

Pioneers of Psychology

- The young Science of Psych. Evolved from the more established fields of **Philosophy** E.g.
- ❖ Wilhelm Wundt-Physiologist & Philosopher
- ❖ Darwin- English naturalist
- ❖ Ivan Pavlov- Russian Physiologist. Pioneered the study of learning.
- ❖ Sigmund Freud-An Australian Physician. Personality Theory.
- ❖ Jean Piaget-A Swiss Biologist. Known observer of children
- ❖ William James- American Philosopher & author of important 1890 Psych. text books

What is Psychology?

- ❖ Wundt- “The **science** of mental life”
- ❖ His basic research tools was-**introspection**- self examination of one's own emotional states & mental process
- ❖ He focused on inner **sensations, feeling & thoughts**

Sensation & Perception:-

- allow us to experience the world

Sensation

- Is a passive process which allows us to bring information from the outside world into the brain & the body

Sensation contd...

Perception

- Is an **active process** that involve **selecting, organizing & interpreting** information that has been brought to the brain by the various senses
- **Sensory organs** begin the process by absorbing energy from physical stimulus in the environment
- Sensory receptors convert (touch, smell, test, light, sound) these energy in to neuro impulses and then sent in to the brain

Contd...

- **Brain** receives the neurons impulses it organizes the information and translate in to something **meaningful** which is referred as Perception. e.g.
- Sound-loud, very loud, quite)
- Touch-cold, too cold, too hot, touch,
- Sight- close, far ,danger, fight etc)
- Brain has the ability to **discriminate** what is **important** and **irrelevant**

Contd...

- ❖ John **Watson**- dismissed introspection & redefined Psychology.
- Science is rooted in observation. As Wundt, said You can't observe a sensation, a feeling or a thought but you can observe people's behavior as they respond to different situations.

Contd...

- ❖ So Psych is “The science of **observable behavior**.” (1920s-1960s definition of Psych.)
- ❖ In 1960s Psych. became the study of mental processes through studies of how our own minds process & retain information, how we perceive, think & remember.
- ❖ Its concern diverted to- **Observable behavior** & with **inner thoughts & feelings**



Psychologists define psychology differently based on

- Their intentions, research findings, and background experiences.
- The wide scope of its concerns and the philosophical difference among its practitioners.

Contd..

- The word "psychology" is derived from two Greek words '***psyche***' and ***logos***".
- ***Psyche refers to mind, soul or spirit***
- ***logos means study, knowledge or discourse.***
- ***Therefore, "psychology" epistemologically refers to the study of the mind, soul, or spirit***
- ***Represented by the Greek letter ψ (psi) which is read as ("sy").***

The agreed defn. of psychology

- ❖ Psychology is a **scientific study** of Human and animal **behavior** and their underlying **mental processes**

Analysis/aspects of the Defn.

1. Scientific-

- uses scientific methods to study behavior and mental processes in both humans and animals
- Do not study behavior with **commonsense** rather they follow scientific procedures, and use **empirical** data to study behavior and mental processes.

Defn.Contd...

- The scientific method consists of the *orderly, systematic procedures that researchers follow as they identify a **research problem**, **design** a study to investigate the problem, **collect** and **analyze data**, draw **conclusions**, and **communicate** their findings*
- It makes appropriate scientific investigation (observation, **experiment**).
- It tries to **describe**, **explain** and **predict b/r of an organism** by using scientific methods
- Generally, experiments & observations are at the core of scientific psychology

Contd....

2. Behavior-

- All of our outward or overt/observable actions and reactions of a organisms, such as talking, facial expressions, movement , Smelling, sweating, Yelling, talking, questionnaire making are all observable b/rs.
- There is also covert behavior which is hidden, non-observable and generally considered as a mental process

B/r Contd...

- ❖ Behavior includes anything a person or animal does that can be observed in some way.
- ❖ Behavior, unlike mind or thought or feelings, can be observed, recorded and studied.
- ❖ No one ever saw or heard a mind, but we can see and hear behavior. We can see and measure what a person does and hear and record what a person says (this is a vocal behavior).
- ❖ *Behavior*- overt (seen behavior-the way we dress, talk)
- ❖ Covert-(un seen behavior-feelings such as anger, jealousy, kindness happiness, sad)

Defn. Contd....

3. Mental Process

- All the internal, covert activities of our minds, such as thinking, feeling, remembering, etc
- A **complex** state of the organism, involving bodily **changes** of a widespread character.
- Are **internal** Subject experiences that we **infer**
- E.g. crying may indicate sadness
- ❖ Applied to all processes of mental life, conscious.

Contd...

Psychology studies animal behavior for **two purposes**.

- It is **ethically** forbidden to conduct experiment

E.g. **destroying part of a brain**) on human beings. So animals are subject to experiment.

- **Conclusions** obtained from experiments on animal behavior are usually **applicable** to human behavior

Brainstorming

- ❑ ***Dear student, why do you think is psychology important?***
- ❑ ***What do you think a psychologist is doing when studying behavior and mental processes?***

Goals of psychology

As a science, psychology has four goals; *description, explanation, prediction, and control*

1. Description

- Observing the behavior and noticing everything about it
- A search for answers for questions like
- **What** is happening?
- **Where** does it happen?
- To **whom** does it happen?
- Under what **circumstances** does it seem to happen?

Goal contd...

- E.g. A teacher might notice that a young freshman girl in his/her general psychology classroom is behaving oddly. She is not turning to her homework, her results are slipping badly, and she seems to have a very negative attitude toward the course.

2. Explanation:

- Explanation is about trying to find reasons for the **observed behavior /what caused the b/r?**
- This helps to form theories of behavior (A

Goal contd...

- To know what cause the behaviour:

The teacher would most likely ask her parents about her home background, her friends and may come to an understanding that this girl was **behaving** the way she did because she was given **attention** (in a way **reward**) by other people when she used to behave oddly

Goal contd...

3. Prediction - to know what **caused the behavior?**

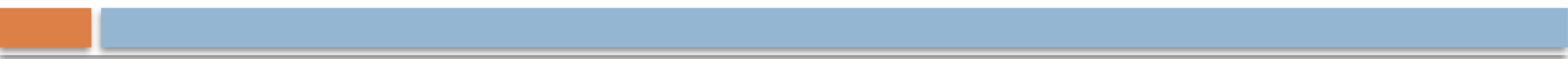
- is about **determining** what will happen in the future
- E.g. the case of the freshman girl, the psychologist or counselor would predict (based on previous research into similar

Contd..

4. Controlling

- ❑ How can it be changed?
- ❑ Control or **modify** or change the **behavior** from undesirable one (such as failing in school) to a desirable one (such as academic success).
- ❑ Control- used in the sense that a psychologist tries to check out the effects of certain undesirable factors in examining the relationship between two or more behaviors.

Goal Contd...



- E.g. in studying the r/n ship b/n intelligence and academic performance in freshman courses, a psychologist needs to control the effect of socio-economic status of the family

Historical Back ground of Psychology

- Formal idea about behavior and mind in Western culture began with classical **Greek philosopher.**
- Then Psychology split away from Biology & philosophy
- The **success of experimental** method encourage these philosophers to think that could be studied with scientific method. **mind and behavior**

Historical Back ground of Psychology

- Psychology as a science is relatively new field- only about 125 years old
- It began as a science of its own in 1879 in the university of Leipzig, in Germany, with the establishment of a psychology laboratory by Philosopher and Psychologist-Wilhelm Wundt.
- Wundt developed the technique of objective **introspection** to scientifically examine mental experiences

Historical Back ground of Psychology

- After the new orientation of subjective human experience, Psychology which was under Philosophy, then begun as an independent field of study and with Wundt as its founder or "father of modern psychology

Contd.-----

- ❖ 1883 first formal psychology laboratory-
united states by Johns Hopkins University
- ❖ Then most major **universities** had
psychological laboratories and dept.
- ❖ **William James & Wilhelm Wundt** & the
other psychologist of the time thought of
psychology as the **study of mind. They
did experiments in the area of
imagery, memory, thinking & emotion.**

Contd.-----

- ❖ **Fundamental** questions were raised about what should be studied in psychology. Should it study **mind**? **behavior**? or should both **mind & behavior**?
- ❖ Therefore; SCHOOL of thoughts formed around these leaders. This **school of thoughts** are called **School of Psychology**.

Schools of thought In Psychology

1. Early/old School of Psychology
2. Modern School of Psychology

A school of thought is a system of **thinking** about a certain issue, E.g. Should Psychology Study about human behavior or mind or both?

- ▣ **Views of psychologists on the nature of mind & the proper subject matter for psychology.**

Schools of thought In Psychology

- You may say human behavior is all the result of **inheritance**, or you, may, instead, say it is all the result of interaction with the **environment**.
- There are **five** early school of psychology
 1. Structuralism
 2. Functionalism
 3. Gestalt Psychology
 4. Behaviouralism

1. Structuralism (Wilhelm Wundt)

- ❖ Views psychology as a study of structure of mind
- ❖ Structuralism,(1879) as the name suggests, was centered on investigating the **structure of the mind**.
- ❖ Is an expansion of Wundt's ideas by his student named Edward Titchener (1867-1927)
- ❖ Wundt believed that psychology should focus on **breaking down consciousness** into its basic elements, in much the same way a child would pull apart a toy to reveal its component parts.

Structuralism

- The goal of structuralisms was to find out the units or elements, which make up the mind such as; **sensations**, **images**, and **feelings**
- E.g. they did experiments to find elementary **sensations**-such as red, cold, sweet and fragrant-which provide, they said, the basis for more complex mental experiences.
- Best Methods used by them to find out units or elements which make up the mind-was **introspection**

1. Structuralism

INTROSPECTION

- ❑ Looking inward into our consciousness,
- ❑ Reflecting on
- ❑ Self - observation technique to analyzing conscious experience and trying to make sense of our own internal experiences as they occur.
- ❑ Is a procedure aimed at analyzing the mental experience into three basic mental elements:
 - Images,
 - Feelings, and
 - Sensations to help humans deal with their environment.

Introspection Contd...

- ❖ Trained subjects were presented with various forms of **stimuli** and asked to describe as clearly and “**objectively**” as possible what they experienced.
- ❖ E.g. A subject might be presented to colored light, a tone, or an odor (stimulus) and asked to describe it as minutely as possible.

Structuralism Contd...

- ❖ These experiments using introspection have given us a great deal of **information** about the kinds of **sensation** people have.
- ❖ **Information**-(sensory inputs from environment that inform us about something that's happening there.
- ❑ Believed that there could be :-
 - a science of the mind

Structuralism Contd...

- The structure of the mind could be studied by breaking it down into its basic components.
- Sensation is basic units of consciousness and he set out to study the nature of **pure sensory experience** through the method of **introspection** (looking within)
- **Apperception:- explains** how we organize and make sense of our experiences
- Elementary sensation become unified whole E.g. Metronome- make the sound at the regular interval

Structuralism Contd...

- Trained subjects were asked to describe their impression of a wide variety of **physical objects** and **experience**, what the **eye saw**, what the **ear heard**, or what the **muscle felt** was considered to be an appropriate way of describing mind
- Verbal descriptions would yield the basic elements of consciousness- sensation, images, and feelings of the subject

Sensation



- ❖ Closely tied to what is happening in the sensory system themselves. E.g. color, brightness, a pitch of the tone, or a bitter test.
- ❖ The study of sensation in the laboratory help us discover how the sensory systems work , but in real life we seldom experience simple sensations-perceptual process are constantly at work to modify sensory input into what we actually experience.

Sensory channels

- Vision, hearing, taste, smell ,touch & the skin contains separate warmth, cold & pain senses
- Each sensory system consists a sensitive element(receptor) e.g. tongue bitter at back, sweetness-tip ,sour-at the side.

Criticism of Structuralism

- ❑ **Introspection** was less than ideal because *no two persons perceive the same thing in exactly the same way.*
- ❑ Subjects' reports therefore tended to be **subjective** and conflicting.
- ❑ Lacks generality, limited to sophisticated highly trained adult subjects
- ❑ Little agreement among introspectionists, and when there was, it was due to extensive training and bias
- ❑ **Remembering** the content of introspection

Criticism of Structuralism

- Some argued that introspection changes the **actual** experience
- **Difficulty** of subjects to describe their **own mind**
- Difficult for psychologist to interpret dissimilar descriptions of the same object
- **Subjectivity** of the introspective method were troublesome for other scientists who were searching for greater objectivity.

Criticism of Structuralism

Contd...

- The method was too **subjective** the use of introspection led to a **lack of reliability in results**.
- A new school of thought was emerged to examine mind in a function of mind

Functionalism

- ❖ A study of *function of the mind*.
- ❖ *What mind and behavior do*.
- ❖ Founder of this school of thought is William James (1848-1910), who was the first American psychologist and the author of the first psychology textbook.
- ❖ They were interested in the fact that *mind* and *behavior* are **adaptive**-they enable an individual to adjust to a changing environment.
- ❖ In brief these early Psychologist studied the functions of mind and behavior.

Functionalism cond..

- According to functionalists, psychological processes are adaptive. They allow humans to survive and to adapt successfully to their surroundings.

Functionalism Contd...

1. How the mind operates: – i.e. how the elements of the mind work together.
2. How mental processes promote **adaptation**.
 - ❖ Influenced by Charles Darwin and the principle of natural selection (survival of the fittest), James believed that mental processes serve vital functions that enable us to adapt and survive in a changing world.

Functionalism Contd...

- ❖ Structuralists asked “***what happens***” when we engage in mental activity,
- ❖ The functionalists were more concerned with “***how*** it happens” and “***why.***”

Contribution of Functionalists

- ❖ Did the experiments on the ways in which ***learning, memory, problem solving*** and ***motivation*** help people and animals adapt to their environments.
- ❖ ***extended*** subject matter of psychology as well as methods use to acquire data.
- ❖ E.g. emphasis on adaptation led them to promote the study of **learning** since this is believed to **improve our adaptability and chances of survival**.

Contd...



- ❖ Did extensive work on motivation.
- ❖ Brought the study of animals, children and abnormal behavior into psychology,
- ❖ An emphasis on individual differences
- ❖ Both made significant contributions to psychology.
- ❖ But neglected one important influence on human thought and behavior – the unconscious. Here is where Sigmund Freud made his great début.

Contd...

What is common among Structuralism, Functionalism and Gestalt Psychology- all try to examine the human mind; which is an internal, no-visible, and hidden experience of human beings.

- it was believed that this subjective, private experience can't be observable, measurable, and hence can't be studied scientifically.

3. Gestalt Psychology

- ❖ Views psychology as a study of the whole mind
- ❖ This school of psychology was found in Germany about 1912 by Max Wertheimer (1880-1940) and his colleagues Kurt Koffka (1886-1941) and Wolfgang Kohler (1887-1967)
- ❖ Argued that the mind is not made up of combinations of elements.
- ❖ The German word "***gestalt***" ***refers to form, whole, configuration or pattern.***

Gestalt Contd...

- The mind should be thought of as a result of the whole pattern of sensory activity and the relationships and organizations within their pattern
- The gestalt psychologists acknowledge *consciousness*.
- “The whole is greater than the sum of its parts- mind is greater than its parts (images, sensations, and feelings).
- Meaning is often lost when psychological events are broken down

Gestalt Contd...

- ❖ Believed that psychology should study human experience as a “whole,” not in terms of separate elements as the structuralists would contend
- ❖ These pioneer psychologist felt that Structuralists were **wrong** in thinking of the mind as being made up of **elements**.
- ❖ *They proved as the mind is not made up of a combination of simple elements.*

Contd.-----

- ❖ Only when these pieces are analyzed together and the whole pattern is visible do we find true meaning in our experiences.
- ❖ E.g. breaking apart the words in to individual letters and scattering them across the page
- ❖ Only a combination of these words give true meaning
- ❖ The “whole” then becomes something different, something greater than the accumulation of its “parts.”

Gestalt Contd...

- ❖ Figure 1
- ❖ When you look at the dots in fig.1, your mental experience is not just of the dots or elements, but of a square and triangle sitting on a line. It is the organization of the dots and their relationships that determine the mental experience you have.

Gestalt Contd...

- ❖ They said in opposition to Structuralism, mental experience depends on the patterning and organization of elements but not due to simply the compounding of elements.
- ❖ To make it vivid, the ***mind*** is best understood in terms of the way elements are **organized**

Extensive work of Gestalt Psychologist

- ❖ On various aspects of cognition, including perception, problem-solving and thinking.
- ❖ Their work also led to the emergence of a form of psychotherapy widely practiced by modern psychologists.

4. Behaviorism

- ❖ Other proponents include E. Thorndike and F. Skinner.
- ❖ Study of observable and measurable behavior and nothing more about hidden mental processes
- ❖ Watson **reject mind** as the subject of psychology
- ❖ Psychology be restricted to the study of behavior-the **observable**(or potentially observable) activities of people & animals.

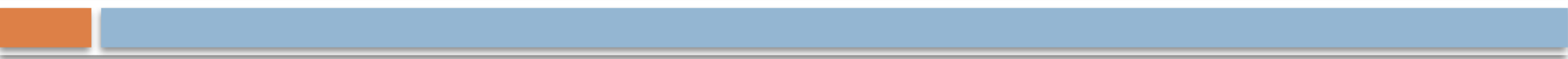
B/r contd..

- ❖ View psychology as a study of **observable** and **measurable** behaviors.
- ❖ John B. Watson is the founder of behaviorism (1879-1958)
- ❖ Had 4 important characteristics.
 1. Focus on observable behavior
 2. Emphasis on CR(neutral stimulus-bell) as the elements/building blocks of behavior

Contd.----

- ❖ Its elements are CRs rather than sensations, images or emotions.
 - ❖ Complex human & animal behavior is made up of entirely CRs
3. Emphasis on learned rather than unlearned behavior-it **denied** the existence of **inborn/innate** behavior tendencies

Contd.---



Focuses of behavioralism

- Behavior;
- Conditioned response as the elements or building blocks of behavior
- Learned rather than unlearned behaviors, and
- Animal behavior

Contd...

- All behaviors are learned but not inherited
- Learners are **passive** and reactive (they are not initiating their learning but they respond when the environment stimulates them).

4. Focus on animal Behavior

- ❖ Watson held that there are no essential differences between animal & human behavior.
- ❖ **There fore we can learn much about our own behavior from the study of what animal do.**

5. Psychoanalysis

- ❖ Studies about the components of the unconscious part of the human mind.
- ❖ Was found in Vienna, Austria by the Psychiatrist Sigmund Freud(1856-1939)
- ❖ Controversial and most popular in the study of behavior and mental processes
- ❖ As a physician some of his patients didn't have medical or bodily causes; but non-physical or emotional causes

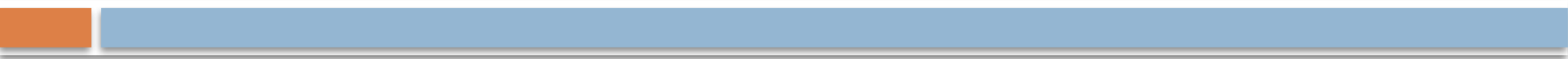
Contd...

- He called these kinds of illnesses as hysteria or conversion reaction to indicate the conversion of emotional problems into bodily problems.
- Conflicts and emotional traumas that had occurred in early childhood can be too threatening to be remembered consciously and therefore they become hidden or unconscious and then will

Contd...

- The unconscious which is the subject matter of psychoanalysis contains hidden wishes, passions, guilty secrets, unspeakable yearnings, and conflict between desire and duty.
- We are not aware of our unconscious urges and thoughts
- They make themselves known in dreams, slip of the tongue, apparent accidents and even jokes.

Contd...



- ❖ He used clinical case studies (hypnosis and Dream analysis) as a method.
- ❖ Developed a theory of behavior & mind which said that much of what we do & think results from **urges/drives** which seek expression in behavior & thought.
- ❖ **Urges** & **drives** are hidden from the awareness of individual-or called **unconscious**

Contd.---

- ❖ **Free association** in which the patient said everything that came to mind, no matter how silly, illogical or even forbidden might seem
- ❖ Applying this techniques Freud pieced together a picture of personality
- ❖ It then became a theory of **personality** & a method of **psychotherapy**.

Modern schools of psychology

- The early schools laid the foundation for the dev't of psychology as a science.
- They opened a door for explaining human behavior and mental processes
- In Early psychological thoughts there are **different** ways of explaining the **same** behavior.

Modern School of Psychology



1. Psychodynamic,
2. Behavioral,
3. Humanistic,
4. Cognitive,
5. Biological, and
6. Sociocultural perspectives.

Scenarios

- To illustrate these current psychological perspective how might these perspectives understand these 2 examples? How might try to deal with b/ral observations such as:-
 1. On the play ground, 6yrs old Sam pushes little Samantha off her tricycle & rides away on it.
 2. Mr.A., a 55yrs old man, finds that he is forgetting important appointments & has trouble recalling newspaper stories he read the day before

1. Psychodynamics perspective

- Emphasizes the unconscious dynamics within the individual such as:-
 - inner forces,
 - conflicts or instinctual energy
- Dig below the surface of a person's behavior to get into unconscious motives
- Think of themselves as **archaeologists** of the mind

Psychodynamics Major emphasis

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

The 3 major parts of Psychoanalytic theory

1. Theory of structure of personality- Id, Ego & Super ego are principal parts
2. Theory of personality dynamics-conscious & unconscious motivation & **ego-defense mechanism** play a major role.
3. A theory of Psychosexual development- which contribute to later adult personality.

1. Personality structure-Id, Ego & Super ego

- ❖ They are **interlocking** parts of personality
- ❖ **Id**-store house of biologically based urges: the urge to eat , drink & to be sexually stimulated
- ❖ The sexual energy that underlies these urges is called *libido*.
- ❖ *Id operates pleasure principles that's left to it self*
- ❖ *Satisfy its fundamental urges immediately & reflexively as they arose without regard to rules, realities of life, or moral of any kind*

Contd.---

- ❖ Id is managed by the Ego.
- ❖ Ego consists of elaborate ways of behaving & thinking which constitute the **executive function of the person.**
- ❖ **Ego delays** satisfying Id motives & channels behavior into more socially acceptable outlets.
- ❖ Adjusting to the realities of life
- ❖ Ego characterized as working in the **service of the reality principle.**

Contd.-----

- ❖ Ego satisfy Id's urges for pleasure, only in realistic ways that take account of what is possible in the real world.
- ❖ Superego- corresponds with conscious./social rules.
- ❖ Consists of prohibition learned from parents & other authorities.
- ❖ Condemn as wrong things the Ego do to satisfy Id
- ❖ Consider a set of positive values & moral ideas

Ego Defense mechanism

- When **impulses/urges** are unacceptable, make us anxious, we use **defense mechanism** to reduce anxiety.

Anxiety:- **a vague, generalized** worry or feeling that one is in danger- **real** or **imagined**

1. Denial:- protecting oneself from an unpleasant reality by refusing to perceive it. E.g. The death of your Dad.

2. Displacement/kicking the dog-angry at someone who is too powerful/frightening to be only angry at, we displace our anger-deflect it onto someone who is weaker.

- Motives in displacement is aggression.

Contd...

- E.g. when a new baby is brought home, an older child in a family may become **jealous that the baby is center of attention.**
- He wants to hurt the baby, but being kept from doing that-may express his/her hostility(unfreindly or aggressive feeling or b/r) on a safer objects like a doll & end up by distorting it

Repression

- Unconsciously preventing painful or dangerous thoughts from awareness

2. Blaming others(projection)

- Blaming some for our own motives
- Your guilt to other
- 3. Making excuses(Rationalization)
- An **acceptable** motive is substituted for an **unacceptable** one.
- E.g. a father may beat his child just b/c he is angry, but he may rationalize it by saying that he is **acting for the child's good**

Contd...

- A student who has sacrificed studying-blame his/her failing grades on bad teaching, unfair examination, too heavy word load.

4. Reversing motives(reaction formation

- A woman who has to live with her aged mother, in order to support the two of them prevented from marrying.
- In her **frustration(barrier)**, she may resent her mother & come to **hate** her. But hating mother is unacceptable thought that's **repressed**(emotions or desires not expressed openly or not allowed to be expressed).

5. Fantasy/day dreaming

- Attempts to resolve conflicts by simply feeling them or trying to
- People's **imagination** of things, the way they would like to have them-without conflicts-instead of the way they are actually are.
- Satisfying the frustrated motives for a while, at least
- **Temporary** escaping from reality

6. Identification

- Making ourselves feel like or **act like another** person & so come to feel that we have attained his/her goals, even though we haven't
- E.g.1. becoming friends with an important person e.g. can make us feel important.
- E.g. 2. a child can feel like “somebody” b/c his/her parent is a famous person (tending to act like that person)

7. Acting childish/regression

- Regression – the process of going back to an earlier/less advanced form/state.
- Seen in child of 4 or 5 yrs old b/c at this stage they begin to face increasingly complex set of frustration

8. Forgetting/repression

- A refusal to think about sth. b/c we find the thought unpleasant
- E.g. people can forget appointments with the dentist b/c they are afraid of the drill.
- People may forget someone's name b/c they dislike or have had unpleasant experience with person

9. Sublimation & compensation

- **Sublimation**-directing sexual energy to socially acceptable activities such as work, art, exercise.
- Sublimation-gratification of sexual desires through some **non sexual activity**.
- E.g. an unattractive woman unable to interest a man, might become creative artist, thus sublimating her sexual desire

Compensation

- Finding an alternative activity to satisfy a social motives
- E.g. an **ugly** man feeling himself a failure in the sexual area, may concentrate on education & become a distinguished scholar or he may compensate by dressing like a **dandy**-a man who cares a lot about his clothes

2. Behavioral Perspective

- Emphasizes the role learning experiences play in shaping the behavior of an organism.
- Focus on environmental conditions (e.g. rewards, and punishments) that **maintain** or **discourage** specific behaviors.

B/ral Contd...

- *Is also called "black box" psychology because*
 - *it treats the mind as less useful in understanding human behavior*
 - *focus on what goes **in to** and **out of the box**, but not on the processes that take place inside*
 - Behaviorists are only interested in the **effects** of the **environment** (input) on behavior (output) but not in the process inside the box

B/ral Contd...

- Why Sam pushed Samantha off her bicycle? –
- He learned to act aggressively in certain situations b/c he was **rewarded** for such b/r in the past.
- Example –the result of lg. B.F. Skinner(rat), Pavlov(dog)

For Mr.A 55 yrs old man with memory problems, - they are interested in teaching b/ral skills to this man so that he might compensate for the b/ral problems caused by his forgetfulness.

3. Humanistic Perspective

- Individual's has free will
- human behavior is not determined by unconscious dynamics or the environment.
- Rather it emphasizes the uniqueness of human beings and focuses on human values and subjective experiences.
- The goal: –
 - helping people to express themselves **creatively**
 - achieve their full potential or **self-actualization** (developing the human

4.Cognitive Perspective

- It emphasizes on:-
 - what goes on in people's heads,
 - How people reason,
 - Remember,
 - Understand language,
 - Solve problems,
 - Explain experiences and
 - Form beliefs

Cognitive contd...

- Concerned about the **mental processes**
- How people's thoughts and explanations affect their actions, feelings, and choices.

5. Biological Perspective-

- It focuses on studying how bodily events or **functioning** of the **body** affects behavior, feelings, and thoughts
- The **brain** and the various **brain chemicals** affect psychological processes such as:-
 - Learning,
 - Performance,
 - Perception of reality,
 - The experience of emotions, etc.

- 
- This perspective underscore:-
 - biology and behavior interact in a complex way;
 - biology affecting behavior and behavior in turn affecting biology.
 - Eyebrows evolved to protect our eyes, we may have evolved certain kinds of behavior patterns to protect our bodies and ensure the survival of our species

6.Socio-cultural Perspective-

- Social and cultural factors that affects human behavior.
- Socio-cultural context and human b/r Vs a fish with out water
- The social and cultural environment) that people "Swim" in every day
- Humans are both the products and the producers of culture, and our behavior always occurs in some cultural contexts

Socio-cultural contd..

- **Social psychologists** examine:-
 - ✓ how group membership affects attitudes and behaviors,
 - ✓ why authority and other people (like spouse, lovers, friends, bosses, parents, and strangers) affect each of us.
- **Cultural psychologists** also examine
 - how cultural rules and values (both explicit and unspoken) affect people's development, behavior, and feelings.

7.The developmental perspectives

Developmental Issues

1. Nature vs Nurture:

1.1. Nature

- Nature refers to biological inheritance
- Individuals are born with an inherited blue print
- They believe that env/t has little to do with the individual dev/t.

1.1.Nurture/ environmentalist

- Believe that environmental experiences are the most important to determine dev/t.
- The child's mind is a blank slate at birth/tabula rasa/ on which experiences write on it and determine our k/ge.
- Argue "one can be come any thing if the environment is right."

2. Continuity vs discontinuity

2.1. Continuity-

- is gradual, smooth, cumulative and continuous process
- They believe there are no stages
- Argue- changes are simply a matter of quality, so we can **predict** later b/r from previous one as dev't always governed by the same process

2.2.Discontinuity

- Development has **stages** so each person has to pass that stages
- In each stages new **abilities** and ways of **thinking** and responding occur
- Each stages is characterized by distinct functioning.

3.Stability Vs Change

- Reflects the extent to which a person becomes older version of his/her earlier self or different
- Does positive or negative experiences of a child affects him/her through out his/her life span?

Development is

- ❖ **Orderly, progressive and continuous** change of the organism from conception to death (throughout the life span).
- ❖ Encompasses:-
 - 1.growth, maturation and learning.
 - 2.Interaction of heredity (**nature**), and learning (environment or **nurture**).
 - 3.Includes both qualitative and quantitative changes

Definitions of basic term

□ 1. Growth

- Quantitative **changes** increase in size height, weight, and structure of the different parts of the body.
- **Quantitative change** -changes in size, amount or quantity, which is subjected to measurement. e.g. A child may weight 20 kg & heights 1.34 m.

□ 2. Maturation

- The **readiness** or **ripening** of a certain growing body part to start its

Maturation contd..

- eg. The ripening of the brain to think,
The appearance of permanent teeth
replaced by milk teeth.
- **3. Learning**
 - Relatively permanent change in
behavior or k/ge that occurs because of
experience or practice

Aspects of Development



1. Physical development
2. Cognitive Development
3. Psychosocial Development
4. Moral Development

1. Physical development

- It involves changes in the person's body, the brain, sensory, Capacity and motor skills.
- It affects other aspect of development

2.Cognitive Development

- **Jean Piaget.**
- Refers to how a person perceives, thinks, and gains an understanding of his or her world through the interaction and influence of **genetic** and **learned factors.**
- **Given Sam 5mns, 2yrs & adolescence a block.**
- What Sam does with blocks depends on his experience and level of cognitive

Cognitive contd...

- Studied how children solved problems in their natural settings
- A child acts like a tiny scientist who is actively involved in making guesses or hypotheses about how the world work
- When given blocks, a 5-month-old Sam puts them into his mouth, while 2-year-old Sam tries to stack them, and adolescent Sam laughs and plays a game of tossing blocks into a can.

Pageant's concept

- **Schema:-** primary mental structure of an individual to acquire knowledge.
- **Adaptation:-** **adjusting** oneself in order to acquire something new. It can be performed through assimilation and accommodation
- He believed that there are active learning processes for children

1. Assimilation

2. Accommodation

Contd...

- *Assimilation* is the process by which a child uses old methods or experiences to deal with new situations.
E.g. Infants like Sam 5 mon, “think” that objects are for sucking on.
- This mouthing behavior is an example of assimilation
- Sam will assimilate the new object as something **too hard to eat** but all right for **sucking**

Concept Contd..

- **Accommodation** is the process by which a child changes old methods to deal with or adjust to new situations.
- If you gave 2-year-old Sam the same blocks, he would not try to eat them, but he might try to stack them, which is an example of accommodation.
- Due to Sam's **experience** with different kinds of objects, he has learned that square, hard objects are not food but things that can be handled and stacked

Concept contd..

- I/g to change existing k/dge b/c of new information (blocks are for stacking, not eating) is an example of accommodation
- **Equilibration**:-mental balance between cognitive elements in the mind and in the outside world.
- **Organization**:- integrating information that gained through different sense organs at different times

Piaget's Four Stages of Cognitive Development



1. Sensorimotor
2. Preoperational
3. Concrete operations, and
4. Formal operations

1. *sensorimotor stage*

- *The sensorimotor stage (from birth to about age 2)*
- *learn about their environments by relating their sensory experiences (such as hearing, testing, touching and seeing) to their motor actions (mouthing and grasping).*

Hidden objects.

- ❖ objects are mostly for mouthing/sucking
- ❖ Covering toy by screen .He doesn't push the screen away to get at the toy.

Contd...

- ❖ Sam behaves as if things that are ***out of sight are out of mind*** and simply no longer exist.
- ❖ Sam has not learned object permanence.

Object permanence

- ❖ *understanding that objects or events continue to exist even if they can no longer be heard, touched, or seen.*
- ❖ Beginning at around 9 months
- ❖ toy dog that is **covered by a screen**, he will try to push the screen away and look for the dog.

Contd...



- has learned that a toy dog that is **out of sight still exists behind the screen.**
- Hidden objects still exist.
- This new concept is called object permanence.

Stage 2-Preoperational Development

- ❖ ***The preoperational stage (from about 2 to 7)years old***
- ❖ As a 4-year-old, Sam is busy pushing a block around the floor and making noises as he pretends the **block is a car**.
This stage include the following processes
- ❖ ***Symbolic functioning***:- mental symbols of words or pictures which the child uses to represent something *w/c is not physically present*.
- ❖ *Pretended play*
- ❖ *solving simple problems and*
- ❖ *Thinking or talking about things that are not present.*

Contd...

Limitations at this stage

- Conservation
- Egocentric thinking(I can't see you can't see me)

Conservation

- ❖ *Refers to the fact that even though the **shape** of some object or substance is changed, the **total amount** remains the same.*

Contd..

- glass, will he know that the amount of milk remains the same even though its shape changes? This is called the problem of conservation.
- If Sam asked he points to the tall, thin glass as having more milk because the tall glass looks larger

Contd..

egocentric thinking.

- ❖ *refers to seeing and thinking of the world only from your own viewpoint and having difficulty appreciating someone else's viewpoint.*
- ❖ *another person's, such as a parent's, point of view*

Stage 3. Concrete

- ❖ Ages of 7 and 11
- ❖ Change in shape, don't lose any quantity or mass, a new concept that occurs during the concrete operations stage.
- ❖ *Children can perform a number of logical mental operations on concrete objects (ones that are physically present).*
- ❖ Master the concept of conservation during the concrete operations stage, and they also get better at classification.
- ❖ A ball of clay was flattened into a long(for 4-yrs- old Sam)

Contd..

- ❖ now 10 years old and has just watched you flatten a ball of clay into a long piece.
- ❖ 10-year-old Sam watched you pour cola from a short glass into a tall glass, he would correctly answer that the amount of cola remained the same

Features of concrete

1. **Decent ring:-**

- The long, flattened piece contains the same amount of clay as the ball, even if the shape changed
- There is no perception of a wide but short cup to contain less than a normally-wide, taller cup.

2. **Reversibility:-** understands that numbers or objects can be **changed**, then returned to their **original** state

Contd..

3. **Serialization:-**

- Arranging objects in an **order** according to **size, shape**, or any other characteristic.

4. **Classification:-**

- Setting of objects according to **appearance, size** or other characteristic, including the idea that one set of objects can **include** another.

Contd..

- ❑ If you give a 4-year old, preoperational Sam some **red** and **blue** marbles in **different sizes**, he would be able to classify the pieces according to a **single** category, such as **size**.
- ❑ 10-year-old Sam has acquired the ability to classify the marbles according to **two categories**, such as **color** and **size**, indicating that he has learned a **new cognitive skill**.

Stage 4-Formal

- is now 17 years old.
- The formal operations stage (from about 12 years old through adulthood)
- adolescents and adults develop the ability to think about and solve **abstract problems** in a logical manner.
- E.g. 17-yrs old Sam can compare theories about why the dinosaurs died, radical temperature change, or some terrible virus??

Contd..

- ability to think in a logical, systematic, and abstract way is one of the major characteristics of the formal operations stage
- adolescents think people are watching their every move, they act as though they are performing in front of an audience. Audience doesn't really exist.

Contd..

- **Imaginary audience** refers to the **belief** adolescents have that everyone is watching all of their actions.
- **Personal fable** refers to an adolescent's **belief** that he or she is invulnerable, unique, and special.
- This type of thinking explains why adolescents can **never** accept that anyone might even remotely understand how they are feeling, because after all they are

Contd..

Features of adolescent egocentrisms

- 1. Argumentativeness:** - **arguing** in every issue and try to convince others forcefully toward their view.
- 2. Indecisiveness (unable to decide):**
Reluctant to make decisions due to sudden awareness of multiplicities of choices.

Contd..

3. **Fault findingness**:-special magnifications of authority figures faults.
4. **Self centeredness (personal fable)**: adolescent's belief of invulnerable, unique, and special
5. **Self consciousness (imaginary audience)**:
 - **Belief that** everyone is **watching** all of their actions.
 - Highly conscious of the **impression** made on others

Contd..

- **6. Apparent hypocrisy:-** everything is easy to them even though it is difficult to be done.

Branches of Psychology



1. Developmental Psychology
2. Clinical psychology
2. Counseling psychology
3. School psychology
4. Educational psychology
5. Developmental psychology
6. Personality psychology

Contd....

- 7. Social psychology
- 8. Industrial/Organizational psychology
- 9. Experimental psychology
- 10. Physiological psychology
- 11. Cognitive psychology
- 12. Abnormal Psychology

1. Developmental Psychology

It studies:-

- Physical,
- cognitive and
- psychological changes across the **life span**.
- It attempts to examine the major developmental milestones that occur at different **stages** of development.

2. *Personality Psychology*

- Focuses on the *relatively enduring traits and characteristics* of individuals.
- Study topics such as self-concept, aggression, moral development, etc.

1. Clinical psychology



Applies psychological principles to the

- *Prevention,*
- *Diagnosis, and*
- *Treatment of psychological disorders.*
- Diagnose and treat emotional and behavioral disorders that range from mild to very severe.

2.Counseling psychology

- *Has same concern as clinical psychology but helps individuals with **less severe problems than those treated by clinical psychologists***
- help people who are having problems with;
 - family living; these are marriage and family counselors
 - **people to make decision about**
- **life;**
- work or choosing a career ,
- education
- coping with marital problems.

3.School psychology

- consists of diagnosing learning difficulties and emotional problems in schooling and develop solution for such problem

4.Educational Psychology

- *Concerned with the application of psychological principles and theories in improving the educational process including curriculum, teaching, and administration of academic programs.*
- concerned with increasing the efficiency of learning in school by applying their psychological knowledge about learning and motivation to the curriculum.

5. Health Psychology

- *Applies psychological principles to the prevention and treatment of physical illness and diseases*

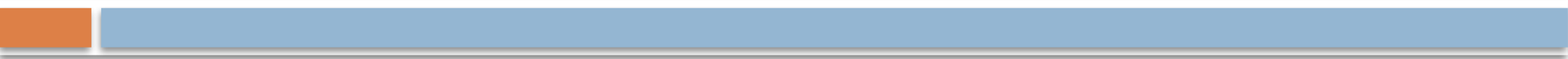
6. Developmental Psychology

- study **mental**, **physical** and **social** development of humans over the **entire life span** (from the prenatal period through childhood, adolescence, adulthood, and old age).

7. Industrial & Organizational (I/O Psychology)

- Applies *psychological principles* in industries and organizations to increase the *productivity* of that organization
- *Behavior* of *workers* at working places; industries, companies, institutions or at any working situation.
- Various aspects of behavior in relation to work interest, efficiency, satisfaction, diligence and commitment leading to maximum production and profit.

8. Forensic psychology



- Applies psychological principles to improve the legal system (police, testimony, etc..).

9. Personality Psychology

- Personality psychology studies ***human differences, factors that make the differences*** and ***development***.
- Understanding of personality is based on many perspectives; psychoanalytic, social learning, behavioral, humanistic, cognitive.

10. Social Psychology

- Study the way **we affect and are influenced by other** people, both in groups and in intimate relationships.
- Deals with people's
 - **social interactions,**
 - relationships,
 - social perception,
 - attitudes.
- E.g. It includes the study of the ways in which we **perceive other** people and how those **perceptions affect our behavior** toward them.
- In school setting children learn new behavior, perceptions, beliefs, thoughts, actions and attitude as a result of **interaction** and communication with teachers and other children.

11. Cross-cultural Psychology

- Examines the **role of culture** in understanding
 - behavior,
 - Thought
 - emotion
- Compares the nature of psychological processes in different cultures, with a special interest in whether or not psychological phenomena are universal or culture-specific

12. Experimental Psychology

- studies all aspects of basic psychological processes such as perception, learning, and motivation.
- It is concerned on employment of experimental methods to obtain psychological data or to solve psychological problems.

13. Physiological psychology

- It studies **biological basis of behavior**, the function of the body and **behavior**.

E.g.

- Causes of anger,
- brain and memory,
- secretion of hormones and emotional arousal,
- genes and behavior patterns.

14. Cognitive psychology

- Investigates all aspects of
 - cognition-Memory,
 - thinking,
 - reasoning,
 - language,
 - decision-making, and so on.
- It studies **internal mental processes**, which include thinking, memory, concept formation, and processing of information.

15. Abnormal Psychology

- Significant deviation from commonly accepted patterns of b/r. emotion, or thought
- Social context-abnormality must be judged in the context of particular situation.
- E.g. alone at home sing, make speech...if do this in class you may

Research Method

Terms

Scientific method

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

Theory

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

Hypotheses –

is a tentative proposition about the relationship b/n two or more variables or phenomena.

E.g. Males have high self - confidence in making decisions than females.

What is Research?

- **Is a scientific and systematic investigation aimed at the discovery of knowledge or to solve some educational or social problem**

Major types of research methods

1. Descriptive

➤ Include:-

1.1. Naturalistic Observation,

1.2. Case studies

1.3. Surveys.

2. Correlational Research method

3. Experimental

4. Longitudinal

5. Cross-sectional

1.1. *Naturalistic observation*

- Subjects are observed in their natural environment to get a real (not artificial) picture of how behavior occurs.
- Limitations
 - Observer effect (animals or people who know they are being watched may behave artificially)
 - Observer bias (the researcher may not observe systematically or he/she may observe behaviors he/she wants to observe)

1.2. Case study:

- *individual is studied in great detail.*

Its advantage

- *it provides tremendous amount of data about a single case or individual.*

□ Disadvantage

- what researchers find in one case can't necessarily apply or generalize to others

1.3.Survey

- used to collect data from a very large group of people.

Advantages

- get information on private (covert) behaviors
- it addresses hundreds of people with the same questions at the same time.

Disadvantage

- it needs a careful selection of a representative sample of the actual population.

Survey Contd...

- Surveys are indirect questionnaires and interviews about subjects experiences or attitudes
- topics, including:-
 - consumer preferences,
 - sexual behavior,
 - political opinions,
 - religious affiliation,
 - child rearing practices,
 - use of internet,

2. Correlation

- Measures the relationship b/n two or more variables.

A variable

- is anything that can change or vary –scores on a test, the temperature in a room, gender, and so on

E.g. whether or not cigarette smoking is connected to life expectancy.

Correlation tells researchers if there is

- a relationship b/n variables,
 - how strong the relationship is,
 - in what direction the relationship goes
- A **positive correlation**:-high values of one variable are associated with high values of the other, and that low values of one variable are associated with low values of the other.

Correlation contd...

- A ***negative correlation*** :-high values of one variable are associated with low values of the other.
- Coefficient of correlation-The statistic used to express a correlation
- A perfect positive correlation has a coefficient of + 1.00
- A perfect negative correlation has a coefficient of -1.00.
- When there is **no association** between two

3. Experimental

- to study the cause and effect relationship between variables.
- one or more factors believed to influence the behavior being studied are manipulated and all other factors are held constant
- To draw conclusions about cause and effect-about what causes what.

Contd...

- involve at least one independent variable and one dependent variable.
- independent variable is the manipulated, influential, experimental factor.
- **Independent variable:-**situation manipulated or varied by the researcher

Dependant variable

- is the factor (behavior) that is measured in an experiment.
- It can change as the independent variable is manipulated
- the behavior that the researcher tries to predict.

E.g. “Do students in small class size have better academic performance than students in large class size?”

Contd...

□ two variables:

- 1. Class size, which is the independent variable to be manipulated and***
- 2. Students' performance which is the dependent variable to be measured while class size is changed.***

Experiment:- involve randomly assigned experimental groups and control groups

- Experiment Group
- Control Group

Experiment group

- a group whose experience is manipulated
E.g. Students who are assigned in **small class sizes**
- **A control group** :- serves as a baseline against which the effects of the manipulated condition can be compared.
E.g. students who are assigned in **large class sizes**

4. Longitudinal Studies

- An ideal way to examine **consistencies** and **inconsistencies** in behavior over time.
- The **same group** of individuals is studied repeatedly at many different points in time to determine whether their behavior and/or feelings have changed.
- E.G. A researchers first measure temperaments in a group of 2-year-old children, retest this same group again at age 7, then test them again at age 12, and so on

5. Cross-Sectional Studies

- A cross-sectional method means that **several groups** of different aged individuals are studied at the same time
- For example, researchers are using the cross-sectional method because they selected a group of 2-year-olds, a group of 7-year-olds, and a group of 12-year-olds and measured their **temperaments** at the same time

Steps of scientific research

Step1. Defining the Problem

- **E.g.** The effect of aggressive videos on children's behavior

Step2. Formulating the Hypothesis

- **educated guess** about the explanation for your observations
- putting it into the form of a statement that can be tested in some way

E.g. "children who watch violent cartoons will become more aggressive than those who watch non-violent cartoons."

Contd...

Step3. Testing the Hypothesis

- employs appropriate research methods and collects sample data (information) to **accept** or **reject** the proposed statement.
- E.g. The data will be gathered from children who watch aggressive videos and from those who do not watch aggressive videos and make comparisons between the behaviors of the two groups to determine whether watching aggressive video makes children more aggressive

contd/...

Step4. Drawing Conclusions

- researcher attempts to make generalizations or draw implications from tested relationship

Step 5. Reporting Results

- write up exactly
- what the researcher did,
- why the researcher did,
- what the researcher found.

Goals of research in psychology

- To carefully examine questions using objective methods
- To test ideas about the factors that contribute to or affect learning
- To add the principles, laws, and theories about the behavior of the learner at different stages of development
- To add the principles, laws, and theories about teaching and learning



❖ **THANK YOU!**