychology. **A clinical psychologist** is one who has received specialized training in causation of abnormal behaviour, its diagnosis and often its treatment by psychotherapeutic methods used in the correction of abnormal behaviour.

Clinical Psychologist	Psychiatrist
<ol style="list-style-type: none"><li>1. A clinical Psychologist holds a Ph.D. or M.A. degree.</li><li>2. The Ph.D. clinical Psychologist has taken 4 or 5 years of Post-graduate work in psychology department; the M.A. clinical psychologist has about 2 years of postgraduate work.</li><li>3. The clinical psychologist, who does not have medical training, cannot prescribe drugs to treat behaviour disorders.</li></ol>	<ol style="list-style-type: none"><li>1. A psychiatrist holds a M.D. degree.</li><li>2. The psychiatrist has gone to medical school and then completed 3 or 4 years of residency training in psychiatry.</li><li>3. The psychiatrist prescribe durgs to treat behaviour disorders.</li></ol>

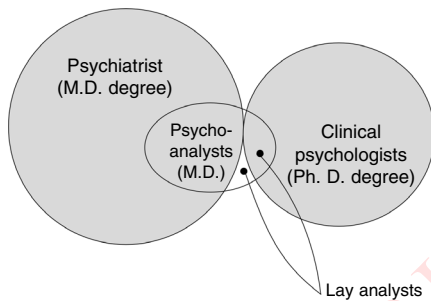
**Fig 1.3 Some of the differences between clinical Psychologist and Psychiatrist**

- Both provide psychotherapy.
- Both use various techniques to relieve the symptoms of psychological disorders and to help people understand the reasons for their problems.

**Fig 1.4 Some similarities between clinical Psychologist and Psychiatrist**

They are “doctors” who diagnose psychological disorders and treat them by means of psychotherapy. Clinical psychologists are basically attached to mental hospitals or are associated with the department of psychiatry in general hospitals. They also work in close collaboration with neurologists, paediatricians etc. Many of them are attached to schools and colleges.

In clinical psychology, the findings of basic and applied research into the classification, aetiology, diagnosis, treatment and prevention of mental disorders are put to use in an effort to deal with these problems more effectively.



**Fig 1.5 Relationships among psychiatrist, clinical psychologists and psychoanalysts**

### Psychoanalyst

A **psychoanalyst** is a person who uses the particular psychotherapeutic techniques which originated with **Sigmund Freud** and his followers. Anyone who has had the special training required to use these techniques can be a psychoanalyst. Psychoanalysts without M.D. degrees are known as “**Lay analysts**”.

### Counselling psychology

It overlaps to a great extent with clinical psychology. The work of counselling psychologist is quite similar to that of the clinical psychologist. **Counselling psychologist** work with individu-

als whose problems are less serious than those who see a clinical psychologist or a psychiatrist.

Counselling helps individuals with vocational and academic problems; counselling psychologist may use psychotherapy in an attempt to **help** with these kind of problems. In their practice, counselling psychologist may make extensive use of tests to measure aptitudes, interests and personality characteristics.

These are wide varieties of counselling. Some of them are Vocational educational counselling, Marriage counselling, Employee counselling, Rehabilitation counselling etc.

### Experimental psychology

It is one of the fundamental subfields of psychology. Fundamental because it carries on research and experimental work in many basic aspects of behaviour. These psychologists try to understand the fundamental causes of behaviour. The **experimental psychologist** studies how behaviour is modified and how people retain these modifications, the processing of information in thinking, how human sensory systems work to allow people to experience what is going on around them and factors that urge them on and give direction to behaviour.

The distinguishing characteristics of experimental psychology is that it uses the experimental method as the main tool of investigation.

Experimental psychology is distinguished from other subfields by what it studies—the fundamental processes of learning, memory, thinking, sensation, perception, motivation and emotion.

### Physiological psychology

**Physiological psychologist** are concerned with the relationship of the brain and other biological activity to behaviour. They look for causal events in the organism’s physiology, especially

the nervous system and its interaction with glands that secrete hormones. Physiological psychologists mostly study animals because physiological experiments cannot ethically be performed with humans.

### School and educational psychology

These are two interrelated subfields of psychology. **Educational psychologists** are especially concerned with increasing the efficiency of learning in school by applying their psychological knowledge about learning and motivation to the curriculum. They are more concerned with general psychological principles underlying the entire process of education. The main question that educational psychology tries to answer are, when to teach, what to teach and how to teach. Educational psychology researches into problems of learning, adjustment and behaviour among school-children is applied in an effort to provide practical help to teachers, parents and children with learning or behaviour problems.

Counselling psychologists who are involved in the testing and guidance of individual students are usually called **school psychologists**. They are more concerned with the problems of individual students than with the general principles of education. Their main task is to help students with various problems to reach full adjustment to the school or college situation. School psychologist's job consists of diagnosing learning difficulties and trying to remedy them. Using tests and information gained from consultations with the student and his or her parents, the school psychologist tries to pinpoint the problem and suggest action to correct it.

### Industrial psychology

The application of psychology in industrial and business fields started with the use of psychological tests for selection of the right worker for the

right job. **Industrial psychology** can be divided into two most important subdivisions; *Personnel psychology* and *Engineering psychology*.

Industrial psychology is oriented towards fitting the worker to the job, through selection, classification, training and incentives. Industrial psychologists seek to select the right man for right job, whereas the engineering psychologist is oriented chiefly towards fitting the job to the worker by designing appropriate procedures, equipment and work environment.

### Organizational psychology

It is a growing subfield of psychology. It began with the work of **F.W. Taylor** and **Frank Gilbreth**. It is concerned with not only industrial organizations but with any organization where human beings work. Some of the topics covered under organizational psychology includes stress, communication, organizational development, organizational decision making etc. In **organizational psychology**, research into the well-being and efficiency of people at work and into organizational behaviour is applied to the problems arising in those settings.

### Developmental psychology

The main objective of **developmental psychology** is to investigate the changes in human behaviour that accompany changes in age. It is study of human organism from the time of conception to death. Developmental psychologists try to understand complex behaviours by studying their beginnings and the orderly ways in which they change with time.

Developmental psychology has both research and applied aspects. In its effort to obtain a meaningful picture of human development, through its various stages of growth, such as infancy, childhood, adolescence, youth, adulthood and old age, developmental psychology seeks to discover

sequential changes in human personality by utilizing specialized techniques. Child psychology is a part of developmental psychology.

## Social psychology

**Social psychology** focuses on the nature of social interaction. Social psychology attempts to determine the manner in which the behaviour of one individual is influenced by other people. This field has particularly benefited from contributions by sociologists. While the research endeavours of people from both disciplines often overlap, the focus of social psychology is typically upon the individual, while the sociologist is primarily concerned with societal institutions.

Social psychology studies the impact of group life on various aspects of individual's behaviour. Some of the major topics which social psychology studies are interpersonal attraction, social perception, social communication, group attitudes, public opinion, sexual behaviour, social influence, group decision making etc.

## Community psychology

**Community psychologists** apply psychological principles, ideas and points of view that help individuals to solve the social problems and also help them to adapt to their work and living groups.

Some community psychologists are essentially clinical psychologists. They set up programs to reach people in the community who happen to have behaviour problems, or are likely to develop them and who are not presently being served by traditional psychotherapeutic methods. These psychologists are a part of the community mental-health movement. Other community psychologists are more concerned with bringing ideas from the behavioural sciences to bear on community problems. We might call these the "*social-problem community psychologists*".

Community psychologists often work to encourage certain groups to participate in community decisions, to provide psychological information about effective and health promoting child-rearing practices, or to advise school systems about how to make their curricula meet the needs of community members. To accomplish their aims, social-problem community psychologists sometimes focus on changing community organizations and institutions to help remove the sources of community problems.

## RELATED DISCIPLINES AND PRACTICES

It is important to distinguish psychology from a few related practices and professions with which it is often confused.

### Psychiatry

As its name suggests, **psychiatry** is a branch of medicine concerned with mental disorders—their classification, aetiology, diagnosis, treatment and prevention. Anyone intending to qualify as a psychiatrist must first undergo a full medical training and then specialize in psychiatry, which is simply a medical specialization among many others, including cardiology, dermatology, and gynaecology.

Psychology, in contrast, is not a medical specialization and psychologists are not medically trained. Furthermore, most of psychology is concerned with normal behaviour and mental life rather than with mental disorders. A small part of academic psychology is, however, concerned with mental disorders and one of the professions of psychology, clinical psychology involves the treatment of mentally disordered patients. Psychiatrists tend to favour more medically oriented interpretations of mental disorders and more physical forms of treatment than do most clinical psychologists because of their different backgrounds and training.

## Psychoanalysis

**Psychoanalysis** is a theory of mental structure and function and a method of psychotherapy based on the writings of **Sigmund Freud** and his followers. As a theory, psychoanalysis focuses primarily on unconscious mental processes and the various defence mechanisms that people use to repress them. As a therapeutic method, psychoanalysis involves the client in three or more 50-minute sessions per week for several years. During the analytic sessions a number of specialized techniques are used to help the client uncover the repressed thoughts and feelings, to understand why they were repressed and also to accept them consciously.

**Psychoanalysts** are not necessarily trained in psychology or psychiatry; their training involves undergoing psychoanalysis themselves. Conversely, it is also true to say that most psychologists and psychiatrists have no formal qualifications in psychoanalysis; but many of them are influenced to varying degrees by psychoanalytic ideas and approaches. Most—though by no means all psychologists, on the other hand, hold attitudes towards psychoanalysis ranging from indifference to open hostility.

## Philosophy

Many of the problems that non-psychologists assume to fall within the scope of psychology are really philosophical problems. These are questions that must be tackled by rational argument rather than by experiments or observations of behaviour.

Although psychology was once a branch of philosophy called “**mental philosophy**”, the psychological offspring has grown up to be quite distinct in its subject matter from its distinguished philosophical parent. Psychology, in contrast to philosophy, is devoted to empirical questions, that is, questions that can, in principle at least, be decided by observations of real world facts and events.

The most obvious example is the **mind-body problem**. This problem relates to the puzzling relationship and apparent interaction between mental experiences and the physical world. How can mental experiences such as desires, which are entirely immaterial, produce physical effects like bodily movements—in other words, how can a thought move a muscle? And how can physical injuries to our bodies produce the non-physical mental experiences we call pains? These are irreducibly philosophical questions, in spite of their superficial resemblance to psychological problems, because they could not be solved, even in principle, by empirical investigations of any kind, or at least that is what most philosophers and psychologists believe.

Factual questions about moral attitudes and behaviour, and how they develop in children, are legitimate topics for psychological research, but questions about how people ought to behave belong to the field of ethics within the discipline of philosophy. It goes almost without saying that psychologists ought to be and generally are, concerned about moral issues that arise in psychological research and practice. ■■



# The Human Mind and Schools of Psychology

## CONCEPT OF MIND

The human mind is customarily viewed as having the capacity to perform such mental functions as thinking, reasoning, planning and decision-making; and of possessing the property of consciousness, as well as producing emotional responses to stimuli.

*“The mind is a mental system consisting of a grouping of brain cells, which have the special capability of being able to directly generate thought messages.”*

## Views of greek philosophers

In ancient times, it was commonly believed that the universe consisted only of space and a vast magnitude of atoms in ceaseless motion that interact with one another. A greek philosopher, *Democrites*, who lived around 400 B.C., reasoned that the mind is only a specific grouping of atoms, which interact with each other and with the environment to produce the person's behaviour, and exists only as long as the person is alive.

On the other hand, the ancient greek philosopher *Plato*, who lived during the same time period, proposed that the mind is non-physical and exists independently of the body, before the birth of the person and after the person's death. He believed that the mind not only interacts with the physical world but has access to the pure concepts of a second non-physical world.

Plato viewed the *human psyche* to be comprised of three parts :

- The element of reason.
- A spirited or emotional, element.
- The element of bodily needs, appetites and desires.

He considered the proper relationship between these elements to be one in which the element and the irrational element of desires and appetites.

*Aristotle*, who also was a renown ancient Greek philosopher and a student of *Plato* held a belief regarding the mind somewhere between the two. He believed the mind to be a form of the body and not separate from it. However, he regarded the mental properties exhibited by the mind to be a distinct class of properties different from the physical properties of the body.

Another view of mind was held by the Stoic school of philosophy, which became popular around the time the Roman empire flourished. These philosophers believed the living creatures were created from ordinary matter by the infusion of “*pneumata*,” which is derived from the greek word, meaning “*breath*” and translated into the latin word meaning “*spirit*”. The observation that life begins with breathing and ceases when breath leaves the body probably gave rise to the Stoic theory. The human spirit, according to this theory, leaves the body at death and rejoins the universal spirit from whence it came. The immortal soul doctrine of various religions is another form of the Stoic theory.

## View of the western philosophers

The various kinds of philosophically opposing

views of the mind held by the ancient western philosophers are :

- That it is purely a material, physical substance.
- That it is part of the body, but has properties unlike those of the body.
- That it is non-physical and distinct from the body and continues to exist after death.

## Views of eastern cultures

The ancient eastern cultures also formulated view about the human mind and psyche. According to the scriptures of the philosophic religion of Hinduism called the Vedas, the human psyche is comprised of the elements of “*Atman*”, “*Manas*”, “*Vijana*”, and “*Buddi*”.

*Atman* is the ultimate, true self of a person. It is the essence, or spirit, of an individual, the person’s essential core of being, the spark of God within all of us which gives us life. *Atman* is the observer of all that is happening to a person; all the ideas, all the thoughts and all that is perceived by the person. *Atman* is seen as being eternal, imperishable, indestructible and self-existent, neither being born nor capable of dying.

*Manas* is the element whose function is to focus attention on specific stimuli being perceived by the senses. Out of the multitude of stimuli constantly impinging upon the senses, *Manas* gathers in and directs the attention of the senses to be actually perceived. The selected stimuli are transformed into a particular sensation, image, or sound, while the others are discarded. *Manas* is the necessary mental faculty required for sense perception. For instance, it is what takes the perceived visual and audible stimuli and turns them into the vision and sound of a bird singing.

*Vijana*’s function is to take the selected perception that *Manas* has presented to it and make that perception into an actual experience, so

that the sight and sound of a bird singing is not just sound and sight, but is something we experience, feel and store in memory and later can recall. *Vijana* is that which holds together the accumulation of all our experiences into a coherent whole that we consider to be ourselves, the “*I am*” with whom we identify ourselves.

*Buddi*’s function is to reflect upon and evaluate the stored data gained from experience (*Vijana*) and to make decisions. *Buddi* gives meaning to that which we have perceived and experienced. It is the awareness or consciousness of oneself and that his or her existence is distinct from other beings and from the environment. In the process of making a choice or decision, *Buddi* forms judgements by evaluating and discriminating from among all the knowledge and experiences the individual has accumulated.

## Views of french philosophers

The seventeenth century French philosopher and mathematician, Rene Descartes considered man to be comprised of two entirely different types of substances:

1. A mental substance.
2. A physical substance

The human brain falls into Descartes’ definition of a physical substance, to the extent that it is a tangible substance that responds mechanically to stimuli. The mind corresponds to Descartes’ definition of a mental substance, which he considered to be a spiritual, immaterial thinking substance, having the capacity for thought, consciousness and free will.

There were, however, many who disagreed with Descartes that the mind is immaterial, considering it to be part of the brain; and there were others who denied its spirituality, or that it has free will. And even today there are many contrary views held as to the nature of the mind.

Till now, we have seen the various views of different philosophers on the concept of mind.



Now, we will be discussing the concept of mind as understood by the psychologist and natural sciences.

## MIND

Until a psychology with a scientific orientation was created, psychological inquiry and thinking were concerned with the mind, its substantiality, spirituality and mortality. The mere fact of talking about a mind serves to distinguish it from the body to which it is bound. Thus the theory of mind raises the mind-body problem. Investigation of the mind and its relation to the body was the special task of rational or metaphysical psychology, which was and is a branch of philosophy.

About the middle of the nineteenth century, psychology was detached from philosophy and turned to science and its methods, it considered its subject to be those psychic processes whose totality Wilhelm Wundt sought to embrace in his actualistic concept of mind. The term coined by F.A. Lange, "*Psychology without a soul*", is on the whole correct for modern scientific psychology. Nevertheless, the question concerning the real essence of the problem of mind persists.

On the whole psychology in so far as it considers itself a "*pure*", empirical science, cannot decide the problem of mind.

### Mind-body problem from the standpoint of psychologists

The *mind-body problem* is rarely defined in detail in contemporary psychology. Nevertheless it is a genuine problem and its existence can be demonstrated.

It can be considered on the basis of the principle of conflict or identity or alternatively by a combination of these two principles.

If it is approached from the principle of conflict (i.e., *dualistically*), the theory of interaction

can be used to explain the functional relationship between mental and somatic processes: physiological processes "*cause*" mental correlates and vice versa. Psychosomatics and psychopharmacology are based on this principle; traumatic experiences lead to somatic disorders of a functional and organic nature. Drugs have a specific influence on the mental state.

From the standpoint of the identity principle in contemporary psychology only the physiological-materialistic concepts remain relevant: mental phenomena are derivatives of processes in the muscles, nerves and brain. For the development of psychology these assumptions have the advantage that they clearly emphasize the importance of the body as distinct from the metaphysical approach. The solution to the mind-body problem indicated by most authors under the heading of "*identity*" are located in accordance with the distinction made here, "*substantially and functionally*" between the two extreme solutions described above and therefore combine the two principles.

Spinoza defines the mind and body as two attributes, he introduces dualism in the sense of a bilateral theory. **Leibniz's concept of parallelism** can be considered in the same light; he refers to unity in the substance and duality in the function.

Methodical dualism would probably be acceptable as a description of the attitude to the mind-body problem in contemporary psychology: every psychologically relevant process or state must be described, analyzed and interpreted through its physical (neuro-physiological) and psychological (experiential) coordinates.

### Mind-body problem from the standpoint of natural science

All over conscious processes and states are dependent on the brain, as is demonstrated by the following facts:

- (a) If the brain becomes unable to function as a result of chemical or mechanical influences (narcosis, injury), all psychological activity ceases.
- (b) Changes in our brain activity due to the administration of certain substances (alcohol, opium morphine, LSD, etc.) lead to changes in our conscious experience.
- (c) Failure of specific areas of the brain results in the breakdown of certain psychological functions. (aphasia, agnosis, alexia, etc.)
- (d) There is a phylogenetic and ontogenetic parallel between the development of the brain and mental development. It follows that all forms of conscious experience are based on specific brain processes; brain processes form the indispensable prerequisite for psychological activity.

The mind-body problem can be reduced to two questions: “What happens in the brain when we experience something?” and “What is the causal relationship between psychological and cerebral process?”

The first question can in principle be answered reliably during all conscious experience an enormous number of electrical and chemical processes takes place in the ganglionic cells and fibres of the cerebral cortex (nervous system). The resulting “*excitation constellations*” must be “*specific*”, i.e., a separate excitation constellation corresponds to each individual content of our conscious experience; there must therefore be at least as many excitation constellations as there are contents of experience.

The answer to the second question is dependent in large measures on the importance attached to the “*difference in nature*” between the two processes; it consists of the fact that the psychological processes are non-physical (they are not made up of atoms and molecules and are

largely independent of space and time), while the cerebral processes belong to the organic-material sphere.

The old mind-body theories overlooked this distinction and held that there could be an interaction between physical and mental processes or that they could be two aspects of the same process.

New theories have tried to explain the dependence of psychological processes on cerebral activity and the difference in nature between them by the assumption that conscious experience is an effect of the brain processes but cannot itself act on the latter (“*theory of the ultimate effect*,” Rohrer, 1967).

The natural-scientific approach to the mind-body problem is best reflected in the “*theory of the ultimate effect*”, which fully recognizes the special character of psychological processes—immateriality considerable independence of space and time—as well as the absolute dependence of the psychological processes on the brain. For natural-scientific psychology, the conscious experiences are biological phenomena; they help to maintain life and individuality (e.g. the vital and social drives) as well as cultural progress. The mental processes can be considered as the highest expression of natural developmental and as the ultimate effect of the organic process as a transcendental expression of the material process in immaterial subjective experience. Advantage of this theory lies in the fact that it avoids the logical difficulties inherent in the assumption of a “*feedback*” effect of psychological processes on physical activity.

## SCHOOLS OF PSYCHOLOGY

In the first decade of the twentieth century, psychologists came to hold quite different views about the nature of mind and the best ways to study it. About the same time, strong differences

of opinion about what psychology should study and how it should study, and should psychology be the study of mind or behaviour; or should both mind and behaviour be included?

Groups of like-minded psychologists, which formed around influential teachers argued for one viewpoint or another. Schools of thought formed around these influential psychologists as their students adopted their ideas. These schools of thought are known as the *schools of psychology*; they set the direction for research on mind and behaviour in the early years of this century. Time has tended to blunt the old arguments somewhat and the early schools have largely passed into history.

## Structuralism

Structuralism became the most commonly held view of the early 1900's. It developed primarily out of the works of the German philosophy, professor Wilhelm Wundt, who was formally trained in medicine and physiology and the American philosopher and psychologist William James. It was established at Cornell University in the United States by one of Wundt's students, Edward B. Titchener.

Structuralists were mainly concerned with analyzing and explaining conscious human experiences, particularly feelings and sensations.

They were called "*structuralists*" because they attempted to understand human experience by breaking it down into its simplest components or structures. The goal of the structuralists was to find the units or elements which make up the mind. They thought that as in chemistry, a first step in the study of the mind should be a description of the basic or elementary, units of sensation, image and emotion which compose it. The main method used by the structuralists to discover these elementary units of mind was "*introspection*".

Subjects were trained to report as objective-

ly as possible; what they experienced in connection with a certain stimulus, disregarding the meanings they had come to associate with the stimulus. For example, a subject might be presented with a coloured light, a tone, or an odour and asked to describe it as minutely as possible. These experiments using introspection have given us a great deal of information about the kinds of sensations people have.

*The purpose and significance of these experiments:*

Wundt attempted by experimentation to discover the basic elements comprising consciousness. He found two such elements to be "*perception*" and "*apperception*." Perception is the mental process of bringing sensations into the consciousness of a person. Apperception is the mental process of attending to and interpreting the perceived sensations.

Wundt investigated the higher mental process of thinking, memory and cognition, which all involve language. One interesting discovery he made was that the fundamental basic unit of thought is not a word, or other linguistic element, but a "*general impression*" that is independent of words. According to Wundt, in the thought process there is first a general impression. This process of transformation of impressions into words occurs when listening to someone else speak, as well as when a person is formulating in his or her own mind and also in thoughts when he or she is about to speak. Thus, the origin of thoughts are impressions which become verbalized.

*Structuralism was also criticised for many things which include:*

At times, the act of introspection may change the experience drastically. For example: Introspection regarding anger; if the state is attended to, it tends quickly to disintegrate and may even disappear completely. Thus, the measuring technique interferes with experience, as it does with electrons for the physicist.

Psychologists at different laboratories were not getting comparable results; rather scientists in one laboratory asserted things that contradicted the results of scientists elsewhere. There was also growing concern for the data, which were not accessible to introspection.

## Functionalism

**Functionalism** as a school of psychology started in university of Chicago out of the writings of **John R. Angell**. It was developed by **Harvey Carr** and **Robert S. Woodsworth**.

Functionalism is the philosophical doctrine of James Angell who considers mental phenomena in their dynamic unity as a system of functions (geared to adapting the organism to its environment) for the satisfaction of needs that are biological in origin. Functionalists studied “*what mind and behaviour do*” rather than “*what they are composed of*.” Specifically, they were interested in the fact that mind and behaviour are adaptive; they enable an individual to adjust to a changing environment. Instead of limiting themselves to the description and analysis of mind, the functionalists did experiments on the ways in which learning, memory, problem solving and motivation help people and animals adapt to their environments.

According to *James Angell*, the basic principles of functionalism are as follows:

- Functional psychology is the study of mental operations and not mental structures. (For example, the mind remembers; it does not contain a memory).
- Mental processes are not studied as isolated and independent events but as part of the biological activity of the organism. These processes are aspects of the organism’s adaptation to the environment and are a product of its evolutionary history. The fact that we are conscious implies that conscious-

ness has adaptive value for our species.

- Functional psychology studies the relation between the environment. There is no meaningful distinction between mind and body; they are part of the same entity.

Functionalism emphasized learning, mental testing and other utilitarian subject matters. Functionalism concerned more with functional interrelationships of variables than with theoretical super structures; accepting both introspective and behaviour data but utilizing mainly the latter, stressing adaptive behaviour and purposive motivated activity.

If this approach is applied to social life, this appears as an organism comprehended through the relationship existing between organs and their functions.

## Gestalt psychology

**Gestalt psychology** was developed into a school of psychology in Germany about 1912 by **Max Wertheimer** and his colleagues **Kurt Koffka** and **Wolfgang Köhler**. It is mainly concerned with how human beings perceive things. The word “*Gestalt*” is german and it means “*form*”, “*shape*”, “*configuration*” or “*pattern of something*”. Gestalt, as used in psychology, denotes that the objects are perceived in the context of their overall form or configuration, not as the sum of their individual elements. For instance, a square is composed of four separate and equal lines connected together at right angles. However, if a person was asked what he sees, he would respond that he sees a square, the whole configuration, not for individual lines. Gestalt psychologists believed that just as a person perceives in terms of the whole object rather than its parts, that human behaviour should be studied as a pattern, not as separate incidents of stimulus and response.

The gestalt psychologists observed that the mind imposes its own interpretation on the sensations it perceives, independent of the stimuli themselves. A good example of this is optical illusion. Two lines of equal length may be drawn in a certain way against a particular background, and made to appear to be unequal. Such optical illusions obviously are not inherent properties of the objects themselves. Thus, it can be concluded that the illusions must be caused by one's mental processes and that the brain does not just passively react to stimuli.

Studies made by gestalt psychologists also showed that the mind can focus attention on one thing and can perceive only one thing or one sensation at a time. They also showed that the mind tends to simplify complex sensual information by grouping together those that have similar characteristics.

For example, if there are seven pieces of fruit in a bowl, of which three are apples and four are oranges, the mind will group the apples together and the oranges together. So, if asked what is in the bowl, one would answer, "three apples and four oranges," not seven pieces of fruit. Although its principles and ideas are still utilized in the studies of perception, and behaviour, gestalt psychology, which began as a revolt against "structuralism," no longer exists today as a separate school.

## Behaviourism

It is a radical form of objective psychology in which all references to introspection and consciousness are rejected in favour of a discussion of psychologically relevant events primarily in terms of stimulus and response. This radical form was first proposed in America by **John B. Watson** in a paper entitled "Psychology as the behaviourist views it." Watson rejected mind as the subject of psychology and insisted that psychology be restricted to the study of behaviour;

the observable (or potentially observable) activities of people and animals.

In addition to its focus on behaviour as the proper subject matter of psychology, behaviourism had three important characteristics:

- First was an emphasis on conditioned responses as the elements, or building blocks, of behaviour. Behaviourism, in fact, was somewhat like the structuralism because it maintained that complex processes are compounds of more elementary ones. Its elements however, were conditioned responses rather than sensations, images or emotions. The conditioned responses can be described loosely as a relatively simple learned response to a stimulus. Watson argued that complex human and animal behaviour is made up almost entirely of conditioned responses.
- Second closely related characteristic of behaviourism was its emphasis on learned, rather than unlearned behaviour. It denied the existence of inborn, or innate behavioural tendencies.
- Third characteristic of behaviourism was its focus on animal behaviour. Watson held that there are no essential differences between human and animal behaviour and that we can learn much about our own behaviour from the study of what animals do.

## Watsonian behaviourism

The central tenet of behaviourism is, of course, the objectivity of the data to be accepted by science. The facts of observation are to be limited to those of any other science: observable events that can be recorded by an experimenter, often with the aid of precision instruments. The events to be included are, first of all, the antecedent stimuli, and then



the consequent responses of muscles and glands. Muscles and glands are the only effectors; there is no additional “mental activity.” The behaviourist was also interested in the products of behaviour, which can also be objectively measured. Verbal responses, although produced by muscular movements, are really products of movement, quite as much as words typed on a page or check-marks on a psychological test. This interest in the products of behaviour saved behaviourism from becoming a “muscle-twitch” psychology—an unfavourable description mentioned by Watson in the preface to his psychology from the standpoint of a behaviourist.

The acceptance of verbal responses as behaviour also freed behaviourism from restrictions that would otherwise have been imposed: for instance, it permits the study of dreams, without calling this introspection.

Behaviourism is still very much alive today in psychology. Behaviourism has given birth to the technology of teaching machines, the use of behaviour modification in instructing the mentally retarded and the use of behaviour therapy to treat mental disorders.

## Psychoanalysis

The psychoanalytic school was founded in Vienna, Austria, by the psychiatrist **Sigmund Freud**. Contrary to the other schools of psychology, which looked for the external and structural factors to determine the causes of human behaviour, the psychoanalytic school looked for the emotional causes of behaviour, and concerned itself with abnormal behaviour as well as normal.

In the course of his practice with the neurotic patients, Freud developed a theory of behaviour and mind which said that much of what we do and think result from urges, or drives, which seek expression in behaviour and thought. A crucial point about these urges and drives,

according to psychoanalytic theory, is that they are hidden from the awareness of the individual; they are, in other words, unconscious. It is the expression of unconscious driver which show up in behaviour and thought.

Freud emphasized that human behaviour is controlled by unconscious forces or behaviour. Human behaviour is largely controlled by only two instincts, namely that of sex and aggression. All human behaviour is caused and expressed because of these two instincts. Psychoanalysis also emphasized that the first six years of life are very important and play a crucial role in the formation of the personality development.

Psychoanalysis received mixed reception. Some welcomed its ideas as revolutionary, others criticised it for being more of an art and less scientific. However, psychoanalytic views, thinking, concepts and explanations still predominate amongst the psychological works.

## MODERN VIEW POINTS ABOUT PSYCHOLOGY

Today, except for modern versions of behaviourism and psychoanalysis, the old schools of psychology have disappeared. Some of the points of view about what is important in understanding mental life and behaviour, characterize the present scene; among these are:

### Cognitive psychology

**Jean Piaget** and **Bruner** and **Gagne** have contributed immensely towards the development and our understanding of cognitive psychology. According to them, behaviour and mind are to be understood in terms of the ways in which information from the environment, received through the senses, is processed. **Cognitive psychology** is a branch of psychology that deals with perception, learning and

memory, concept formation verbal behaviour and problem solving especially in human beings. Unlike behaviourism, cognitive psychology deals with unobservable mental processes that presumably are composed of particular brain functions.

Although cognitive psychologists now study mental structures and operations, they have not gone back to the introspection methods that were employed by structuralists like Wundt. They still use objective research methods, just as behaviourists do.

## Humanistic psychology

*Humanistic psychology* developed from psychology proper, chiefly from the writings of **Abraham Maslow**, **Carl Rogers** and **Charlotte Bulher**. Humanistic psychology was called as the “*third force*” in psychology by Abraham Maslow. It developed as a reaction to the two dominant schools of thought namely behaviourism and psychoanalysis. According to Maslow both the dominant schools of thought had taken, a very biased view of mankind. Both viewed human behaviour in terms of deterministic and reductionistic principles.

The determination of Freud was characterized in terms of biological principles of instincts, namely the principle of sex and aggressive instinct. Whereas, the determinism of behaviourism was characterized in terms of conditioning principles.

Humanistic psychology believed that human beings are free. They have a “*free choice*” and a “*free will*”. They are not puppets in the forces of nature, environment or instincts. It emphasizes a person’s sense of self and each individual’s attempts to achieve personal competence and self-esteem.

Humanistic psychology emphasized the

future of human beings. The study of his subjective experiences using phenomenological methods. Humanistic psychology de-emphasized the study of animals. They stressed that no doubt human beings are very much similar to animals but we should study how human beings are different from animals because it is these differences that make man a unique being.

Humanistic psychology emphasized the healthy, positive, creative and uniqueness of individuals.

## Behavioural psychology

The current behavioural perspective focuses on the observed behaviour of people or animals and not on their mental processes.

## Biological psychology

Psychologists with a biological perspective try to relate people’s behaviour and mental events, as observed through their behaviour, to functions of their bodies—especially to the activity of their nervous and glandular system.

## Social psychology

Psychologists with a social perspective are interested in the interactions between and among people which influence mind and behaviour.

## Psychoanalytic psychology

The current psychoanalytic perspective (or, more broadly, the psychodynamic perspective) focuses, as did its historical forerunner, on the unconscious motives and defense mechanisms which manifest themselves in mental life and behaviour. ■ ■

