**PSYCHOLOGY**

***COURSE DESCRIPTION/ OBJECTIVES***

**The main focus of the course will be on introducing essential terminology, theories, themes, concepts, and trends relevant to modern day psychology.**

**Practical application of knowledge, besides a knowhow of theoretical constructs, will be encouraged**

How to use psychology and psychological concepts in everyday life is an essential component, besides having a basic understanding of the theoretical part of it. It is expected that after completing this course, the student will be able to use the psychological concepts for resolving problems, or at least identifying, problem areas and situations where psychological intervention is required.

**Why do we study psychology?**

Scientific inquiry begins with an attitude of eagerness to skeptically investigate competing ideas, with an open- minded approach. Putting ideas to the test helps us in fully understanding them. The curiosity that drives us to test ideas, and to expose their underlying assumptions, can be experienced in every day life as critical thinking.

**Theoretical perspectives of psychology**

There are many disciplines that study human nature. Psychology is one. Within psychology, the biological, behavioral, psychoanalytic, cognitive and social- cultural perspectives are complementary. Each has its own purposes, questions, and limits; together they provide a fuller understanding of mind and behavior.

**Some Additional Advantages**

**Identify situations where psychological intervention may be required:** While studying psychology, you come to know that psychology’s applications are not limited to curing mental problems only, but have wide range of applications from the minor to the most extensive tasks in which psychological principles can be used. Here it is important for you to identify situations where psychology’s principles and interventions can be used in order to resolve the issue.

Besides these basic objectives, there are many other advantages that the students will, or may, enjoy. Knowledge of psychology affects your personality also by enriching your intellectual life and enlarging your vision to see and observe things around you. We will discuss a lot of things, and they will be explained in such a manner that they will add some skills and a better understanding to your present intellectual caliber. For example, if you want to enhance your learning by studying psychology, there are some important and useful tips for you:

***Misconceptions about psychology and psychologists***

**Anybody who has studied psychology can read people’s Minds**

This is the most frequent thought that comes into the mind of people who believe that psychologists are like magicians who can tell every thing about any person, his thoughts, feelings emotions, personality and all that other people cannot tell. This actually is not the case, because psychologists are not the magicians or something like that. They are professionals and their area of interest is basically the study of human behavior and mental processes; and this requires good observation as well as good prediction. Another important thing that has to be kept in mind is that not all of those who have a degree in psychology can understand, explain, and predict the personality or behavior of a person, because it mainly requires not just good observation but proper training as well.

**Psychologists can predict fate or destiny**

This is not actually the case. Lay people have these views because they see that psychologists are capable of accurately telling what type of people others are, what they are capable of doing, what are their potentials and capacities etc. In reality, the case is different since psychologists can only predict not the destiny but the direction that one may adopt in future; psychologists can assess and predict personality and behavior because they get professional training for studying human behavior and that is why they can easily tell what type of a person one is, what might be his potentials, and how much he/ she is capable of performing certain tasks.

**Psychologists are doctors**

Another very common misconception is that psychologists are doctors. Psychologists are not at all doctors; they are specially trained people who deal with the psychological problems and not the medical problems. Psychiatrists, on the other hand, are doctors who have a professional degree in medicine as well as training in treating those suffering from psychiatric/ psychological problems.

**Psychologists give medicines**

Not psychologist, but psychiatrists are the ones who prescribe medicine to the mentally ill patients, as they have a professional(MBBS) degree in medicine that authorizes them to prescribe medication.

**Best of luck**

**Syeda Ayesha Sheeraz**

Clinical psychologist

MS in Clinical & Counseling Psychology

(Gold Medalist)

**Chapter 1**

* Definition
* Goals of psychology
* Scope of psychology
* Psychology as a science of behavior
* Schools and systems of psychology,
* Recent trends in psychology

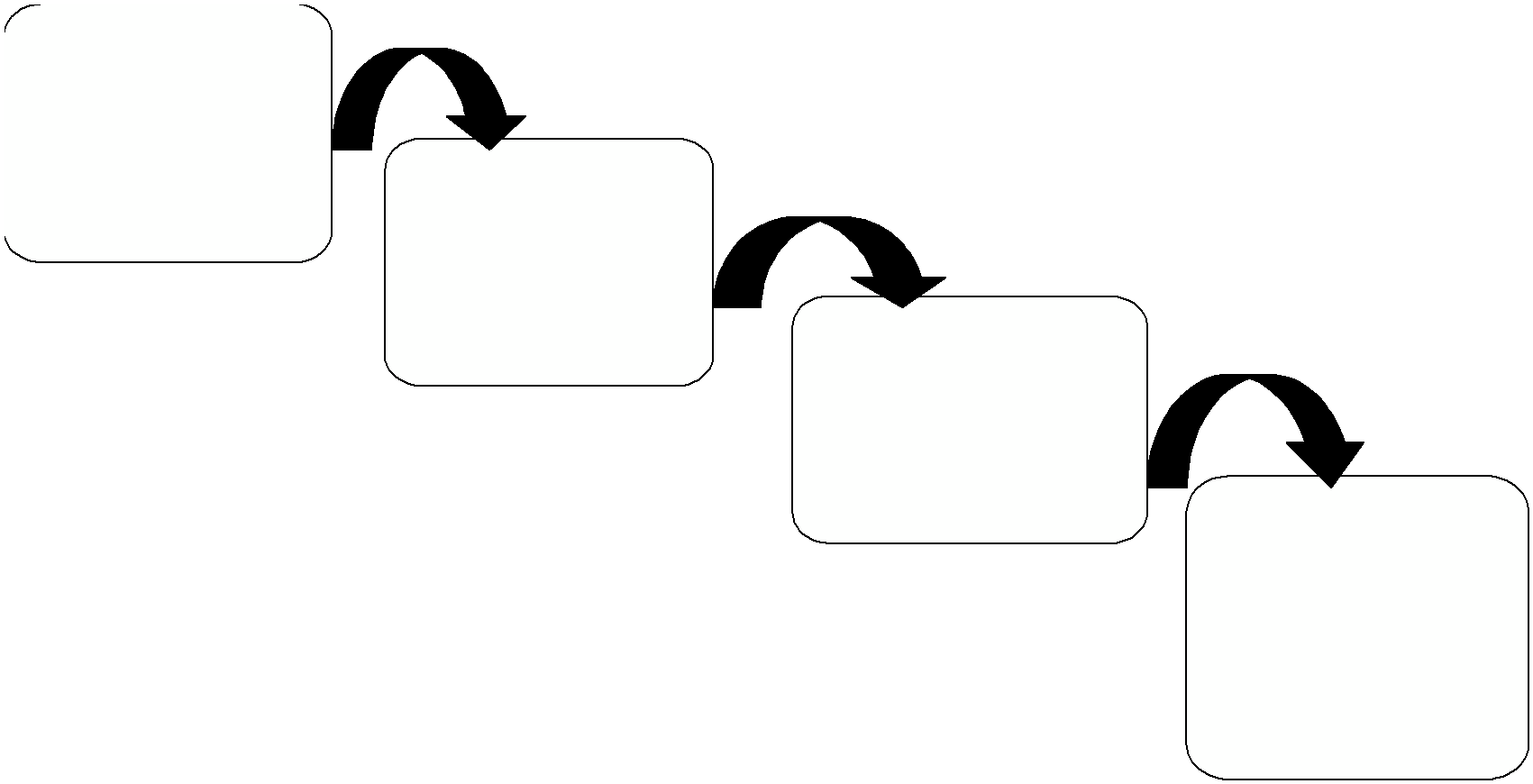
Literal meaning of psychology

* Term psychology comes from the combination of two Greek words

**Psych = Soul, self or mind**

**Logus = Study, knowledge**

Psychology **was** defined as knowledge of soul, mind, and consciousness in different era.



Study of consciousness

Study of behavior

Study of soul

Study of mind

**Psychology as a Science of Soul**

This is the first definition of psychology. Soul is concept that we all know very well but can’t describe it easily. Muslims and non Muslims both have clear concept according to their beliefs.

The term has changed its meaning with the passage of time. In primitive era it was believed that each and everything has a soul, but afterwards this belief was limited to living organisms only. In Greek period concept of good and bad soul was prevailing yet Greek philosopher had described it by their own.

* Pythagoras: he purposed body is a prison of soul. After the death of an individual soul becomes free and roam anywhere according to its will.
* Plato: felt that the soul could exist separately from the body, a view known as *Dualism.*
* Socrates: he was the 1st one to introduce the word Psyche. He purposed body is greater than the soul. Soul in immortal not the body.
* Aristotle: “De Anima” – the first book of psychology

Also considered as the first psychologist.

He believed Life is nothing without soul because it is the basic principle of life

Criticism

* Psychology is defined as science. Experimentation and observation cannot be possible with this definition.
* Soul is a mustery, it cannot be seen, or verified
* Concept of soul implies certain theories of religion with regard to immortality and relationship to God. Science is free from religious & cultural impact and vague terminologies.

**Psychology as a Science of Mind**

Greek philosophers named psychology as science of mind. Mind is defined as feeling, sentiments, emotions, sensations, conscious and unconscious functions.

* Plato: was the 1st term person who introduced this term for the 1st time.
* Aristotle: proposed mind as the function of body & mental process are effected due environmental factors
* John Locke: soul is a religious concept and mind is psychological concept

He gave the concept of “Tabula Rasa” that means mind is absolutely blank sheet at the time of birth. Environmental experiences make prints on it.

In 19th century psychology was emerging as a separate discipline. It was defined as a science of mental process.

There are two types of mental process

Cognitive : perception, beliefs, thinking, thoughts, ideas, understanding, remembering, judgement are included in cognitive mental processess

Affect: it includes one’s feeling, mood or emotional state.

Criticism

* Mind & mental processes are unobservable, experimentation is impossible.
* This definition is very Subjective, As we can be aware of our mental activities but not of others
* Not applied on animals, kids, or mentally ill patients.
* Mental processes is of Changing nature

**Science of Consciousness**

Psychology was also defined as science of consciousness. What is consciousness? The present momentary state/awareness is called consciousness. What we are experiencing now at the moment is conscious mental process.

Criticism

* Unscientific, subjective and cannot be observed
* Not applied on animals, kids, or mentally ill patients
* Difficult to study other’s conscious processes directly
* Def is narrow: excludes the study of subconscious & unconscious

**Psychology as a science of Behavior**

John B Wason claimed that psychology is a study of behavior. What an organism do, their action, reaction, and responses to a stimuli. The behavior is observable and can be measured experimentally.

Criticism

* Ignored mental process
* Discarded concepts of conscious, subconscious or unconscious.

**Comprehensive Definition**

**The systematic & scientific study of behavior and mental processes of both humans and animals.**

Science: psychology as a science uses systematic methods to observe, describe, understand, predict, & control behavior.

Scientific methods are not casual it is a systematic and objective. Researchers carefully plan and conduct their studies for exploring any phenomenon in order to obtain accurate, reliable and consistent results.

Behavior is considered to be any anything that the individual does, or any action that can be observed by others. Eating, speaking, laughing, aggression, cry, sleeping etc.

Mental processes are the internal, subjective, unobservable components, such as thoughts, beliefs, feelings, sensations, perceptions etc., that can be inferred from behavior. For example planning, thinking, imagining etc

**Goals of psychology**

* Describe: what is happening?
* Explain: why it is happening?
* Predict: how will it happen again?
* Control: how can human behavior & mental processess be changed?

**(Read explanation from the handout provided)**

**Psychology as a Science of Behavior**

**Humans and Animals.** *Behavior* is defined as any observable or measurable response by a person or animal. The definition of psychology includes the study of *all* behavior , including both animal and human behavior.

**Heredity and Environment.** One of the questions psychology attempts to answer is whether behavior occurs as a result of inherited characteristics *( hereditary influences-* ***NATURE****)* or because of some effect of learning *(environmental influences-* ***NURTURE****).* A controversy regarding the relative importance of *heredity* and *environment* has continued in psychology for a long time and remains unresolved. The generally accepted finding is that both influences affect behavior-separately and as they interact.

**Conscious and Unconscious.** Behavior is often the product of a *conscious* choice. Some behaviors, however , may result from motives or intensions that are below a level of awareness/consciousness. Many theorists refer to these motives as *unconscious.* Both conscious and unconscious motives may lead to responses, and psychology therefore studies both.

**Normal and Abnormal.** Psychology studies both *normal* and *abnormal behavior.* It is often difficult to decide whether a behavior or thought pattern should be classified as normal or abnormal. The criteria used to make this decision include the level of distress or disability being experienced and how maladaptive, disruptive, or harmful the behavior is for the person or for society. Decisions of this nature may depend on the specific characteristics of the individual or the culture in which the individual resides.

**Age Range.** Psychology studies behavior over the entire life span. Indeed, because behavior may depend on hereditary characteristics as well as learning. Psychologists are concerned with the individual from the moment of conception until death. However, very few psychologists study the entire age range; most prefer to concentrate on a distinct span, such as early childhood , adolescence, or late adulthood.

**Pure or Applied.** Finally, the breadth of psychological study is such that it includes both theoretical studies and the application of psychological principles to specific problems.

The aim of *pure psychology* is to extend and improve knowledge while the aim of *applied psychology* is to extend and improve the life .

**﻿Subfields of psychology**

***Subfield Description***

**Behavioral neuroscience** Behavioral neuroscience examines the biological basis of behavior.

**Clinical psychology** Clinical psychology deals with the study, diagnosis, and treatment of psychological disorders.

**Cognitive psychology** Cognitive psychology focuses on the study of higher mental processes.

**Counseling psychology** Counseling psychology focuses primarily on educational, social, and career adjustment problems.

**Cross-cultural psychology** Cross-cultural psychology investigates the

similarities and differences in psychological functioning in and across various cultures and ethnic groups.

**Developmental psychology** Developmental psychology examines how people

grow and change from the moment of conception

through death.

**Educational psychology** Educational psychology is concerned with teaching and learning processes, such as the relationship between motivation and school performance.

**Environmental psychology** Environmental psychology considers the relationship between people and their physical environment.

**Evolutionary psychology** Evolutionary psychology considers how behavior is influenced by our genetic inheritance from our ancestors.

**Experimental psychology** Experimental psychology studies the processes of sensing, perceiving, learning, and thinking about the world.

**Forensic psychology** Forensic psychology focuses on legal issues, such as determining the accuracy of witness memories.

**Health psychology** Health psychology explores the relationship between psychological factors and physical ailments or disease.

**Industrial/organizational** Industrial/organizational psychology is concerned with the psychology of the workplace, including productivity, job satisfaction, and decision-making.

**Personality psychology** Personality psychology focuses on the consistency in people’s behavior over time and the traits that differentiate one person from another.

**Psychology of women** Psychology of women focuses on issues such as discrimination against women and the causes of violence against women.

**School psychology** School psychology is devoted to counseling children in elementary and secondary schools who have academic or emotional problems.

**Social psychology**  Social psychology is the study of how people’s thoughts, feelings, and actions are affected by others.

**Sport psychology** Sport psychology applies psychology to athletic activity and exercise.

**SCOPE OF PSYCHOLOGY**  
After doing a degree course in psychology one may join a variety of work settings, the most common being:  
• Education/teaching  
• Research  
• Hospitals/clinics  
• Recruiting/screening agencies  
• Specialized professional settings e.g. armed forces, social welfare etc.

**SCHOOLS AND SYSTEMS OF PSYCHOLOGY**

**Earlier schools of thoughts**

The earlier schools that paved the way for further developments in modern psychology were

STRUCTURALISM: focused on studying the conscious experience by looking into its basic elements.

FUNCTIONALISM: focused on what the mind does and how it does.

GESTALT PSYCHOLOGY: focused on studying the whole experience of a person rather than breaking it into individual components.

PSYCHODYNAMIC SCHOOL: focuses on the unconscious forces and childhood experiences that drive/ motivate human behavior.

BEHAVIORIST / BEHAVIORAL SCHOOL: focuses on studying the behavior that is observable and overt.

**Structuralism.**

Developed by William Wundt and later expanded by his student Edward Titchener (1867- 1927) was called *Structuralism.*

The school of thought that focused upon the study of mind and conscious experience: consciousness, thinking, and emotions.

Emerged from the work of Wilhelm Wundt who set up the first psychology laboratory at Leipzig, Germany, in 1879 to study the “building blocks of the mind”, and is generally known as the founder of “scientific psychology”.

He proposed materialism because he did not think a science could be operated solely through physical investigations of the brain. He felt that the study of mind must be a science of experience.

They used INTROSPECTION as their method of study.

Literally it means looking within, to try to describe a person’s memory, perceptions, cognitive processes and motivations.

It can also be defined as analysis of one’s own thoughts.

* **Structuralists** believed that sensations are the basic elements of consciousness for example the **sensation of taste**, **Tichener** identified 4 elements, **Sweet, sour, salty, bitter.**
* **Wundt** believed that mind in compare of **senses, ideas, images** and **feelings** and each can be described through describing its quality, duration, clearness and intensity, (sweet, how long, vivid, dim).

Psychology for the Structuralists was the study of the *introspective* reports of normal human adults. Trained subjects made descriptive reports of what they believed were the elements of stimuli presented to them. These reports were supposed to allow a psychologist to interpret the structure of the mind and how it worked . The work of the Structuralists paralleled that of scientists in other disciplines; for example, studies in chemistry focused on analyzing substances into their chemical elements.

**EXAMPLE** In a Structuralist experiment, you might be asked to report how you sensed the weight, color, and texture of this book. You also might be asked to describe your feelings, if any, toward the book. Merely saying, "This is a psychology book ," would not be sufficient as an introspective report.

* An interpretation upon being shown an apple would be “**I see around, red object**”.
* According to **structuralists**, introspection was their preferred method because it came directly from the person experiencing the **phenomena** and that analyzing these reports **psychologists** could come to a better understanding of the **structure** of mind.

He felt that the study of mind must be a science of experience. He supported the existence of the science of psychology quite independent of biology and physiology. He believed that psychology must have an experimental side.

**Subject matter of psychology**

According to Wundt, the subject matter of psychology is to be immediate experience, as contrasted to mediate experience. By mediate experience Wundt meant experiences used as a way to find out about something other than the experience itself. This is the way in which we use experience in gaining knowledge about the world.

Immediate experience is the experience as such, and the task of psychology is to study this immediate experience. The physicists are, on the other hand, interested in studying only the mediate experience, but the Wundtian psychologists study immediate experience.

*Main Presumption*

• All human mental experience could be understood as the combination of simple events or elements. By analyzing the basic elements of sensations and other mental experiences, the underlying structure of the mind could be unveiled

• Task of psychology is to identify the basic elements of consciousness just like physicists could break down the basic particles of matter

**Edward Bradford Tichener**

• American psychologist, who was English by birth, but German in professional and personal temperament, who spent his most productive years in Cornell University, New York.

• He was solely concerned with studying the brain, and the unconscious, and for this he believed, we should break it down into basic elements. After that, we can construct the separate elements into a whole and understand what it does.

• He believed that we can study perception, emotions and ideas through introspection, by reducing them to their elementary parts

• There are four elements in the sensation of taste: sweet, sour, salty and bitter

• Ideas and images are related: ideas were always accompanied by images

• The underlying process in emotions was affection

**Strengths:**

* Helps us organize and understand how the world works e.g. psycho-analytical theory comes from a structural model that assumes a three component psyche system of id, ego and super ego.
* It is a structure which gives us a way of interpreting and understanding human behavior.
* It is the first major school of thought in psychology.
* It formed the bans of experimental psychology and provided a foundation for the future researchers of what to do and what not to do.
* Establishing psychology as a scientific endeavor and stressing appropriate scientific methodology
* Providing a starting point that was challenged and investigated by many of the later psychological systems.

**Weakneness:**

* Structuralists tried to deiscover “what is there” and “in what quantity” not why is it there in the first place or what is its function.
* It assumed that people had a complete understanding of the process of their conscious experience.
* Structuralism required people to be able to verbalize their thoughts and perceptions.
* It excluded and ignored the important social and scientific developments happening outside of structuralism. For example- study of animal behavior, abnormal behavior personality.
* Structuralism studied only verbal reports of human conscious experience and awareness, ignoring the study of subjects who could not report their introspection.
* The structuraralists sought to look at individual elements first, and then combine parts into a whole, rather than study the variety of behavior directly.

**Functionalism.**

* Founded by William James, also known as the founder of American Psychology.
* This school became prominent in the1900s. It emerged as a reaction to Structuralism.

The functionalist psychologists start with the fact that objects are perceived and “how” they are perceived. They asked “why” as well.

* Functionalists were concerned with the purposes of behavior rather than the structure of the mind.
* Influenced by Charles Darwin's theory of evolution, which stressed species survival and natural selection, Functionalism concentrated on functions of mental activity & investigated the adaptation or adjustment the subject achieved in different environments for survival.
* Functionalists held that psychologists should study the functions of consciousness as it was always changing and hence, had no basic structure of its own.
* William james, suggested that habits are repeated activities which are learned and that use repeat something several times our nervous system is learning For example.

Each time that we open a door, it is easier than the previous time.

* He suggested that beliefs, thoughts and behaviors have to be considered according to their consequences.

Functionalists generally adopted a broader view of psychology than did Structuralists. This allowed them to study all age groups and a variety of subjects. Many new areas of investigation resulted, including the study of motivation and emotion, child psychology, animal experimentation, and various areas of *applied psychology.*

*Main assumptions*

• Emphasized “function” rather than “Structure” of human consciousness i.e., what the mind does

• Focused upon the way humans adapt to their environment; what roles behavior played in allowing people to better adapt to their environment.

• Examined the ways in which behavior allows people to satisfy their needs

• Functionalists were especially interested in education and applied psychology

***EXAMPLE.*** *The Functionalists were not limited to the use of normal human adults as subjects for their experiments. (They did not rely exclusively on introspective reports, as did the Structuralists.) The Functionalists, for example, might investigate the ways in which very young children responded to novel problem-solving situations.*

***Aims & Objectives of Functionalism***

* To make psychological studies practical and applicable To real life situations and issues.
* To broaden the scope of psychology to animal children’s. And abnormal human research.
* To study the functions of the components of mind as to why and for what purpose a behavior occurs

***Method of Investigation***

*Longitudinal Research*

Observation, interviews, and testing of a person over a long period of time: made possible to observe and record the subject’s development and his reaction to different circumstance.

The functionalists were more interested in “how it happens” and “why it happens” as approved to structuralists who seeked “what happen” and “in what amount” when we engage in mental activity

William James psychology included four methods.

Analysis.

Introspection.

Experiment.

Comparison.

The participants comprised of animal, children as well as abnormal human beings.

***William James***

**James was a Harvard University professor, primarily trained in physiology and medicine. Psychology and philosophy fascinated him, and he treated psychology as a natural science.**

James wrote about the stream of consciousness, emotions, the self, habit formation, mind-body link and much more. He was also interested in will, values, religious and mystical experiences. James said: “We should study consciousness but should not reduce it into elements, content and structure”. Acts and functions of mental processes need to be focused upon, rather than contents of the mind. Consciousness was an ongoing stream, and was in continual interaction with the environment.

***John Dewey***

• Famous American educator

• One of the key founders of “Functionalism”

• Stimulus– Response phenomenon is not an automatic behavior, the goal of the person performing it has the main role in it; the stimulus and the response determine each other

• It is the function, or the goal, of the whole action that elicits response

• Dewey developed the field of ‘School Psychology’ and recommended ways for meeting student’s needs

• Teachers are strongly influenced by their psychological assumptions about children and the educational process

Teachers need to understand two issues:

i. Children and adults are different; teaching/education should be in accordance with children’s developmental readiness

ii. Children are similar to adults in the sense that they perform better when they have some control over what they are to accomplish; the curriculum should be designed accordingly

**Strengths:**

* Influenced behaviorism and applied psychology.
* Refined the thoughts of structuralism to improve psychology.
* Involved children disabled and animals to widen the scope of psychology.
* Moved from pure psychological concepts too applied ones.

**Gestalt Psychology**

Gestalt psychology is a school of thought that looks at the human mind and behavior as a whole.

This school developed as a reaction to structuralism in the early 1900s

An approach that focuses on the organization of perception and thinking in a ‘‘whole” sense rather than on the individual elements of perception.

Instead of considering the individual parts that make up thinking, gestalt psychologists concentrated on how people consider individual elements as units or wholes.

• In contrast to the structuralist approach of breaking down conscious experience into elements, or focusing upon the structure, the Gestalt school emphasized the significance of studying any phenomenon in its overall form.

• The word gestalt means “Configuration”

• The main concept that the Gestaltists posed was that the “WHOLE” is more than the sum of its parts, and it is different from it too.

• They concentrated on how people consider individual elements together as units or wholes

• The concept of Gestalt applies to everything, objects, ideas, thinking processes and human relationships

**Major Gestalt Psychologists**

* [Max Wertheimer](http://psychology.about.com/od/profilesmz/p/max-wertheimer.htm)
* Kurt Koffka
* Wolfgang Kohler

**Max Wertheimer**

• The founder of Gestalt Psychology, born in Prague in 1880

• Studying at the University of Frankfurt he became aware of a form of apparent motion that was called “Phi phenomenon”

• Phi phenomenon = when two lights are in close proximity to each other, flashing alternately they appear to be one light moving back and forth; therefore the whole was different from the separate parts;

• Explanation of phi phenomenon led to a separate school of thought i.e., Gestalt school, that had deep rooted impact on learning, ethics, and social psychology

***Gestalt Laws of Perceptual Organization***

*The whole is greater than the sum of its parts.*

*We perceive experiences in a way that calls for the simplest explanation, even though reality may be entirely different.*

*We tend to organize our experience so that it is as simple as possible.*

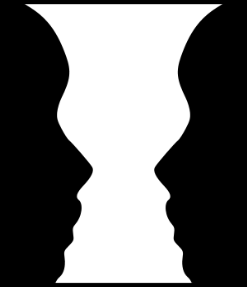
**Gestalt laws of organization:**

A series of principles that describe how we organize bits and pieces of information into meaningful wholes.

1. **Figure and ground**

Our perceptual tendency to see objects with the foreground as well as the background\_ the object is being recognized with respect to its background

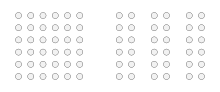
The figure is the thing being looked at, and the ground is the background against which it stands.

(a)

Weather you see two faces or a vase depends on which parts of the drawing you see. You can’t perceive the drawing both way’s at once.

1. **Proximity**

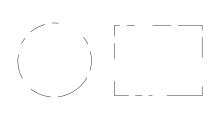
Things that are near one another seem to belong together. The black dots in figure (b) could be grouped into vertical and horizontal rows, people tend to perceive rows because of proximity (the dots are closure together horizontally.

(b)

**3- Closure**

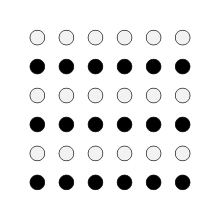
It is the perceptual tendency to fill in the gaps and completing the contours; enables us to perceive the disconnected parts as the whole object.

Thus, you may “complete” figures that actually have gaps in them.it demonstrated in figure (c)

 (c)

**4- Similarity**

Tendency to perceive objects, patterns or stimuli as groups, which are similar in appearance - parts of the visual field that are similar in color, lightness, texture, shape, or any other quality



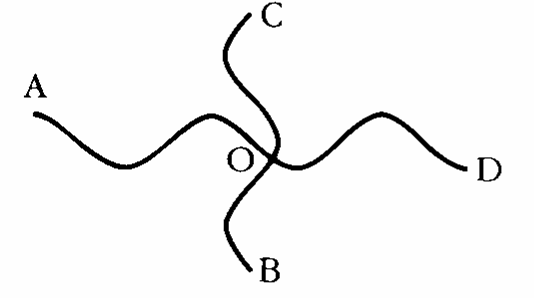
Elements that are similar in appearance we perceive as grouped together. (d)

**5-simplicity**

We tend to organize stimuli in the simplest way. We don’t see the pattern as complicated figure.

**6- Continuity**

The principle of continuity reflects peoples tendency to follow in whatever direction they’ve been led. Thus, people tend to connect points that result in straight or curved lines that shown in below figure.



***Kurt Koffka***

• Wrote the famous “Principles of Gestalt Psychology” (1935)

• Talked about geographical versus behavioral environment: people’s behavior is determined by how they perceive the environment rather than by the nature of the environment.

***Wolfgang Kohler***

• Gave the concept of “insight” and “transposition”, as a result of his observations of a caged chimpanzee and experiments with chickens

• **Insight** = spontaneous restructuring of the situation

• **Transposition** = generalization of knowledge from one situation to another

**Modern Perspectives / Recent trends**

At present some of the earlier approaches still exist. Psychologists belonging to these sets of theories have contributed a lot to the body of psychological knowledge and practice.

**The biological Modal**

The psychological model that views behavior from the perspective of biological functioning .The role of brain, genes, neurotransmitters, endocrine glands etc. How the individual nerve cells are joined together, how the inheritance of certain characteristics from parents and other ancestor influences behavior, how the functioning of the body affects hopes and fears, and so on..

* Biological theorists view abnormal behavior as an illness brought about by malfunctioning parts of the organism.
* They point to a malfunctioning brain as the cause of abnormal behavior, focusing particularly on a problem in brain anatomy, brain chemistry or genetics.

***Brain anatomy and abnormal behavior***

* The brain is made up of approximately 100 billion nerve cells called neurons and thousands of billions of support cells, called ‘Glia’.
* Neurons are the cells that receives information and transmit it to other cells
* Within in the brian large groups of neurons form distinct areas or brain regions. The neurons in each of these brain regions control important functions

***Brain Chemistry and Abnormal Behavior***

* Psychological disorders can be related to problems in the transmission of messages from neuron to neuron.
* Information spreads throughout the brain in the form of electrical impulses that travel from one neuron to another neuron or more others……
* A tiny space, called the ‘ Synapse’ separates one neuron from the next. (gap between 2 neurons)
* When an electrical impulse reaches a neuron’s ending, the nerve ending is stimulated to release a chemical, called a “neurotransmitter”.

***Neurotransmitters and Their Role***

* **Acetylcholine:** Learning, Memory and Muscle control
* **Dopamine:** Motor activity, Coordination, Emotion and Memory
* **Epinephrine:** Emotion, Stress
* **GABA (Gamma-Amino Butyric Acid):** Anxiety, Arousal, Learning
* **Serotonin:** Sensory Processing, Sleep, Arousal
* **Glutamate:** Anxiety, Mood

***Endocrine Glands***

These glands form the body’s “slow” chemical communication system; a set of ductless glands that secrete hormones (special chemicals) into the bloodstream”

**ENDOCRINE GLANDS** **Hormones**

*Endocrine Glands and Abnormality*

* Low secretions of the thyroid produce anxiety like symptoms such as irritability and tension
* Low level of pituitary secretions produces depression like symptoms—Fatigue, apathy etc.
* Abnormal secretions of hormones may cause major depression

*Neurotransmitters play a key role in moving information through the brain.*

Researchers have identified dozens of neurotransmitters in the brain, and they have learned that each neuron uses only certain kinds. Studies indicate that abnormal activity by certain neurotransmitters can lead to specific mental disorders

* Certain anxiety disorders, for example, have been linked to low activity of the neurotransmitter gamma-aminobutyric acid (GABA),
* Schizophrenia has been linked to excessive activity of the neurotransmitter dopamine, and
* Depression has been linked to low activity of the neurotransmitters serotonin and norepinephrine.

Mental disorders are sometimes related to abnormal chemical activity in the body’s endocrine system.

* Endocrine glands, located throughout the body, work along with neurons to control such vital activities as growth, reproduction, sexual activity, heart rate, body temperature, energy, and responses to stress.
* The endocrine glands release chemicals called hormones into the bloodstream, and these chemicals then propel body organs into action.

**Genetics and Abnormal Behavior**

Abnormalities in brain anatomy or chemistry are sometimes the result of genetic inheritance.

Studies suggest that inheritance also plays a part in mood disorders, schizophrenia, Alzheimer’s disease, and other mental disorders.

***Therapeutic Techniques in Biological Model***

The three leading kinds of biological treatments used today are

* drug therapy,
* Electroconvulsive therapy, and
* Neurosurgery.

Drug therapy is by far the most common of these approaches.

In the 1950s, researchers discovered several effective psychotropic medications, drugs that mainly affect emotions and thought processes

Four major psychotropic drug groups are used in therapy:

* Antianxiety,
* Antidepressant,
* Antibipolar, and
* Antipsychotic drugs.

**Electro-Convulsive Therapy (ECT)**

• A biochemical therapy for severely depressed patients in which a brief electric current is sent through the brain of the anesthetized patient.

• This controversial therapy is applied to severely depressed patients

**Psycho-Surgery**

• It involves brain surgery which is used in the treatment of severe mental disorders patients who have resisted all other forms of treatments

* It is thought to have roots as far back as trephining, the prehistoric practice of chipping a hole in the skull of a person who behaved strangely.
* It is used only after certain severe disorders have continued for years without responding to any other form of treatment.

**Assessing the Biological Model**

Biological research constantly produces valuable new information. And biological treatments often bring great relief when other approaches have failed.

Weaknesses

* all human behavior can be explained in biological terms and treated with biological methods.
* Our mental life is an interplay of biological and nonbiological factors, and it is important to understand that interplay rather than to focus on biological variables alone.

Much of the evidence for biological explanations is incomplete or inconclusive. Many brain studies, for example, are conducted on animals in whom symptoms of depression, anxiety, or some other abnormality have been produced by drugs, surgery, or experimental manipulation.

Finally, several of today’s biological treatments are capable of producing significant undesirable effects. Certain antipsychotic drugs, for example, may produce movement problems such as severe shaking, bizarre-looking contractions of the face and body, and extreme restlessness.

**Psychodynamic Approach**  
The approach that concentrated on the unconscious forces that drive our behavior; belief that the inner forces over which individuals have little control motivate behavior.

• Founded by Sigmund Freud, the most influential figure in the history of psychology.

• The basis of motivation and behavior lies in inner forces; forces that are predetermined, and forces over which humans have little control, which the person is not aware of i.e., unconscious determinants of behavior or childhood experiences.

• It maintained that instincts are the driving force behind individual’s personality; there are life instincts as well as death instincts that play a role in human life.

*Significance of Psychodynamic Approach*

• The most influential theory of the 20th century, that affected psychology and related disciplines in a revolutionary manner

• Gave an entirely new perspective to the understanding of behavior and mental processes as well as mental illness

• The first theory to raise the awareness that not all behavior is rational

• Provided a basis to understand everyday life phenomena e.g. interpersonal relationships, aggression, prejudice

*Foundations of Psychodynamic Approach*

* **Psychic Determinism**

All behavior is determined i.e., has a cause that lies in the mind/psyche

* **Role of Consciousness**

A significant part of our behavior is generated by unconscious forces

* **Emphasis on Clinical Observation**

Clinical observation/ case studies were the main source of data

*Structure of Mind*

**Conscious**

Contains thoughts and feelings of which one is immediately aware

**Subconscious**

Mind level below the level of conscious awareness

**Unconscious**

Part of the sub conscious that cannot be accessed directly although impulses, ideas, and feelings may permeate out through other sources e.g. dreams, slips of tongue etc.

*Dreams in Freudian Approach*

• Dreams reflect unconscious needs, desires, and impulses.

• Dreams have two levels of dream content: manifest and latent.

Manifest content

**The obvious, apparent part: what a dream appears to be to the dreamer.**

Latent content

**The dream’s true meaning, which is usually disguised or distorted by dream work.**

*Psychodynamic Model of Personality*

**Is a three-part structure of the mind;** **containing id, ego and super ego.**

**ID:** The id is the only component of personality that is present from birth.

This aspect of personality is entirely unconscious and includes of the instinctive and primitive behaviors.

Freud used the term id to denote instinctual needs, drives, and impulses. The id operates in accordance with the *pleasure principle*; that is, it always seeks gratification.

**EGO:** Mediates the link of the self with the outside world, “Real World”, as well as between the id and superego; operates under the demands of the environment.

It operates under the *reality principle* and operates in the services of id. In other words, the ego comes into existence in order to bring the person into contact with experiences that will truly satisfy his/ her needs.

**SUPEREGO:** operates under *Moral principles*

* The superego grows from the ego.
* As we learn from our parents that many of our id impulses are unacceptable, we unconsciously adopt, our parents’ values.
* Judging ourselves by their standards, we feel good when we uphold their values; conversely, when we go against them, we feel guilty. In short, we develop a conscience.

According to Freud, these three parts of the personality—the id, the ego, and the superego—are often in some degree of conflict. A healthy personality is one in which an effective working relationship, an acceptable compromise, has formed among the three forces. If the id, ego, and superego are in excessive conflict, the person’s behavior may show signs of dysfunction.

***Defense Mechanisms***

Ego defense system, that may be distorting reality

i. **Repression:** Blocking unpleasant/ unacceptable thoughts by pushing them into the unconscious e.g. forgetting events of the painful childhood.

ii. **Regression:** Reverting back to a stage that was satisfying e.g. a boss showing temper tantrums like a child; or acting like a baby.

iii. **Displacement:** Redirecting the expression of unwanted desires or impulses to a substitute rather than the actual target e.g. beating children when a wife cannot express anger toward

husband.

iv. **Rationalization:** In order to justify one’s behavior, one develops a socially acceptable explanation or reasoning e.g. going for a second marriage saying that the first wife was quarrelsome.

v. **Denial:** Refusing to acknowledge or accept anxiety provoking thoughts or impulses e.g. being a heavy smoker but saying ‘I am an occasional smoker’.

vi. **Projection:** Attributing unwanted thoughts and impulses to others e.g. a person takes bribe and blames the organization for paying him not enough salary.

*vii. Sublimation:* **Converting unwanted impulses into socially approved thoughts, feelings and actions e.g. disliking the in-laws but behaving in a very friendly manner, or becoming a stamp collector to overcome the impulse to steal**

*Psychotherapy: Psychoanalysis*

• An intensive, long-term psychotherapeutic procedure.

• Requires long sessions over extended periods----- may be years.

• Better suited to intelligent individuals.

• Involves a special relationship between the therapist and the patient.

• **Target:** To explore unconscious motivation, conflicts, desires.

• **Goal:** Establishing intra psychic harmony by developing awareness of the role of the id, reducing over compliance with super ego, and by strengthening the ego.

• **Understanding of ‘repression’:** The therapy gives central importance to the understanding of the manner in which the person uses repression for handling conflict.

*Interventions used in Psychotherapy*

**1. Free association**

• Kept in a comfortable position, the patient is asked to talk aloud and say whatever comes to his mind without considering whether or not it is relevant, rational, or sensible.

• The patient is asked to reveal even the most undesirable and strong thoughts that have been repressed. This leads to emotional release, called ‘catharsis’.

**2. Analysis of Resistance**

At times patient feels inhibitions, and is unable or unwilling to express some thought or feeling i.e., barriers between conscious and unconscious. The psychoanalyst aims to break down such resistances so that the patient is enabled to face the unpleasant thoughts, impulses, events.

**3. Dream Analysis**

The therapist tries to uncover the latent content of dreams and decipher the symbolism involved.

**4. Analysis of Transference & Counter Transference**

Transference: The patient’s emotional response toward the therapist is often an indication of the patient’s relationship with a person who had been the center of the conflict. It may be negative or positive.

• Counter Transference: The therapists’ emotional reaction toward the patient is also important.

He may also start having positive or negative feelings for the patient.

*Criticism against Freudian Psychodynamic Theory*

• There is no scientific proof that many psychodynamic constructs, e.g. unconscious, exist

• Psychic Determinism: Freudian approach is deterministic and leaves not much room for conscious, rational, decision making or personal will to act

• It ignores the external variables and the environment

• It emphasizes the early childhood experiences too much

• The therapy is too time consuming and therefore expensive

**BEHAVIORIST / BEHAVIORAL APPROACH**

The psychological model that focuses on the overt, observable, behavior. The model grew out of the rejection of psychology’s early emphasis on the inner working of the mind, suggesting instead that observable behavior should be the focus of the field.

**John B. Watson** was the first person that advocated the behavioral approach. This is a psychological approach that considers the relationship between behavior and environmental stimuli as the focus of study; observable behavior is what psychology should be studying, understanding, and explaining.

This approach dominated psychology for most of the 20th century

* Behaviorism is different from most other approaches because they view people (and animals) as controlled by their environment and specifically that we are the result of what we have learned from our environment.
* Behaviorism is concerned with how environmental factors (called stimuli) affect observable behavior (called the response).

*What do the Behaviorists Study?*

**They specifically study:**

• Observable/ overt behavior

• Specific measurable responses

• How particular types of behaviors are controlled by particular types of environmental stimuli

**Method of investigation:** Data are typically collected under controlled laboratory conditions, employing technological assistance

*What the Behaviorists Are Not Interested in:*

**They are not interested in:**

• Unconscious

• Inner motivation

• Biochemical processes

• These and all other states, which are not being observed with the naked eye or cannot be evaluated.

*Behaviorist Analysis*

**Behaviorist Analysis is done for seeing and establishing the relationship between the stimulus and response/ behavior.**

Basic Terminology

• **Stimulus:** A physical energy source that has an effect on a sense organ, thus producing a response.

• **Response:** The action, behavior, or reaction triggered by a stimulus.

• **Environment:** External factors, variables, conditions, influences, or circumstance affecting one’s development or behavior.

• **Learning:** A relatively permanent change in behavior that takes place as a result of practice and/ or experiences.

The behaviourist approach proposes three main processes whereby people learn from their environment:

* + Classical conditioning involves learning by association.
  + Operant conditioning involves learning from the consequences of behaviour.
  + Modelling: learning by observing and imitating others.
* In Behaviourism only observable behaviour is to be studied because this can be objectively measured, and believes that the environment determines all behaviour.

HUMANISTIC APPROACH  
The psychological model, that suggests that people are in control of their lives. It is considered as one of the most recent approaches to psychology. This approach rejected the view that predetermined, automatic, biological forces, unconscious processes or the environment determines behavior. On the contrary, it proposes that people themselves decide about their lives. A failure in being capable of doing so leads to psychological problems. It also stresses the idea that people, by nature, tend to move towards higher levels of maturity and maximum potential.  
COGNITIVE APPROACH  
The psychological model that focuses on how people know, understands, and thinks about the world. Main emphasis is on how people understand of the world, and their thinking, affects their responses; how it may lead to positive or negative psychological consequences, and even health-related outcomes.

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| Subfield | Description |
| Behavioral genetics | *Behavioral genetics* studies the inheritance of traits related to behavior. |
| Behavioral neuroscience | *Behavioral neuroscience* examines the biological basis of behavior. |
| Clinical psychology | *Clinical psychology* deals with the study, diagnosis, and treatment of psychological disorders. |
| Clinical neuropsychology | *Clinical neuropsychology* unites the areas of biopsychology and clinical psychology, focusing on the relationship between biological factors and psychological disorders. |
| Cognitive psychology | *Cognitive psychology* focuses on the study of higher mental processes. |
| Counseling psychology | *Counseling psychology* focuses primarily on educational, social, and career adjustment problems. |
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