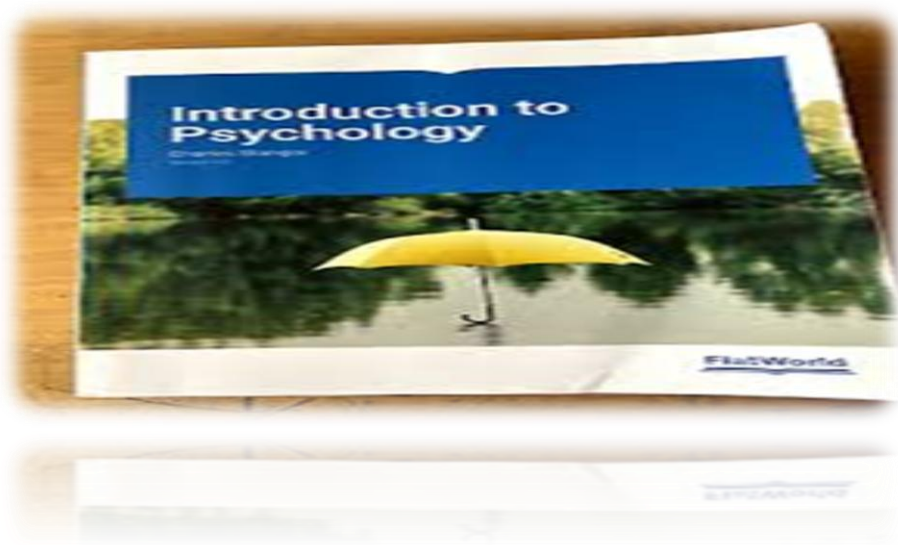


People's Democratic Republic of Algeria
Ministry of Higher Education and Scientific Research
Higher Teacher Training School of Oran
Department of English



Foundations of Psychology :
Understanding Mind, Brain, and Behaviour

A Course in Introduction to psychology Module for Third Year
Students (PES) of E.N.S.O.

Presented by: **Dr. Benosmane Naziha**

2025-2026

Level: Third year PES English students at E.N.S.O. (Ecole Nationale Supérieure d'Oran).

Course Name: Introduction to Psychology.

Course Schedule: 1 hour and a half a week during both semesters.

Course Description:

The current course will introduce the fundamental principles of psychology besides the main subjects of psychological questions and queries. It is intended to prospective teachers who are in need to understand themselves and the others in order to be able to manage their future classes, and constantly adapt with their learners, colleagues and administrative staff. Indeed, a teacher is first of all a human being who faces a myriad of situations that appeal different moods, reactions and behaviours. In this sense, introduction to psychology is considered as a preparatory course for future teachers to develop an awareness and readiness for their life and career.

The course has been designed to not only present learners with notions and concepts of psychology but to provide them with a sampling of the main interests and areas of research in the field of psychology. In this sense, the course provides a comprehensive introduction to the field of psychology as the scientific study of human behaviour and mental processes. It familiarizes students with the fundamental concepts, theories, and research methods that underlie modern psychological science.

This course provides a comprehensive exploration of the scientific study of human behaviour and mental processes. Beginning with the historical evolution of the field—from the early structuralist and functionalist schools to modern sociocultural and biological perspectives—students examine the diverse theoretical frameworks that shape our understanding of the mind. or This course offers a comprehensive introduction to the field of psychology as the scientific study of behaviour and mental processes. It familiarizes students with the fundamental concepts, theories, and research methods that underpin modern psychological science.

Beginning with an exploration of what psychology is and how it developed as a discipline, the course examines major schools of thought and methodological approaches used to investigate human behaviour. It then moves into core domains of psychology, including the biological bases of behaviour, sensation and perception, memory, learning, and higher cognitive processes

such as thinking, language, and intelligence. Through a rigorous lens of research methodology and scientific inquiry, students will analyse how humans interact with their environment, process information, and develop individual intelligence. By bridging the gap between physiological reactions and complex cognitive functions, this course prepares students to apply psychological principles to real-world challenges and advanced behavioural studies.

Course Objectives:

By the end of this course, students will acquire different skills as follows:

Knowledge and Understanding

Students will be able to:

- Define psychology and explain its scope as a scientific discipline.
- Identify and describe major schools of thought in psychology.
- Explain key research methods used in psychological studies and evaluate their strengths and limitations.
- Describe the biological foundations of behaviour, including the role of the brain and nervous system.
- Understand the processes of sensation and perception and how individuals interpret sensory information.
- Explain how memory functions, including encoding, storage, and retrieval.
- Describe major theories of learning and their applications.
- Explain core concepts related to thinking, language, and intelligence.

Cognitive and Analytical Skills

- Apply psychological concepts to everyday life situations.
- Analyse human behaviour using different psychological perspectives.
- Interpret basic psychological research findings.
- Develop critical thinking skills in evaluating psychological claims and evidence.

Practical and Transferable Skills

- Use appropriate psychological terminology in oral and written communication.
- Demonstrate scientific reasoning and inquiry skills.
- Reflect on personal learning and cognitive processes.
- Engage in discussions and collaborative learning activities.

Course Syllabus (S1/S2)

Lecture One: Introduction to Psychology

1. What is Psychology?
2. The Goals of Psychology
3. Branches of Psychology

Lecture Two: Psychology as a Science

1. The Limits of Intuition
2. Psychologists Rely on Empirical Methods
3. Levels of Explanation

Lecture Three: Research Methods in Psychology

1. Why Study Research Methods in Psychology?
2. The Scientific Method in Psychology
3. Classroom Experiment: The Effect of Context on Memory

Lecture Four: The Evolution of Psychology

1. The Evolution of Psychology
2. Prominent Contributors to the History of Psychology

Lecture Five: Schools of Psychology/ 1. Structuralism

1. Historical Backgrounds
2. Definition of Structuralism
3. Example of Structuralist Analysis
4. Limitations of Structuralism

Lecture Six: Schools of Psychology/ 2. Functionalism

1. Historical Backgrounds
2. Principles of Functionalism
3. Limitations of Functionalism

Lecture Seven: Schools of Psychology/ 3. Behaviorism

1. Introduction to Behaviorism
2. Definition of Behaviorism
3. Classical Conditioning
4. Operant Conditioning
5. Limitations of Behaviorism

Lecture Eight: Schools of Psychology/ 4. Psychodynamic Perspective

1. Introduction to Psychodynamic Psychology
2. The role of the Unconscious Mind
3. Structure of Personality

Lecture Nine: Schools of Psychology/ 5. Humanistic Perspective

1. The third Force in Psychology
2. Core Assumptions of Humanistic Psychology

Lecture Ten: Schools of Psychology / 6. Cognitive Perspective

1. The Cognitive Revolution
2. Prominent Contributors

Lecture Eleven: Schools of Psychology / 7. Sociocultural Perspective

1. Beyond the Individual
2. Main Contributors
3. Key Concepts

Lecture Twelve: Biological Bases of Behaviour

1. The Biological Perspective
2. The Nervous System
3. The Brain Structure and Function

Lecture Thirteen: Sensation and Perception

1. Definitions
 - 1.1 Sensation
 - 1.2 Perception

Lecture Fourteen: Memory

1. The Information Processing Model
2. The Atkinson- Shiffrin Model

Lecture Fifteen: Learning

1. Classical Conditioning
2. Operant Conditioning
3. Observational Learning

Lecture Sixteen: Thinking, Language, and Intelligence

1. The Nature of Thinking: Concepts and Problem-Solving
2. Language: The Vehicle of Thought
3. Intelligence: Defining Human Potential

Lecture Seventeen: Personality

1. Personality: Definition and Core Features
2. Individual Differences
3. Theories of Personality
4. Trait Theories of Personality
5. Factors Influencing Personality Development
6. Applications in Education and Everyday Life

Lecture Eighteen: Emotions and Motivations

1. The Psychological Forces behind Behaviour
2. Motivation
3. Emotion
4. Theories of Emotion
5. Relationship between Motivation and Emotion

Lecture Nineteen: Psychological Disorders and Mental Health

1. Understanding Mental Health and Psychological Disorders
2. Classification of Psychological Disorders
3. Major Categories of Psychological Disorders
4. Causes of Psychological Disorders: A Biopsychosocial Perspective
5. Approaches of Treatment
6. Mental Health in the University Context

Lecture One: Introduction to Psychology

Objectives:

- To develop students' awareness of what psychology means.
- Students will understand and explain the role and importance of psychology in their daily life, educational settings, and professional career.
- By the end of this lesson, students will be able to:
 - Define psychology and explain the distinction between behaviour and mental processes.
 - Analyse why "Common Sense" is often unreliable in a scientific context.
 - Describe Hindsight Bias, Overconfidence, and Pattern Perception with real-world examples.
- Apply the Scientific Attitude to evaluate everyday claims.

1. What is Psychology?

The word, 'Psychology' is derived from two Greek words, 'Psyche' and 'Logos'. Psyche means 'soul' and 'Logos' means 'science'. Thus, psychology was first defined as the 'science of soul'. According to earlier psychologists, the function of psychology was to study the nature, origin and destiny of the human soul. But soul is something metaphysical. It cannot be seen, observed and touched and we cannot make scientific experiments on soul. In the 18th century, psychology was understood as the 'Science of Mind'. William James (1892) defined psychology as the science of mental processes. But, the word 'mind' is also quite ambiguous as there was confusion regarding the nature and functions of mind.

Modern psychologists defined psychology as the "Science of Consciousness". James Sully (1884) defined psychology as the "Science of the Inner World". Wilhelm Wundt (1892) defined psychology as the science that studies the "internal experiences". Nevertheless, there are three levels of consciousness – conscious, subconscious and the unconscious and so this definition also was not accepted by some. In 1892, William James defined psychology as the 'science of mental processes'. In his view, psychology may be defined in terms of conscious states.

Thus, psychology first lost its soul, then its mind and then its consciousness. At present, only its behaviour exists. William McDugall (1905) defined psychology as the "Science of Behaviour", W.B. Pillsbury (1911) and J.B. Watson (1912) also defined psychology as the science of behaviour.

Behaviour generally means overt activities that can be observed and measured scientifically. However, one's behaviour is always influenced by his experiences. Therefore, when we study one's behaviour we must also study his experiences. Psychology should, therefore, be defined as a "science of behaviour and experiences on human beings" (B.F. Skinner). According to Crow and Crow, "Psychology is the study of human behaviour and human relationship".

Lastly, psychology is considered as an academic and applied field involving the study of behaviour and mental processes. Psychology also refers to the application of such knowledge to various spheres of human activity, including problems of individuals' daily lives and the treatment of mental illness. The discipline of psychology does attempt to establish general laws, for example, that the mind, thoughts, and feelings in particular directly affect behaviour.

To sum up, psychology is the scientific study of the mind and behaviour. Psychologists are actively involved in studying and understanding mental processes, brain functions, and behaviour. The field of psychology is considered a "Hub Science" with strong connections to the medical sciences, social sciences, and education (Boyack, Klavans, & Borner, 2005).

2. The Goals of Psychology

Psychologists pursue four main goals: description, explanation, prediction, and control (or influence) of behaviour. These goals reflect the scientific nature of the discipline and guide research and practice.

The first goal, description, involves carefully observing and documenting behaviour. For instance, a teacher may notice that some students participate actively while others remain silent. The second goal, explanation, seeks to understand the causes of behaviour. A psychologist might explain this difference by considering factors such as personality, confidence, or prior experiences.

The third goal, prediction, involves anticipating how individuals will behave in certain situations. For example, if a student has consistently shown test anxiety, it is possible to predict that they may experience similar stress in future exams. Finally, the goal of control or influence involves applying psychological knowledge to modify behaviour in beneficial ways, such as using relaxation techniques to reduce anxiety (Skinner, 1953).

These goals demonstrate that psychology is not only theoretical but also practical, with direct applications in education, health, and everyday life.

Indeed, many psychologists conduct their work in research laboratories, hospitals, and various field environments where they examine the behaviour of both humans and animals. Their studies address a wide range of topics, including anxiety in children, the meaning of dreams, the influence of caffeine on cognitive performance, cultural differences in negotiation, and the psychological factors that may lead individuals to develop phobias or excessive fear responses. Other areas of research include alcohol and drug dependence, memory, emotions, hypnosis, love, as well as the factors that influence aggression and prosocial behaviour. Psychologists also investigate the psychological aspects of politics, prejudice, culture, and religion. In addition to research settings, psychologists work in schools and organizations. To better understand behaviour, they rely on different research techniques such as observation, questionnaires, interviews, and controlled laboratory experiments within the field of Psychology.

3. Branches of Psychology

Psychology is a broad field that includes several specialized areas, each focusing on different aspects of behaviour and mental processes.

Cognitive psychology studies mental processes such as perception, memory, and problem-solving. Researchers like Ulric Neisser (1967) emphasized how individuals process information, much like a computer. For example, when students study for an exam, cognitive psychology helps explain how they encode, store, and retrieve information.

Developmental psychology examines changes across the lifespan. Scholars such as Jean Piaget (1952) explored how children's thinking evolves through stages, while Erik Erikson (1968) focused on social and emotional development.

Social psychology investigates how individuals are influenced by others. For example, Solomon Asch (1951) demonstrated how people may conform to group pressure even when they know the group is wrong.

Clinical psychology focuses on diagnosing and treating psychological disorders, while **educational psychology** applies psychological principles to learning and teaching processes. As a teacher, understanding these branches can help you address students' cognitive, emotional, and social needs.

To conclude, psychology is a field that will provide you with new ways of thinking about your own thoughts, feelings, and actions.

Assignment:



4. <https://parentstalkvapesandscreens.ca/>

Look at the pictures, (1. Frustrated Businesswoman During A Business Meeting In Office/2. Father son talk)

Discuss what are these people feeling and why are they reacting in this way?

(Source: <https://stockfresh.com/image/8261232/business-people-arguing-in-meeting>)

The discipline of psychology can be said to satisfy the necessary criteria and so may therefore be classed as a 'science'.

Silent observation:

- What do you see in the pictures?
- What is happening?

- Who are the people involved?

Identify overt behaviours: What are the overt behaviour?

Interpretation:

- Why do you think the people are behaving in such ways?
- What might they be thinking?
- What emotions can you identify?
- What might have caused these situations?

Critical reflections:

- Do you think everyone would interpret these pictures in the same way?
- What influences out interpretation? (experience, culture, personality...)

After discussion, we conclude:

This activity shows that psychology studies:

‘What people do (behaviour)’

What people think and feel (mental processes)

- As an introduction to the next lesson: Psychology as a science: Students think about this question: How can we be sure our explanations are correct?

This is where psychology becomes a science- How psychology moves from opinion to scientific knowledge.

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Lecture Two: Psychology as a Science

Objectives:

- To develop students' awareness of what psychology means.
- Identify the Problem of Intuition.
- Define and Identify Hindsight Bias contrast Overconfidence with Evidence.
- Distinguish Values from Facts.
- Analyse levels of explanation of a behaviour.
- Explain how the use of the scientific method separates modern psychology from philosophy.

Psychology is a diverse discipline unified by its reliance on the scientific method to understand behaviour and mental processes. The field is broadly categorized into research-based psychology, which focuses on generating original insights through controlled studies, and applied psychology, where practitioners like clinical or counselling specialists use those findings to solve real-world problems. Whether a psychologist is discovering new data or applying established theories to help others, the foundation of their work remains rooted in scientific rigor and empirical evidence. They share commitment to the scientific method.

In a sense, every individual functions as an "everyday scientist," driven by a natural curiosity to decode the mechanisms of the world and predict future occurrences. We are constantly investigating the "why" and "how" of events- like failing an exam, or observing social cues to figure out why a friend seems upset—to better understand our social and physical environments. This drive to collect informal data and test hypotheses allows us to gain a sense of predictability and control, helping us refine our future actions and anticipate the behaviour of those around us (Nisbett & Ross, 1980).

1. The limits of intuition

The lessons we learn from our daily interactions can actually teach us a lot about human behaviour. For example, we often figure out through experience that people might get angry with us for sharing bad news, even when we did not cause the problem. We notice that failing at something important can lead to feelings of depression, and as we see more conflict in the world around us, we naturally start to wonder why people act out. These kinds of realizations are just a normal part of life. In reality, a big part of psychology is simply taking these everyday

behaviours and studying them more carefully using scientific methods. (Heider, 1958; Kelley, 1967).

In fact, psychologists have identified various cognitive and motivational biases that often shape our perceptions and cause us to reach invalid conclusions. (Fiske & Taylor, 2007; Hsee & Hastie, 2006). In this sense, embracing explanations for events without testing them can make us believe we understand their true causes when in reality we do not.

Let's consider the following study:

Research Focus: Unconscious Preferences for the Letters of Our Own Name

A study reported in the *Journal of Consumer Research* (Brendl, Chattopadhyay, Pelham, & Carvallo, 2005) demonstrates the extent to which people can be unaware of the causes of their own behaviour. The research demonstrated that, at least under certain conditions (and although they do not know it), people frequently prefer brand names that contain the letters of their own name to brand names that do not contain the letters of their own name.

The research participants were recruited in pairs and were told that the research was a taste test of different types of tea. For each pair of participants, the experimenter created two teas and named them by adding the word stem “oki” to the first three letters of each participant’s first name. For example, for Jonathan and Elisabeth, the names of the teas would have been Jonoki and Elioki.

The participants were then shown 20 packets of tea that were supposedly being tested. Eighteen packets were labelled with made-up Japanese names (e.g., Mataku; Somuta), and two were labelled with the brand names constructed from the participants’ names. The experimenter explained that each participant would taste only two teas and would be allowed to choose one packet of these two to take home.

One of the two participants was asked to draw slips of paper to select the two brands that would be tasted at this session. However, the drawing was rigged so that the two brands containing the participants’ name stems were always chosen for tasting. Then, while the teas were being brewed, the participants completed a task designed to heighten their need for self-esteem, and that was expected to increase their desire to choose a brand that had the letters of their own name. Specifically, the participants all wrote about an aspect of themselves that they would like to change.

After the teas were ready, the participants tasted them and then chose to take a packet of one of the teas home with them. After they made their choice, the participants were asked why they chose the tea they had chosen, and then the true purpose of the study was explained to them.

The results of this study found that participants chose the tea that included the first three letters of their own name significantly more frequently (64% of the time) than they chose the tea that included the first three letters of their partner's name (only 36% of the time). Furthermore, the decisions were made unconsciously; the participants did not know why they chose the tea they chose. When they were asked, more than 90% of the participants thought that they had chosen on the basis of taste, whereas only 5% of them mentioned the real cause — that the brand name contained the letters of their name. (Jorden & al.2019, p.7).

The study highlights 'unconscious preferences' for self-related cues, trying into the illusion of intuition- We think we are rational, but hidden biases drive us.

This is the tendency to believe, after learning an outcome, that one would have foreseen it.

Once we learn about the outcome of a given event (e.g., when we read about the results of a research project), we frequently believe that we would have been able to predict the outcome ahead of time.

To understand this; let's consider the following classroom activity (about **The "Hindsight" Experiment**)

3. Classroom Activity: The "Hindsight" Experiment

1. The class is divided into two groups.
2. Tell Group A: "Social psychologists have found that absence makes the heart grow fonder. People tend to miss their partners more when they are away." Ask them to explain why this is common sense.
3. Tell Group B: "Social psychologists have found that out of sight, out of mind. People tend to forget or lose interest in partners when they are away." Ask them to explain why this is common sense.
4. **The Reveal:** Tell the class that both groups were given plausible-sounding but contradictory statements. This proves that we can justify almost any outcome as "obvious" once we are told it is a fact.

The problem is that just reading a description of research findings leads us to think of the many cases we know that support the findings, and thus makes them seem believable. *This tendency*

to think that we could have predicted something that has already occurred that we probably would not have been able to predict is called the **hindsight bias**. (**The "I-Knew-It-All-Along" Phenomenon**)

Intuition can lead to hindsight bias and also to overconfidence, which may affect how we interpret events and make decisions.

Indeed, we often hear people say, “I do not need a study to tell me that; it is just common sense.” It is because most of us have spent a lifetime observing people, so we feel like experts on human nature.

However, while intuition is good for quick reactions, it is actually an unreliable tool for understanding the deeper complexities of human behaviour. The problem with common sense is that it is often based on anecdotal evidence—things that happened to us or our friends—which does not always represent the holistic overview.

This is where psychology steps in. It takes those "obvious" observations and puts them under a microscope. By using scientific methods, researchers can strip away our personal biases and the "hindsight bias" (the feeling that we knew it all along) to find out what is actually happening. Intuition gives us a starting point, but science gives us the evidence to know if our intuition is actually right.

As a science, psychology does not rely on intuition or common sense. It relies on empirical evidence—information gathered through observation and rigorous, systematic research.

2. Psychologists Rely on Empirical Methods

Psychology evolved from a branch of philosophy into a rigorous social science by adopting **empiricism**—the theory that all knowledge is derived from sense-experience. In modern psychology, relying on empirical methods is essential for several critical reasons:

a. Moving Beyond Intuition and "Common Sense"

Human intuition is often flawed by cognitive biases. For example, **hindsight bias** (the "I-knew-it-all-along" phenomenon) makes us believe we could have predicted an outcome after it has already occurred.

- **Empirical solution:** By using controlled experiments and systematic observation, psychologists can test whether "common sense" beliefs actually hold true under scrutiny.

b. Objectivity vs. Subjectivity

Early psychology relied heavily on **introspection** (looking inward at one's own thoughts). However, one person's internal experience cannot be verified by another.

- **Empirical solution:** Empiricism requires observable evidence. If a researcher claims that a specific stimulus causes a reaction, other researchers must be able to observe that same reaction. This moves the focus from "what I feel" to "what can be measured."

c. Replicability and Verification

A single study is rarely enough to establish a "fact." Scientific knowledge is built through the accumulation of evidence.

- **The Role of Data:** Because empirical methods rely on standardized procedures and quantitative data, other scientists can replicate the study. If different researchers in different parts of the world get the same results, the findings gain "scientific posters" or validity.

d. Falsifiability

According to the philosopher Karl Popper, for a theory to be scientific, it must be **falsifiable**—meaning there must be a way to prove it wrong.

- **Empirical Testing:** If a psychologist proposes that "stress causes memory loss," they must collect data that could potentially disprove that statement. Without empirical methods, theories remain abstract and impossible to challenge.

e. Establishing Causality

Psychology aims not just to describe behaviour, but to explain *why* it happens.

- **Controlled Experiments:** Through empirical design, researchers can manipulate one variable (the independent variable) while keeping others constant. This is the only way to determine **cause-and-effect** relationships rather than simple correlations.

Hence, in psychology (as a science), all claims must be tested using a systematic approach called the Scientific Method. This ensures that findings are objective, reliable, and valid. The process generally involves five steps:

1. **Forming a Hypothesis:** A specific, testable prediction derived from a theory. For example: 'Students who meditate before an exam will score higher than those who do not.'

2. Designing the Study: Choosing the appropriate research method such as experiments, surveys, case studies and identifying the population to be studied.

3. Collecting the Data: Systematically gathering information through observation, tests, or physiological measures.

4. Analysing the Data: Using statistical methods to determine if the results support or reject the hypothesis.

5. Drawing Conclusions and Reporting Results: Publishing the findings and submitting them to peer review. If the results are inconsistent, the theory must be revised.

So, empirical methods *include the processes of collecting and organizing data and drawing conclusions about those data*. The empirical methods used by scientists have developed over many years and provide a basis for collecting, analysing, and interpreting data within a common framework in which information can be shared. We can label the scientific method as *the set of assumptions, rules, and procedures that scientists use to conduct empirical research*.

Although scientific research is a key method for understanding human behaviour, it cannot answer every type of question. Some statements cannot be tested or verified through objective measurement, and therefore they fall outside the scope of scientific investigation. For this reason, scientists distinguish between **facts** and **values**. Values are personal beliefs or opinions, such as “*School uniforms should be mandatory,*” or “*Helping others is the most important purpose in life.*” These statements reflect personal judgments rather than scientifically testable claims. In contrast, facts are objective statements that can be verified through empirical research. For example, a statement such as “*Studies show that students who sleep fewer than six hours per night often perform worse on cognitive tasks than those who sleep longer*” can be tested and supported through scientific evidence.

Table 1: Examples of values and facts in scientific research (Morling, 2021)

Personal Value	Scientific Fact
Students should not use smartphones in class.	A study conducted in several universities found that students who frequently use smartphones during lectures tend to recall less information from the lesson.
People should sleep early every night.	Research shows that adults who sleep fewer than six hours per night are more likely to experience fatigue and reduced cognitive performance.
Children should spend less time playing video games.	Studies indicate that excessive video game use (more than three hours per day) is associated with lower academic performance in some adolescents.
Teachers should always encourage students.	Research in educational psychology shows that positive feedback from teachers can increase students' motivation and engagement in learning.

Although scientists rely on research to establish factual knowledge, the difference between **values and facts** is not always perfectly clear. In some cases, statements that were once considered factual may later be shown, through additional research, to be partly or even completely inaccurate. Scientific methods therefore do not always guarantee perfectly objective or unbiased answers. Nevertheless, science remains the most reliable approach for reaching objective conclusions about the world. When earlier findings are rejected, they are replaced by new explanations supported by more accurate and recent evidence. While science is not flawless, its emphasis on **empirical evidence and objectivity** greatly increases the likelihood of developing an accurate understanding of human behaviour compared with other ways of explaining it.

3. Levels of explanation:

In fact, the study of psychology examines human behaviour and mental processes through different levels of explanation, which are *the perspectives or layers of analysis*. Each level provides a different type of explanation, and together they give a fuller understanding of human behaviour. Main levels of psychology are:

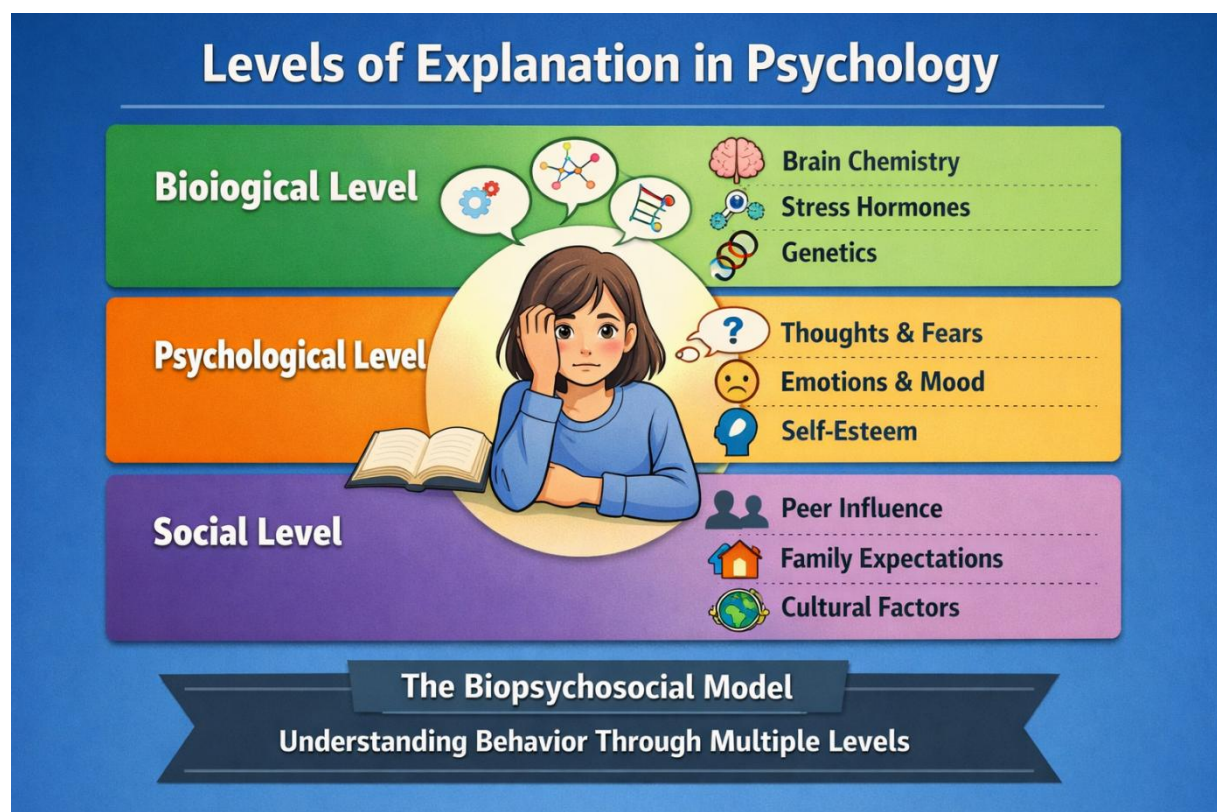
-Lower levels of explanation: they are linked to biological influences, such as brain structures, genes, neurons, neurotransmitters, hormones, and the nervous system.

- Middle levels of explanation: they refer to the individual (psychological) abilities and characteristics of individual people such as thoughts, emotions, motivation, learning, and perception.

- The highest levels of explanation: they relate to social or groups, such as organizations, relationships, culture(s), and environmental factors. (Cacioppo, Berntson, Sheridan, & McClintock, 2000).

To understand better students are given the following example: A student feels anxious before an exam. At the biological level, this anxiety may be explained by the release of stress hormones such as cortisol and activity in the brain (for example the amygdala). At the individual level, the student may feel anxious because they believe they are not prepared enough or they have negative thoughts about failing

At the social level, the student's anxiety may be influenced by pressure from parents, teachers, or competition with classmates.



So, the same topic can be studied within psychology at different levels of explanation, as shown in the table above.

Assignments:

Classroom activity 1:

Read the following statements and decide whether each one represents a **personal value (V)** or a **scientific fact (F)**.

Students should justify their answers.

1. University education is essential for success in life.
2. Research shows that students who study regularly tend to achieve higher academic results.
3. Social media has a negative effect on young people.
4. Studies indicate that excessive social media use is associated with increased anxiety levels.
5. People should exercise every day.
6. Research suggests that regular physical activity reduces the risk of cardiovascular disease.

After students answer, they discuss:

- Why is statement 1 a value rather than a fact?
- Which statements can be tested through scientific research?
- Why is it important for psychologists to distinguish facts from values?

(They have to conclude that in scientific research, psychologists rely on **empirical evidence** and measurable data rather than personal beliefs or opinions.)

Classroom activity 2:

Students will be given another scenario, for example A person laughing during a conversation; and will work in small groups and explain the scenario under the three levels

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Lecture Three: Research Methods in Psychology

Objectives:

- Explain the importance of scientific research in psychology.
- Describe the main steps of the scientific method.
- Differentiate between types of research methods (experimental, correlational, and observational).
- Identify independent and dependent variables in a study.
- Understand basic ethical principles in psychological research.
- Recognize the strengths and limitations of different research methods.

1. Why Study Research Methods in Psychology?

Psychology is considered a scientific discipline because it relies on systematic methods to investigate human behaviour and mental processes. Unlike everyday observations or personal opinions, psychological knowledge is based on empirical evidence, meaning that it is gathered through careful observation, measurement, and experimentation. Research methods are therefore essential tools that allow psychologists to test theories, answer questions, and develop reliable explanations of behaviour.

One of the foundations of psychological research is the scientific method, a structured process used to investigate phenomena. This process typically begins with observation, where a researcher notices a behaviour or pattern. Based on these observations, the researcher formulates a research question and develops a hypothesis, which is a testable prediction about the relationship between variables. The hypothesis is then tested through systematic data collection, after which the results are analysed and conclusions are drawn. Finally, findings are often shared with the scientific community for further evaluation and replication.

2. The Scientific Method in Psychology

An important concept in research is the idea of variables. A variable is any factor that can change or be measured in a study. In experimental research, two main types of variables are identified: the independent variable and the dependent variable. The independent variable is the factor that the researcher manipulates, while the dependent variable is the outcome that is measured to assess the effect of the independent variable. For example, a psychologist studying the effect of sleep on memory might manipulate the number of hours participants sleep

(independent variable) and then measure their performance on a memory test (dependent variable).

Different research methods are used depending on the nature of the research question. One of the most important methods is the experimental method, which allows researchers to determine cause-and-effect relationships. In an experiment, participants are typically divided into different groups, such as an experimental group and a control group. The experimental group is exposed to the independent variable, while the control group is not. By comparing the outcomes between these groups, researchers can determine whether the independent variable has an effect on the dependent variable. Early psychologists such as Wilhelm Wundt emphasized the importance of controlled experimentation in establishing psychology as a scientific discipline.

Another commonly used method is correlational research, which examines the relationship between two or more variables. Rather than manipulating variables, researchers measure them as they naturally occur. For example, a psychologist might investigate the relationship between stress levels and academic performance. If a correlation is found, it means that the variables are related; however, it does not necessarily mean that one variable causes the other. This limitation is often summarized by the principle that correlation does not imply causation.

Psychologists also use observational methods to study behaviour in natural settings. This approach involves carefully watching and recording behaviour without interfering with the situation. Observational research can be particularly useful when studying behaviours that cannot easily be recreated in a laboratory. However, it may be limited by the researcher's interpretation or by the presence of observers, which can sometimes influence participants' behaviour.

Surveys and questionnaires are another important research tool. These methods allow researchers to collect data from a large number of participants efficiently. Participants are asked to respond to questions about their attitudes, beliefs, or behaviours. While surveys can provide valuable insights, their accuracy depends on the honesty and self-awareness of the respondents.

Ethical considerations play a crucial role in psychological research. Because research often involves human participants, psychologists must ensure that studies are conducted in a way that protects participants' rights and well-being. Key ethical principles include informed consent, which means that participants must be fully aware of the nature of the study and agree to

participate voluntarily, and confidentiality, which ensures that personal information is kept private. Participants should also have the right to withdraw from a study at any time without penalty. Organizations such as the American Psychological Association have established ethical guidelines to ensure that research is conducted responsibly.

Over time, research methods in psychology have become more sophisticated, incorporating advanced statistical techniques and technological tools. These developments have strengthened the scientific foundation of psychology and have allowed researchers to explore complex aspects of human behaviour with greater accuracy.

3. Classroom Experiment: The Effect of Context on Memory

Here is a simple, ethical, classroom-friendly experiment you can implement immediately:

Objective (for students): To examine how context and organization influence memory recall, a key concept in cognitive psychology and research methods.

Research Question: Does organizing information into categories improve memory recall?

Hypothesis: Students who receive organized (categorized) words will recall more items than those who receive a random list.

Variables :

- **Independent Variable:** Type of word list
 - Organized list (categories)
 - Random list
- **Dependent Variable:** Number of words correctly recalled

Participants : the class is divided into two groups./

Materials : Two lists of words (you can project or read them)

List A (Organized):

Apple – Banana – Orange (Fruits)

Carrot – Potato – Tomato (Vegetables)

Chair – Table – Bed (Furniture)

Dog – Cat – Horse (Animals)

List B (Random)

Apple – Chair – Dog – Banana – Table – Cat – Orange – Bed – Horse – Carrot – Potato – Tomato

Procedure

1. Divide the class into **Group 1 and Group 2**.
2. Tell students they will see/hear a list of words and must try to remember them.
3. Present:

Group 1 → **Organized list (List A)**

Group 2 → **Random list (List B)**

4. Give students 30–40 seconds to study the list.
5. Remove the list.
6. Ask students to write down as many words as they can remember (1–2 minutes).
7. Collect or ask them to count how many correct words they recalled.

Results (Class Discussion)

- Compare the **average number of words recalled** in each group.
- Usually, Group 1 (organized list) performs better.

Interpretation

- Organizing information helps **encoding and retrieval**.
- The brain uses **schemas and categories** to store information.
- This experiment demonstrates a key idea in cognitive psychology.

Research Methods: Students will be explain that the experiment was linked to

- Experimental method
- Independent vs dependent variables
- Control (same time, same conditions)
- Hypothesis testing

Ethical Considerations

- No harm or stress involved
- Participation is voluntary
- No personal data collected

Debrief Questions: Students answer the following questions:

1. Which group remembered more words? Why?
2. What strategy did you use to remember the words?
3. How does this relate to studying for exams?
4. Can you think of real-life situations where organization improves memory?

Assignment:

Understanding Research Methods in Psychology

Discuss one of the following questions:

1. Explain the importance of using scientific methods in psychology.
2. Describe the main steps of the scientific method.
3. Differentiate between experimental and correlational research, providing one example for each.
4. Explain one ethical principle in psychological research and why it is important.

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Lecture Four: The Evolution of Psychology: History, Approaches, and Scope

Objectives:

- Understand the origins of Psychology.
- Raise students' awareness of the evolution of psychology from philosophy to psychology
- Identify the Pre-Scientific Roots: Discuss how early thinkers (e.g., Plato, Aristotle, and Descartes) influenced modern psychology through their debates on the nature of the mind and body.

1. The Evolution of Psychology

Psychology did not emerge immediately as a scientific discipline. Instead, it developed gradually through centuries of philosophical inquiry and scientific investigation aimed at understanding human thought and behaviour. Long before psychology became an independent field of study, philosophers were already raising important questions about the nature of the mind, knowledge, and human behaviour.

The earliest thinkers known to have explored these questions were the Greek philosophers Plato (428–347 BC) and Aristotle (384–322 BC). These philosophers examined issues that remain central to psychology today, such as the relationship between nature and nurture and the question of free will. Plato emphasized the importance of nature, arguing that certain types of knowledge are innate and exist within individuals from birth. Aristotle, however, placed greater emphasis on nurture. He proposed that the human mind begins as a *tabula rasa*, or “blank slate,” suggesting that knowledge is primarily acquired through learning and experience.

Centuries later, European philosophers continued to explore these fundamental questions. During the Renaissance and the early modern period, thinkers sought to better understand the relationship between the mind and the body. One of the most influential philosophers of this time was René Descartes (1596–1650). Descartes supported the idea of free will and proposed that the mind interacts with the body through the pineal gland in the brain. Although this explanation was later proven inaccurate, it represented an early attempt to explain how mental and physical processes are connected.

Descartes also believed that certain abilities are innate. In addition to his philosophical work, he conducted scientific investigations, including animal dissections, which helped advance

early knowledge about how nerves control muscles. Descartes further introduced the concept of *dualism*, the idea that the mind and the body are fundamentally different entities: the mind representing mental processes and the body representing the physical organism.

Other European philosophers also contributed to debates about the nature of knowledge and human behaviour, including Thomas Hobbes, John Locke, and Jean-Jacques Rousseau. However, these philosophers faced an important challenge: they lacked reliable scientific methods to test their ideas. Their discussions were largely based on logical reasoning and speculation rather than systematic observation and experimentation. At the time, it was still unclear whether human thoughts and experiences could be studied objectively.

A major transformation occurred during the nineteenth century when scholars began applying scientific methods to the study of the mind and behaviour. This shift marked the beginning of psychology as an independent scientific discipline. A key milestone occurred in 1879 when the German psychologist Wilhelm Wundt established the first experimental psychology laboratory in Leipzig, Germany. Around the same time, the American psychologist William James founded a psychology laboratory at Harvard University. Their work played a crucial role in transforming psychology from a philosophical field into a scientific discipline.

2. Prominent contributors to the history of psychology

As psychology developed, different theoretical perspectives emerged to explain behaviour and mental processes. These perspectives, often referred to as schools of thought, offered different interpretations of how the mind works and how behaviour should be studied. The following lectures will examine these schools of thought, their main principles, their key contributors, and their influence on the development of modern psychology.

Table 1: History of Psychology (Cummings & al, 2019)

Date	Psychologist(s)	Description
428 to 347 BCE	Plato	Greek philosopher who argued for the role of nature in psychological development.
384 to 322 BCE	Aristotle	Greek philosopher who argued for the role of nurture in psychological development.
1588 to 1679 CE	Thomas Hobbes	English philosopher.

Date	Psychologist(s)	Description
1596 to 1650	René Descartes	French philosopher.
1632 to 1704	John Locke	English philosopher.
1712 to 1778	Jean-Jacques Rousseau	French philosopher.
1801 to 1887	Gustav Fechner	German experimental psychologist who developed the idea of the “just noticeable difference” (JND), which is considered to be the first empirical psychological measurement.
1809 to 1882	Charles Darwin	British naturalist whose theory of natural selection influenced the functionalist school and the field of evolutionary psychology.
1832 to 1920	Wilhelm Wundt	German psychologist who opened one of the first psychology laboratories and helped develop the field of structuralism.
1842 to 1910	William James	American psychologist who opened one of the first psychology laboratories and helped develop the field of functionalism.
1849 to 1936	Ivan Pavlov	Russian psychologist whose experiments on learning led to the principles of classical conditioning.
1850 to 1909	Hermann Ebbinghaus	German psychologist who studied the ability of people to remember lists of nonsense syllables under different conditions.
1856 to 1939	Sigmund Freud	Austrian psychologist who founded the field of psychodynamic psychology.
1867 to 1927	Edward Bradford Titchener	American psychologist who contributed to the field of structuralism.
1878 to 1958	John B. Watson	American psychologist who contributed to the field of Behaviorism.

Date	Psychologist(s)	Description
1886 to 1969	Frederic Bartlett	British psychologist who studied the cognitive and social processes of remembering.
1896 to 1980	Jean Piaget	Swiss psychologist who developed an important theory of cognitive development in children.
1904 to 1990	B. F. Skinner	American psychologist who contributed to the school of behaviourism.
1926 to 1993	Donald Broadbent	British cognitive psychologist who was a pioneer in the study of attention.
20th and 21st centuries	Linda Bartoshuk; Daniel Kahneman; Elizabeth Loftus; George A. Miller	American psychologists who contributed to the cognitive school of psychology by studying learning, memory, and judgment. An important contribution is the advancement of the field of neuroscience. Daniel Kahneman won the Nobel Prize in Economics for his work on psychological decision-making.
1850	Dorothea Dix	Canadian psychologist known for her contributions to mental health and opened one of the first mental hospitals in Halifax, New Brunswick.
1880	William Lyall; James Mark Baldwin	Canadian psychologists who wrote early psychology texts and created the first Canadian psychology lab at the University of Toronto.
1950	James Olds; Brenda Milner; Wilder Penfield; Donald Hebb; Endel Tulving	Canadian psychologists who contributed to neurological psychology and opened the Montreal Neurological Institute.
1960	Albert Bandura	Canadian psychologist who developed social learning theory with his Bobo doll studies illustrating the impact that observation and interaction have on learning.
1970	Hans Selye	Canadian psychologist who contributed significantly in the area of psychology of stress.

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[The American Psychological Association \(APA\) Ethics Code](#) – A deep dive into the rules governing research.

Lecture Five: Schools of Psychology

1. Structuralism

Objectives:

- Identify the main contributors to the structuralist school.
- Define structuralism and describe its main principles.
- Understand the method of introspection used by structuralists.
- Evaluate the strengths and limitations of structuralism.
- Recognize the influence of structuralism on the development of modern psychology.

1. Historical backgrounds

Wilhelm Wundt (1832–1920) was a German scientist who is generally regarded as the first person to be identified as a psychologist. In 1873, he published his influential book *Principles of Physiological Psychology*. Wundt considered psychology to be the scientific examination of conscious experience. He believed that the main objective of psychology was to analyse the basic elements of consciousness and understand how these elements combine to form our conscious experiences.

The research conducted by Wilhelm Wundt in his laboratory in Leipzig focused on understanding the nature and structure of conscious experience. Wundt and his students believed that the human mind could be studied scientifically by identifying and analysing its fundamental components. They assumed that complex mental experiences could be broken down into simpler elements that could then be classified and systematically examined.

2. Definition of Structuralism

The approach raised by Wundt gave rise to the school of psychology known as structuralism, whose main objective was to determine the basic structures that compose psychological experience. Structuralists sought to identify the fundamental elements of sensations in much the same way that chemists classify chemical elements in the periodic table. Their aim was therefore to create a comprehensive classification of the basic components of conscious experience.

To achieve this goal, structuralists relied on a method called *introspection*, which Wundt referred to as *internal perception*. This method involved asking trained participants to carefully observe and report their own conscious experiences while performing specific mental tasks, such as looking at colours, reading text, or solving mathematical problems. Rather than

describing objects in everyday terms, participants were expected to focus on the immediate sensory elements of their experience. For example, when reading a page, a participant might describe seeing a series of straight and curved black marks arranged on a white background rather than simply reporting that they were reading words.

In addition to introspection, structuralists also used newly developed instruments designed to measure *reaction time*. These tools allowed researchers to examine not only what individuals were experiencing but also how long mental processes took to occur. Through such experiments, Wundt discovered that people required more time to identify or interpret a sound than merely to acknowledge that they had heard it. This finding revealed an important distinction between the *sensation of a stimulus* and the *perception or interpretation of that stimulus*. The use of reaction time as a method for investigating mental processes later became a fundamental technique in modern Cognitive Psychology.

The work of Wilhelm Wundt played a crucial role in establishing experimental psychology as a scientific field. Although he did not formally use the term *structuralism*, his investigations of conscious experience greatly influenced the emergence and development of this school of thought.

One of the most prominent representatives of structuralism was Edward Bradford Titchener (1867–1927). A student of Wilhelm Wundt, Titchener moved to the United States toward the end of the nineteenth century, where he established a psychology laboratory at Cornell University. Through his work, he further developed and formalized the structuralist approach that had been inspired by Wundt's earlier research on conscious experience.

Using the method of introspection, Titchener and his students attempted to identify the fundamental elements of conscious experience. Introspection refers to the systematic examination and reporting of one's own mental experiences. In their experiments, participants were carefully trained to observe and describe what they experienced internally while performing specific mental tasks or while being exposed to particular stimuli.

Titchener proposed that conscious experience could be analysed into three basic types of mental elements:

1. **Sensations** – the basic elements of perception; for example: seeing a colour or hearing a sound.
2. **Images** – mental representations such as memories or imagination.

3. **Feelings** – emotional elements of experience such as pleasure, discomfort, or tension.

According to Titchener, by identifying and classifying these fundamental elements, psychologists would be able to understand the structure of the human mind. In practice, participants in structuralist experiments were asked to provide detailed descriptions of their immediate sensory experiences. For example, if a participant were presented with an apple, they were not expected to simply say “I see an apple.” Instead, they were trained to focus on the basic sensory qualities of the experience, such as the colour (red or green), the round shape, the smooth texture of the surface, the smell, or even the taste if the apple was eaten. In this way, structuralists attempted to analyse perception by breaking it down into its simplest components- to identify the **basic components of perception**.

Classroom discussion:

3. **Example of Structuralist Analysis**

Consider the experience of **drinking coffee**. Ask students to discuss how a structuralist psychologist would analyse this experience by breaking it into basic sensory elements before providing the answer:

Component	Example
Sensation	bitterness of taste
Sensation	warmth of the cup
Sensation	smell of roasted coffee
Feeling	pleasure or comfort

Through their research using introspection, Titchener and his students claimed to have identified more than 40,000 different sensations, including those associated with vision, hearing, and taste. An important contribution of the structuralist approach was its attempt to apply rigorous and systematic methods to the study of the mind. Their work marked an important step in establishing psychology as a scientific discipline, demonstrating that mental processes could be studied and measured in an organized way.

4. Limitations of Structuralism

The structuralists encountered significant limitations with the method of introspection. Even highly trained participants often found it difficult to accurately describe their internal mental processes. For example, when individuals were asked to solve simple mathematical problems, they were usually able to produce the correct answer, but they often struggled to explain the mental steps they had used to reach it. These observations led early psychologists to recognize that many psychological processes operate outside conscious awareness. In other words, a large part of human mental activity occurs unconsciously, and individuals may not always be able to provide reliable reports of their internal experiences.

Despite its historical importance, structuralism faced several criticisms.

- **Subjectivity of Introspection:** Different participants often reported different experiences when exposed to the same stimulus. This made results difficult to verify scientifically.
- **Lack of Reliability:** Because introspection depended on personal reports, it lacked the objectivity required for rigorous scientific research.
- **Limited Scope:** Structuralism focused mainly on conscious experience and ignored other important psychological processes such as behaviour, development, and unconscious processes.

By the early twentieth century, structuralism began to decline as new psychological approaches emerged. One important alternative was functionalism, developed by William James (1890), which focused on the purpose of mental processes rather than their structure. Later movements such as Behaviorism and cognitive psychology also contributed to the decline of structuralism.

Although structuralism is no longer a dominant approach in psychology, its influence remains significant. It contributed to:

- the scientific study of mental processes
- the development of experimental psychology
- the establishment of psychology laboratories in universities

Structuralism therefore played a crucial role in transforming psychology from a philosophical discipline into a scientific field.

Assignment / Discussion Questions

- Define structuralism and explain its main objective.
- Explain the method of introspection and give an example.
- Compare the contributions of Wilhelm Wundt and Edward Bradford Titchener.
- What were the main limitations of structuralism?
- Why did structuralism decline in the early twentieth century?

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Lecture Six: Schools of Psychology

2. Functionalism

Objectives:

- Explain the historical context in which functionalism emerged
- Identify the main contributors to the functionalist school.
- Describe the key principles of functionalism.
- Understand how functionalism differs from structuralism.
- Explain the influence of evolutionary theory on functionalist thinking.
- Recognize contributions of functionalism to the modern psychology.

1. Historical Backgrounds

One of the most influential figures in the development of functionalism was William James (1842–1910), who is often considered the first American psychologist. James proposed a different perspective on how psychology should be studied. While Wilhelm Wundt and the structuralists attempted to analyse the structure of consciousness by identifying its basic elements, James and other functionalists were more interested in understanding why psychological processes exist and what purposes they serve.

For James, mental processes were meaningful mainly because of their role in guiding behaviour. In his influential book *The Principles of Psychology* (1890), he emphasized the close connection between thinking and action, arguing that thoughts ultimately exist to support behaviour and practical activity. From this perspective, the mind should be understood not simply as a collection of elements but as a dynamic system that helps individuals function effectively in their environment.

2. Principles of Functionalism

The functionalist approach was strongly influenced by the evolutionary theory proposed by Charles Darwin (1809–1882). Darwin's theory of natural selection suggested that physical traits develop and persist over time because they contribute to an organism's survival and reproductive success. Functionalists extended this idea to psychological processes. Just as certain animals evolved strong muscles that enable them to run quickly or escape predators, functionalists believed that the human brain and mental abilities also evolved because they serve important adaptive functions. In other words, psychological characteristics such as

perception, memory, and reasoning were viewed as tools that help organisms adapt to their surroundings. For example:

Psychological Process	Adaptive Function
Fear	Helps individuals avoid danger
Memory	Allows learning from past experiences
Problem-solving	Helps individuals cope with new challenges

Functionalism therefore focused on how mental processes help individuals adjust to their environment and deal with everyday challenges. Another important aspect of this perspective was its emphasis on studying the mind as a whole, rather than analysing it into separate components. In contrast to structuralists, who concentrated on the individual elements of consciousness, functionalists were more interested in how different mental processes work together to enable effective behaviour.

Although James acknowledged that introspection could be one way of studying mental experiences, he did not rely on it exclusively. Instead, he supported the use of a variety of research methods, including:

- observation
- questionnaires
- comparative studies of animals
- studies of children and development

These included objective measurements obtained through experimental instruments, the study of observable behaviour, the examination of physiological processes, and the analysis of the outcomes of mental activity. This broader methodological approach allowed psychologists to explore behaviour in more practical and natural contexts. (Unlike structuralists, who relied heavily on introspection in laboratory settings).

Although functionalism eventually declined as a distinct school of psychology, many of its core ideas continue to influence modern psychological research. In particular, its emphasis on the adaptive value of mental processes contributed to the development of Evolutionary Psychology, a field that applies evolutionary principles to the study of human and animal behaviour.

Evolutionary psychology builds on the functionalist assumption that many psychological systems serve important adaptive purposes. According to this perspective, mental processes such as memory, emotions, and personality traits have developed because they helped our ancestors survive and reproduce. Researchers in evolutionary psychology use evolutionary theory to explain a wide range of behaviours, including romantic attraction, cooperation, prejudice, and even certain psychological disorders.

A central concept in evolutionary psychology is fitness, which refers to the degree to which a particular characteristic increases an organism's chances of survival and reproduction compared with other members of the same species. Individuals who possess traits that enhance their fitness are more likely to pass their genes on to future generations. As a result, these beneficial characteristics gradually become more common in the population.

For instance, some researchers have suggested that the emotion of jealousy may have persisted in human evolution because it helped increase reproductive success. From this perspective, individuals who experienced jealousy might have been more likely to protect their partners and guard against potential rivals, which could increase the likelihood of passing on their genes.

3. Limitations of Functionalism

Despite its significant contributions, evolutionary psychology also faces several challenges. One major limitation is that many of its hypotheses are difficult to test directly. Unlike physical evolution, which can be studied through fossil evidence, psychological traits leave no direct historical record. Consequently, researchers cannot know with certainty which mental characteristics our ancestors possessed. Instead, many explanations are based on theoretical reconstruction, which raises the possibility that some interpretations may be developed after observing the behaviour rather than being independently verified.

Although functionalism is no longer considered a separate school of psychology today, its ideas continue to influence many areas of modern research. By emphasizing the purpose of behaviour and mental processes, functionalism helped broaden the scope of psychology and encouraged the study of behaviour in real-world contexts. Functionalism influenced several later perspectives, including Behaviourism, Educational Psychology, and Evolutionary Psychology.

- Before assignment students are given the following comparison table between Structuralism and Functionalism:

Aspect	Structuralism	Functionalism
Main Focus	Studying the structure of consciousness by identifying its basic elements	Studying the functions and purposes of mental processes
Main Question	<i>What are the basic components of the mind?</i>	<i>Why do mental processes exist and how do they help us adapt?</i>
Main Figure	Edward Bradford Titchener (inspired by Wilhelm Wundt)	William James
Influences	Experimental laboratory research on consciousness	Evolutionary theory of Charles Darwin
Research Method	Mainly introspection (analysis of conscious experience)	Multiple methods: observation, experiments, study of behaviour
View of the Mind	Mind is composed of basic elements (sensations, images, feelings)	Mind is a continuous and dynamic process that helps adaptation
Approach to Behaviour	Focus on internal mental elements	Focus on how mental processes guide behaviour and adaptation
Major Contribution	Established psychology as a scientific discipline	Expanded psychology to study real-life behaviour and adaptation
Historical Outcome	Declined due to limits of introspection	Influenced later fields such as Evolutionary Psychology and applied psychology

Key idea:

- **Structuralism:** *What is the mind made of?*
- **Functionalism:** *What does the mind do and why?*

Assignment: Discussion Questions

1. Define functionalism and explain its main focus.
2. Describe the contributions of William James to psychology.
3. How did Charles Darwin influence functionalist thinking?
4. Compare structuralism and functionalism.
5. Provide an example of how a mental process can serve an adaptive function.

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Lecture Seven: Schools of Psychology

3. Behaviorism

Objectives:

- Define Behaviorism and explain its main principles.
- Identify the main contributors to Behaviorism.
- Explain the concepts of classical conditioning and operant conditioning.
- Understand why behaviorists rejected the study of consciousness.
- Recognize the influence of behaviourism on modern psychology.

1. Introduction to Behaviorism

The early schools of psychology, particularly structuralism and functionalism, were mainly concerned with understanding the nature of the mind and conscious experience. However, many psychologists began to question these approaches because of the methodological difficulties associated with introspection. Since introspection relied on individuals describing their own conscious experiences, the results were often subjective and difficult to verify scientifically. As a result, some psychologists argued that psychology should focus only on phenomena that could be directly observed and measured. This reaction led to the emergence of Behaviorism in the early twentieth century.

2. Definition of Behaviorism

Behaviorism is a school of psychology based on the idea that the scientific study of psychology should concentrate exclusively on observable behaviour rather than on internal mental processes. Behaviorists argued that the human mind cannot be studied objectively because thoughts and feelings are not directly observable. For this reason, they maintained that psychologists should restrict their investigations to behaviours that can be seen and measured. Within this perspective, the mind was often described as a “black box.” Environmental stimuli enter the organism and produce behavioural responses, but what happens inside the mind is not considered necessary for explaining behaviour. According to this view, behaviour can be understood and predicted by examining the relationship between environmental stimuli and

observable responses. From this perspective, behaviour can be understood through the relationship between:

- **Stimulus (S)** – an environmental event or situation
- **Response (R)** – the behavioural reaction to the stimulus

3. Classical conditioning

The first major figure associated with Behaviorism was the American psychologist John B. Watson (1878–1958). Watson argued that psychology should be a purely objective science that studies behaviour rather than consciousness. His ideas were strongly influenced by the work of the Russian physiologist Ivan Pavlov (1849–1936). Pavlov had demonstrated through his experiments that animals could learn associations between stimuli. In his famous research, dogs naturally salivated when presented with food. Pavlov then paired the presentation of food with the sound of a tone. After repeated pairings, the dogs began to salivate when they heard the tone alone, even when food was not present. This process, known as *classical conditioning*, showed that a previously neutral stimulus could acquire the ability to trigger a learned response. This discovery showed that behaviour can be learned through associations as explained in the following table:

Table 1: Basic Elements of Classical Conditioning

Element	Description
Unconditioned Stimulus (US)	A stimulus that naturally produces a response (food)
Unconditioned Response (UR)	A natural reaction (salivation)
Conditioned Stimulus (CS)	A previously neutral stimulus that becomes associated with the US (bell)
Conditioned Response (CR)	The learned response to the CS (salivation to the bell)

Watson applied these ideas to the study of human behaviour. In one of his most well-known experiments, conducted with his colleague Rosalie Rayner, Watson studied an eight-month-old infant known as Little Albert. At the beginning of the experiment, the child was placed in a

room with a white laboratory rat and was allowed to play with it. Initially, the infant showed no fear of the animal. During later trials, however, the researchers produced a loud sound by striking a steel bar with a hammer whenever the child touched the rat. The sudden noise frightened the infant and caused him to cry. After several repetitions of this pairing, the child began to cry and withdraw when he saw the rat, even when the loud noise was no longer produced. This experiment suggested that emotional responses such as fear could be learned through associations between stimuli.

4. Operant Conditioning

Another major contributor to Behaviorism was B. F. Skinner (1904–1990), who expanded behaviorist principles and brought them to wider public attention. Skinner developed the concept of *operant conditioning*, which focuses on how behaviour is shaped by its consequences. According to Skinner, behaviours that are followed by *reinforcement*, such as rewards, are more likely to be repeated, whereas behaviours followed by punishment are less likely to occur. Two types of reinforcement exist as displayed in the table:

Type	Description	Example
Positive Reinforcement	Adding a reward after a behaviour	Giving a student praise for good work
Negative Reinforcement	Removing something unpleasant	Cancelling homework after good performance

An example of punishment can be a student who receives a penalty for cheating (it may become less likely to repeat the behaviour.)

Skinner used an experimental apparatus called the “*Skinner box*”; Skinner conducted many experiments using animals such as pigeons and rats, which he trained to perform specific actions by systematically applying reinforcement. Through this research, he demonstrated that complex behaviours could be developed gradually through reinforcement and learning.

Research Focus: To What Extent Do Humans Possess Free Will?

The behaviorist research program raised important questions concerning two fundamental issues in psychology: the *nature–nurture debate* and the concept of *free will*. From the behaviorist perspective, human behaviour is primarily shaped by environmental influences rather than innate factors. In other words, behaviorists strongly supported the *nurture position*, arguing that individuals are largely the product of their past experiences and the conditions present in their surroundings.

Based on this view, behaviorists questioned the traditional notion of free will. They suggested that human actions are not the result of independent choices but are instead determined by previous learning experiences and environmental events. In this sense, organisms—including human beings—can be compared to puppets whose actions are controlled by external influences, even though they may not be aware of these influences. Although individuals often feel that they consciously control their behaviour, this perception may occur simply because they are unaware of the many factors shaping their actions.

Empirical research supports the idea that people’s sense of control can sometimes be misleading. Studies have shown that individuals are more likely to believe that they are responsible for an action when the intention to act occurs immediately before the outcome, when the thought corresponds to the result, and when no other obvious cause is present.

For example, Aarts, Custers, and Wegner (2005) conducted an experiment in which participants attempted to control the movement of a rapidly moving square on a computer screen while a computer program was also influencing the square independently. Participants pressed a button in an attempt to stop the square’s movement. When they were briefly exposed to words related to the square’s location just before pressing the button, they were more likely to believe that they had controlled the movement, even when the computer was actually responsible for stopping it.

Similarly, Preston, Wegner, and Aarts (2008) found that participants who were exposed to first-person pronouns such as “*I*” and “*me*” were more inclined to believe that they controlled their actions compared with individuals who were exposed to words such as “*computer*” or “*God*.” These findings suggest that subtle contextual cues can influence people’s perception of personal control.

This tendency to attribute actions to personal control can also be observed in everyday explanations for success and failure. When individuals achieve positive outcomes, they often attribute the result to their own abilities or decisions, reinforcing the belief that they acted freely. However, when outcomes are negative, people are more likely to attribute the result to external factors such as luck, circumstances, or the actions of others.

5. Limitations of Behaviorism

Despite its contributions, Behaviorism has been criticized for several reasons.

- **Ignoring Mental Processes:** Behaviourism largely ignored internal mental activities such as thinking, emotions, and reasoning.
- **Oversimplification of Behaviour:** Human behaviour is often more complex than simple stimulus–response relationships.
- **Limited Explanation of Creativity and Language:** Critics argued that behaviourism could not fully explain complex cognitive processes such as language development and problem solving.

These criticisms later contributed to the rise of *Cognitive Psychology*.

Despite its limitations, Behaviorism made significant contributions to psychology. By emphasizing observable behaviour and objective measurement, behaviorists helped establish psychology as a more scientific discipline. Their research also led to the identification of fundamental principles of learning, such as conditioning and reinforcement, which remain central to modern psychology. Although behaviorists underestimated the importance of internal mental processes, their ideas greatly advanced our understanding of how environmental experiences influence behaviour and learning. Behaviourist principles are widely used in education, behaviour therapy, animal training, and organizational management

Assignment / Discussion Questions

1. Provide one real-life example illustrating how behaviour can be learned through conditioning or reinforcement.
2. In your opinion, what are the main strengths and limitations of the behaviorist approach in understanding human behaviour?

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Lecture Eight: Schools of Psychology

4. Psychodynamic Perspective

Objectives:

- Define psychodynamic psychology.
- Identify the main contributions of the founder of psychoanalysis.
- Explain the role of the unconscious in human behaviour.
- Describe the main components of personality.
- Understand the influence of early childhood experiences on behaviour.
- Evaluate the contributions and limitations of the psychodynamic approach.

1. Introduction to Psychodynamic Psychology

Psychodynamic psychology developed at the end of the nineteenth century as an attempt to understand the hidden psychological forces that influence human behaviour. Unlike behaviourism, which focused mainly on observable behaviour, the psychodynamic approach emphasized the importance of *internal mental processes*, particularly those that occur outside conscious awareness.

The psychodynamic perspective is closely associated with the work of Sigmund Freud (1856–1939), an Austrian neurologist who developed the theory of psychoanalysis. Freud believed that many human behaviours are influenced by unconscious motivations, conflicts, and desires that individuals are not fully aware of. According to Freud, psychological problems often arise from unresolved conflicts that originate in early childhood experiences.

2. The role of the Unconscious Mind

Psychodynamic psychology is a perspective that seeks to explain human behaviour by emphasizing the influence of *unconscious mental processes*, including hidden thoughts, emotions, and memories. This approach was largely developed through the work of Freud who formulated his ideas after many years of observing and analysing patients in his private clinical practice. Through these observations, Freud concluded that many psychological difficulties experienced by his patients—such as anxiety, depression, and sexual disturbances—were linked to distressing experiences from early childhood that had been pushed out of conscious

awareness. According to Freud, psychological problems often arise from unresolved conflicts that originate in early childhood experiences.

According to this perspective, individuals may not consciously remember these early experiences, yet they continue to influence emotions, behaviour, and personality in significant ways. Freud therefore argued that much of human behaviour is shaped by internal psychological conflicts that operate outside conscious awareness. These hidden processes can manifest themselves in various forms, such as dreams, slips of the tongue, or emotional reactions that individuals cannot easily explain.

Freud also proposed that the human mind operates at different levels, including the conscious, preconscious, and unconscious. As explained in the following table:

Table 1: Levels of Mind

Level of Mind	Description
Conscious	Thoughts and feelings that we are aware of at a given moment
Preconscious	Information that is not currently in awareness but can be easily recalled
Unconscious	Thoughts, desires, and memories that are hidden from conscious awareness

While the conscious mind contains thoughts and feelings that individuals are aware of at a given moment, the unconscious stores memories, desires, and conflicts that remain hidden but still exert a powerful influence on behaviour without individuals realizing it. For example, a person may experience anxiety or emotional reactions without fully understanding the underlying cause. From the psychodynamic perspective, understanding these unconscious processes is essential for explaining many aspects of human personality and psychological functioning.

Freud compares the human mind with *an iceberg* to be able to describe how the mind actually works. On the tip of the iceberg is seen as the conscious mind, which is all of the actions and processes we are aware of and can control. However, at the bottom of the iceberg is where the unconscious mind is. In the unconscious mind, there is all of the dark and traumatic material that is too threatening to be acknowledged. There are some memories that are too painful to be acknowledged, so that is locked in the unconscious mind. This process is called repression. Other things that are in the unconscious mind are dreams.

3. Structure of Personality

Freud also proposed that personality is composed of three interacting systems:

Table 2: The structure of the personality

Component	Description
Id	The primitive part of personality driven by instinctual desires and the pleasure principle
Ego	The rational part of personality that deals with reality and balances the demands of the id and the external world
Superego	The moral component that represents internalized social rules and values

According to Sigmund Freud's psychoanalytic theory of personality, the superego is the component of personality composed of the internalized ideals that we have acquired from our parents and society. The superego works to suppress the urges of the id and tries to make the ego behave morally, rather than realistically. These three components often interact in ways that create psychological tension or conflict. For example, the *id* may seek immediate pleasure, while the *superego* imposes moral restrictions, and the *ego* attempts to find a realistic compromise between the two.

Freud suggested that the **ego** uses defence mechanisms to protect individuals from anxiety and psychological conflict. Defence mechanisms are unconscious psychological strategies used to cope with uncomfortable emotions or thoughts. Some common examples include:

Defence Mechanism	Description	Example
Repression	Pushing disturbing thoughts out of awareness	Forgetting a traumatic event
Denial	Refusing to accept reality	Ignoring evidence of a serious problem
Projection	Attributing one's own unacceptable feelings to others	Accusing others of being hostile

Defence Mechanism	Description	Example
Rationalization	Creating logical explanations for unacceptable behaviour	Making excuses for poor performance

Freud developed several techniques to explore unconscious processes. These included:

- **Free association** – encouraging patients to say whatever comes to mind
- **Dream analysis** – interpreting dreams as expressions of unconscious desires
- **Analysis of slips of the tongue** (often called “Freudian slips”)

These techniques aimed to reveal hidden conflicts that might influence behaviour.

Freud’s theories were later developed and expanded by several psychologists who were influenced by his work, including Carl Jung (1875–1961), Alfred Adler (1870–1937), Karen Horney (1855–1952), and Erik Erikson (1902–1994). These thinkers built upon Freud’s original ideas while introducing their own perspectives within the broader psychodynamic tradition.

Psychologists who adopt the psychodynamic perspective generally believe that psychological difficulties can be alleviated by bringing unconscious motivations and conflicts into conscious awareness. This often involves exploring a person’s early childhood experiences as well as their current desires and emotional struggles. Such exploration is typically carried out through therapeutic conversations and the interpretation of dreams, a method known as *psychoanalysis*, which aims to uncover hidden psychological processes influencing behaviour.

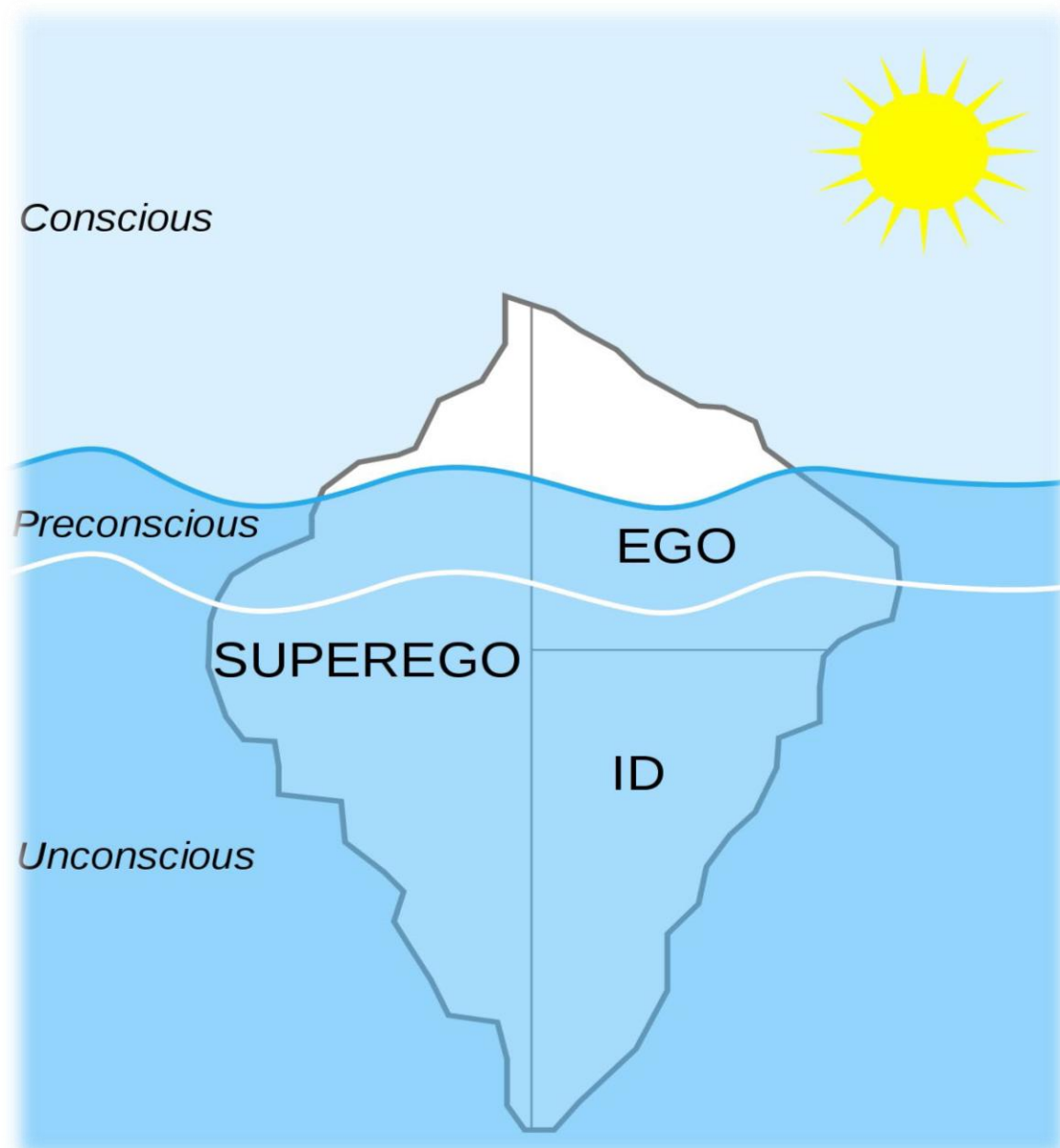
The pioneers of the psychodynamic school were mainly clinicians who worked directly with individuals in order to help them understand and deal with their psychological difficulties. Much of their work was based on therapeutic practice rather than systematic scientific research. Although their theories were not always tested through empirical studies, and later research has not consistently confirmed all of their claims, the psychodynamic perspective has nevertheless had a significant influence on the development of psychology and on broader interpretations of human behaviour (Moore & Fine, 1995).

Several key ideas that originated from this approach continue to shape modern psychology. Among these are the recognition of the *unconscious mind* as an important influence on

behaviour, the belief that early childhood experiences play a crucial role in personality development, and the view that psychological therapy can help individuals improve their well-being and resolve emotional difficulties. These concepts remain central to many contemporary psychological theories and therapeutic practices.

Assignment / Discussion Questions

1. Explain the three levels of the mind proposed by Sigmund Freud.
2. Describe the three components of personality (id, ego, superego).
3. What are defence mechanisms? Give two examples.
4. Explain and discuss the following iceberg suggested by Freud:



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Lecture Nine: Schools of Psychology

5. Humanistic Perspective

Objectives:

- Define humanistic psychology and explain its main principles.
- Identify the key contributions of Abraham Maslow and Carl Rogers.
- Explain the concept of self-actualization and the hierarchy of needs.
- Describe the importance of self-concept and unconditional positive regard.
- Discuss the role of humanistic psychology in education and psychotherapy.

1. The third Force in Psychology

Humanistic psychology emerged, as the *third force* in psychology, in the middle of the twentieth century as a reaction to two dominant perspectives in psychology: Behaviorism and Psychoanalysis. While Behaviorism focused mainly on observable behaviour and psychodynamic theory emphasized unconscious conflicts, humanistic psychologists argued that these approaches did not fully capture the richness of human experience. They believed that psychology should focus on human potential, personal growth, and the individual's capacity to make choices and create meaning in life.

Humanistic psychology emphasizes the idea that individuals are inherently good and possess a natural tendency toward growth and self-improvement. According to this perspective, people are not simply controlled by external stimuli, as behaviorists suggested, nor are they entirely driven by unconscious conflicts, as proposed by psychoanalytic theory. Instead, humanistic psychologists believe that individuals actively shape their own lives and strive to achieve their full potential.

2. Core Assumptions of Humanistic Psychology

Humanistic psychology places the individual at the center of inquiry, focusing on subjective experience and personal meaning. For example, rather than asking "What causes behavior?" humanistic psychologists may ask "How does the individual experience and interpret their world?"

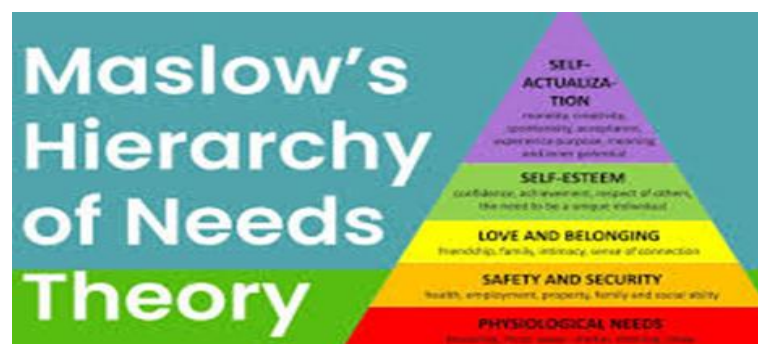
Humanistic psychology is grounded in several key assumptions about human nature. First, it emphasizes the uniqueness of each individual. Unlike approaches that seek general laws of behavior, humanistic psychology focuses on personal experiences and individual differences.

Second, it assumes that humans possess free will and are capable of making conscious choices. This contrasts with deterministic perspectives, such as Freud's emphasis on unconscious drives or Skinner's focus on environmental control (Skinner, 1953).

Third, humanistic psychologists believe that individuals are inherently good and motivated toward growth. Rogers (1961) argued that people have an innate tendency toward self-improvement, provided they are in a supportive environment.

- Abraham Maslow and the Hierarchy of Needs

One of the most influential figures in this movement was Abraham Maslow (1943). Maslow proposed the well-known theory of the hierarchy of needs, which suggests that human motivation is organized in a series of levels.



At the base of the hierarchy are physiological needs such as food, water, and shelter. These are followed by safety needs, including security and stability. Once these basic needs are satisfied, individuals seek love and belonging, such as relationships and social connections. The next level involves esteem needs, including self-respect and recognition from others.

At the top of the hierarchy is self-actualization, which refers to the realization of one's full potential. Self-actualized individuals are creative, autonomous, and focused on personal growth. For example, a student who has met their basic and social needs may strive to achieve academic excellence and personal fulfillment.

According to Maslow, individuals must first satisfy their basic physiological needs, such as food and shelter, before they can focus on higher psychological needs like belonging, esteem, and ultimately self-actualization. Self-actualization refers to the realization of one's fullest

potential and the desire to become the best version of oneself. Maslow (1968) emphasized that not all individuals reach self-actualization, as many remain focused on lower-level needs due to life circumstances.

- Carl Rogers and the Concept of the Self

Another important contributor to humanistic psychology was Carl Rogers (1961). Rogers emphasized the importance of the self-concept, which refers to how individuals perceive and understand themselves. According to Rogers, psychological well-being depends on the congruence between the self-concept and lived experiences. When individuals' experiences align with their self-image, they experience harmony and psychological health. However, when there is a mismatch, known as incongruence, individuals may experience anxiety and distress. For example, a student who sees themselves as competent but repeatedly fails exams may experience a conflict between their self-concept and reality. This incongruence can lead to frustration and lowered self-esteem.

He argued that people develop a healthier personality when they receive unconditional positive regard, meaning acceptance and support from others without judgment. Rogers also developed a therapeutic approach known as client-centred therapy, in which the therapist provides empathy, understanding, and acceptance to help individuals explore their feelings and develop greater self-awareness. In educational settings, this means creating a supportive environment where students feel valued and respected.

Humanistic psychologists also emphasize the importance of subjective experience. Rather than focusing only on observable behaviour or unconscious conflicts, they encourage individuals to reflect on their own feelings, goals, and values. From this perspective, personal meaning, creativity, and free will are central elements of human life. People are viewed as active agents who can make choices and take responsibility for their actions.

Humanistic psychology has had a strong influence in areas such as counselling, psychotherapy, education, and personal development. In education, for example, the humanistic perspective encourages teachers to create supportive learning environments where students feel respected and motivated to develop their abilities. The approach highlights the importance of empathy, emotional well-being, and the development of the whole person, rather than focusing solely on academic performance.

Although some critics argue that humanistic psychology is less scientific than other approaches because it relies heavily on subjective experiences, its influence remains significant. The emphasis on personal growth, self-awareness, and human potential continues to shape modern approaches to psychotherapy, education, and well-being. *Positive psychology* is a recent movement in psychology with roots in the humanist perspective. This field focuses on the aspects that can improve quality of life, happiness, and subjective well-being. For example, this perspective helps us understand how practices like gratitude and compassion strengthen resilience and reduce stress.

Assignment: Group work discussion

Each group will discuss one of the following questions:

1. Explain the main ideas of humanistic psychology. How does this approach differ from Behaviorism and the psychodynamic perspective?
2. Discuss the concept of self-actualization proposed by Abraham Maslow. Why is it considered the highest level of human motivation?
3. Describe the role of self-concept and unconditional positive regard in personality development according to Carl Rogers.
4. Provide one real-life example that illustrates how an individual might strive for personal growth or self-actualization.

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Lecture Ten: Schools of Psychology

6. Cognitive Perspective

Objectives:

- Define the cognitive approach in psychology.
- Explain how the cognitive perspective differs from earlier schools such as Behaviorism.
- Identify the main mental processes studied by cognitive psychologists.
- Describe the contributions of major researchers in the development of cognitive psychology.
- Explain the relationship between cognitive psychology and cognitive neuroscience.
- Identify some of the main techniques used to study brain activity.
- Understand how the brain supports cognitive processes such as memory, perception, and decision-making.

1. The Cognitive Revolution

The emergence of the cognitive approach marked an important turning point in the history of psychology. During the first half of the twentieth century, many psychologists, particularly those associated with Behaviorism, focused mainly on observable behaviour and avoided studying internal mental processes. However, by the middle of the century, researchers began to recognize that behaviour could not be fully understood without considering how individuals think, remember, perceive, and interpret their experiences. As a result, a new perspective known as *cognitive psychology* developed, focusing on the scientific study of mental processes such as perception, memory, thinking, language, and judgment.

The cognitive perspective emerged partly as a response to the limitations of Behaviorism. Behaviorists concentrated primarily on observable relationships between stimuli and responses, often ignoring the mental processes that occur between them. Cognitive psychologists argued that this approach was incomplete because people actively interpret the situations they encounter. In other words, the meaning individuals assign to events influences how they behave.

For example, imagine that a teacher praises a student by saying, “Excellent work on your presentation.” From a behaviorist perspective, this statement would be interpreted simply as a positive reinforcement that increases the likelihood that the student will repeat the same

behaviour. However, a cognitive psychologist would suggest that the student may think about the comment more deeply. The student might wonder why the teacher made this remark at that particular moment. He might interpret it as genuine appreciation, or he might think that the student's interpretation of the situation becomes an important factor in explaining behaviour.

Another illustration can be seen in workplace interactions. When a manager tells an employee, "You are very kind," a behaviorist might view the statement as a positive stimulus intended to reinforce a particular behaviour. However, from a cognitive perspective, the employee may try to interpret the intention behind the comment. The employee might question why the manager made this remark at that moment and may even suspect that the comment is intended to influence future behaviour. These examples demonstrate that understanding behaviour requires examining not only external stimuli but also the internal thought processes through which individuals interpret their experiences.

- The Mind as an Information-Processing System

Scientific progress is often shaped by the technologies available at a particular time, and psychology has been influenced in the same way. During the 1950s and 1960s, the rapid development of computers encouraged psychologists to draw comparisons between the functioning of the human mind and the operations of these machines. Although the brain is far more complex than any computer, this analogy helped researchers conceptualize how information might be processed mentally. Just as computers receive input, store data, process information, and produce output, the human mind also receives sensory information from the environment, interprets it, stores it in memory, and retrieves it when needed. This information-processing perspective became a central idea in cognitive psychology and contributed to what is often called the "*cognitive revolution*." This analogy helped psychologists develop models explaining how individuals learn, remember information, solve problems, and make decisions.

2. Prominent Contributors

Although cognitive psychology became widely recognized during the 1960s, earlier psychologists had already begun investigating mental processes. One of the pioneers in this area was the German psychologist Hermann Ebbinghaus (1850–1909), who conducted systematic experiments on memory. Ebbinghaus studied how people learn and recall lists of meaningless syllables, allowing him to measure memory scientifically and to demonstrate how

memory declines over time. His work provided one of the earliest examples of experimental research on cognitive processes.

Another important contributor was the British psychologist Frederic Bartlett (1886–1969), who explored how social and cultural factors influence memory. Bartlett developed short stories that were mostly logical but included unusual elements. When participants attempted to recall these stories, he observed that they often changed details or omitted unfamiliar parts. Bartlett concluded that memory is not a simple reproduction of information but rather a reconstructive process influenced by prior knowledge and expectations.

The importance of prior knowledge in shaping thinking was also emphasized by the Swiss psychologist Jean Piaget (1896–1980). Piaget proposed that children actively construct knowledge as they interact with their environment. According to his theory of cognitive development, children progress through a series of stages during which their thinking becomes increasingly complex. His work highlighted the idea that cognitive processes play a crucial role in learning and development.

Other psychologists made further contributions to the development of cognitive psychology. For example, George A. Miller (1956) conducted influential research on short-term memory and suggested that individuals can hold only a limited number of items in their immediate memory at one time. Similarly, Donald Broadbent (1958) investigated how people focus their attention on certain pieces of information while ignoring others. Later, researchers such as Daniel Kahneman and Amos Tversky (1979) examined how individuals make judgments and decisions, demonstrating that human thinking often relies on mental shortcuts, or heuristics, which can sometimes lead to systematic errors in reasoning.

Another major figure in the development of cognitive psychology was Ulric Neisser, whose book *Cognitive Psychology* (1967) helped establish the field as a major area of research within psychology.

In addition, Herbert A. Simon and Allen Newell contributed to the study of human thinking by developing computational models that simulated problem solving and decision making processes.

4. Modern Cognitive Science

Over time, the cognitive approach has become one of the most influential perspectives in modern psychology. It has contributed significantly to research in numerous fields, including language development, memory, learning, problem solving, intelligence, education, decision making, and psychotherapy. By emphasizing the role of mental processes, cognitive psychology has greatly expanded our understanding of how people perceive, process, and use information in their everyday lives.

More recently, advances in technology have allowed psychologists to study the relationship between mental processes and brain activity, giving rise to the field of cognitive neuroscience. Cognitive neuroscience seeks to understand how the brain supports mental processes. Cognitive neuroscientists investigate how different areas of the brain are involved in cognitive functions such as memory, attention, perception, language, and problem solving.

This interdisciplinary field aims to identify the neural mechanisms that underlie thinking and behaviour. In other words, it seeks to understand *how the brain enables the mind to function*.

One of the most important tools used in this area is neuroimaging. Neuroimaging methods are widely used in medicine to diagnose brain injuries and neurological disorders. In psychological research, however, these techniques allow scientists to observe which areas of the brain become active when individuals perform specific cognitive tasks. When a person is thinking, remembering information, or making decisions, the brain regions responsible for these processes show increased activity that can be detected through brain imaging technologies. These developments have strengthened the connection between psychology and neuroscience and have provided valuable insights into how cognitive processes are supported by the biological structures of the brain.

Assignment: Applying the Cognitive Approach to Everyday Behaviour

Answer the following questions:

1. Explain the main idea of cognitive psychology. How does it differ from Behaviorism in explaining human behaviour?
2. Describe the information-processing model of the mind. How is the human mind sometimes compared to a computer?

3. Choose one cognitive psychologist discussed in the lecture (for example Hermann Ebbinghaus or Jean Piaget) and briefly explain their main contribution to cognitive psychology.
4. Provide one example from daily life where a person's interpretation of a situation influences their behaviour. Explain the example using the cognitive approach.

(A real-life example of striving for self-actualization can be seen in a person who decides to pursue a meaningful goal that reflects their true interests and abilities. For instance, an individual who has always been passionate about music may choose to dedicate time and effort.)

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Lecture Eleven: Schools of Psychology

7. Social-Cultural Perspective

Objectives:

- Define the sociocultural approach in psychology and explain its main focus on the influence of social contexts and cultural environments on behaviour.
- Explain how social situations shape thinking and behaviour, including how individuals influence and are influenced by others.
- Recognize the importance of culture and social norms in shaping human attitudes, perceptions, and interactions.

1. Beyond the Individual

Another important perspective in psychology examines behaviour from a broader level of analysis and has had a significant influence on the field. This perspective is generally referred to as the sociocultural approach. Sociocultural psychology focuses on understanding how social environments and cultural contexts influence people's thoughts, feelings, and behaviours. According to this approach, individuals cannot be fully understood without considering the social situations in which they live and the cultural systems that shape their experiences.

Psychologists working within this perspective are particularly interested in how people perceive themselves and others, as well as how individuals influence one another's behaviour within social groups. Human beings are inherently social, and much of what we think and do is shaped by interactions with others. For example, our attitudes, beliefs, and behaviours often develop through communication, observation, and comparison with people around us.

2. Main Contributors

Research in social psychology has provided many insights into how social relationships influence behaviour. For instance, studies conducted by Donn Byrne (1969) demonstrated that individuals are more likely to feel attracted to others who share similar attitudes, beliefs, and interests. This phenomenon, often referred to as the similarity-attraction effect, explains why people frequently develop friendships and relationships with individuals who think and behave in ways similar to their own.

Another important contribution was made by Leon Festinger (1954), who proposed *social comparison theory*. According to this theory, people tend to evaluate their own opinions, abilities, and behaviours by comparing themselves with others. When individuals are uncertain about their own beliefs or performance, they often look to others for guidance. For example, a student who is unsure about how well they performed on an exam may look at the reactions of classmates to evaluate their own performance.

3. Key Concepts

The sociocultural approach also examines the process of *conformity*, which refers to the tendency of individuals to adjust their beliefs or behaviours so that they are consistent with those of a group or with the expectations of significant others. People often conform because they want to be accepted, avoid conflict, or maintain harmony within social relationships.

Examples of conformity can easily be observed in everyday life. For instance, a person may adopt certain styles of clothing, language, or behaviour because these are common among their peers. Similarly, individuals may adjust their opinions during group discussions in order to align with the views of friends or colleagues. Even in simple situations, such as deciding what food to order at a restaurant, people may be influenced by the choices made by others around them.

The sociocultural perspective therefore highlights the idea that human behaviour is not shaped solely by internal psychological processes or biological factors. Instead, behaviour is deeply influenced by *social norms* social relationships, cultural norms, and group dynamics. By examining how individuals interact with their social environments, sociocultural psychology provides valuable insights into how beliefs, attitudes, and behaviours develop within different societies and cultural contexts.

The sociocultural perspective places great emphasis on the role of social norms and cultural expectations in shaping human behaviour. Social norms are the shared rules, standards, and expectations that guide how people are supposed to behave in a particular society or social group. These norms develop over time within communities and influence many aspects of daily life, including communication styles, emotional expression, and patterns of social interaction. Because cultures differ in their values and traditions, behaviours that are seen as normal and appropriate in one cultural setting may appear unusual or even unacceptable in another.

For example, greeting behaviours vary widely across cultures. In some societies, people typically greet each other with a handshake, which is considered polite and professional. In other cultures, individuals may bow to show respect, exchange a kiss on the cheek, or place a hand over the heart as a sign of sincerity. These differences illustrate how simple social behaviours are shaped by cultural traditions and expectations.

Cultural norms also influence how individuals manage personal space when interacting with others. In certain cultures, standing close during a conversation may be interpreted as a sign of friendliness, warmth, and engagement. However, in other cultures people may prefer to maintain a greater physical distance during interactions. When individuals from different cultural backgrounds communicate, these differences in personal space can sometimes lead to misunderstandings or discomfort.

Another area influenced by sociocultural factors is the expression of emotions. Some cultures encourage people to express their emotions openly and freely. For instance, showing excitement, sadness, or frustration may be considered natural and acceptable. In contrast, other cultures place greater emphasis on emotional restraint and self-control, especially in public situations. In such contexts, individuals may be expected to regulate their emotional expressions to maintain social harmony.

Cultural expectations also shape attitudes toward time and punctuality. In some societies, punctuality is highly valued, and arriving exactly on time for appointments or meetings is viewed as a sign of respect and responsibility. In other cultural contexts, time may be approached more flexibly, and arriving slightly later than the scheduled time may not be considered problematic. These variations demonstrate how cultural frameworks influence everyday behaviours and social interactions.

Another example can be observed in communication styles. In certain cultures, communication tends to be direct and explicit, with individuals expressing their opinions clearly and openly. In contrast, other cultures rely more on indirect communication, where meaning is conveyed through context, tone, or nonverbal cues rather than through direct statements. Understanding these differences is important because misinterpretations can easily occur when individuals from different cultural backgrounds interact.

Family structures and social roles also reflect sociocultural influences. In some cultures, independence and individual achievement are strongly encouraged, and young adults are expected to become self-reliant at an early age. In other cultures, greater importance is placed on family interdependence, where individuals maintain close relationships with family members and make decisions that consider the well-being of the group.

These examples highlight how behaviour is not determined solely by individual personality or internal mental processes. Instead, human actions are deeply embedded within social and cultural contexts. The sociocultural perspective therefore reminds psychologists that in order to understand human behaviour accurately, it is necessary to consider the cultural values, social relationships, and environmental conditions that shape individuals' experiences.

Assignments:

- Explain the main principles of the sociocultural approach in psychology. Why is it important to study behaviour within its social and cultural context?
- Provide one real-life example of conformity and explain why individuals may change their behaviour to align with a group.

Role-Play Assignment: Exploring Social and Cultural Influences on Behaviour

1. Form groups of 3–4 students. Each group will choose or be assigned a scenario that involves social influence, cultural expectations, or conformity.
2. Develop a role-play where each student assumes a specific role within the scenario. Examples of roles might include:

- A person conforming to peer pressure
- A person resisting social influence
- An observer or mediator
- A cultural outsider trying to understand group behaviour

3. Scenarios Examples:

- Peer Pressure: A group of friends decides whether to follow a new trend, and one member feels unsure about participating.
- Cultural Norms: A student from a culture with strict rules about public speaking joins a classroom debate where others freely express opinions.
- Social Comparison: Employees in a company compare their work performance and adjust their own behaviour or attitudes based on what others are doing.
- Conformity: A person in a group discussion changes their opinion to match the majority even though they initially disagreed.

4. During the role-play:

- Highlight **social influences** affecting behaviour.
- Show how cultural background or group norms impact decisions or attitudes.
- Include **observable reactions and thought processes** (e.g., hesitation, peer pressure, internal conflict).

5. After the role-play: Each group will provide a **5–10 minute debrief**, explaining:

- Which sociocultural concepts were illustrated (e.g., conformity, social comparison, cultural norms).
- How social and cultural factors influenced behaviour in the scenario.
- Any real-life implications or lessons learned.

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Lecture Twelve: Biological Bases of Behaviour

Objectives:

- Explain the role of biology in shaping behaviour and mental processes.
- Describe the structure and function of neurons.
- Identify the main parts of the nervous system.
- Explain how neurotransmitters influence behaviour.
- Recognize the major structures of the brain and their functions.
- Understand how brain research contributes to psychology.

1. The Biological Perspective

Following the development of various psychological perspectives, researchers increasingly recognized that behaviour cannot be fully understood without considering the biological processes underlying it. The biological approach in psychology focuses on how the brain, nervous system, and other physiological processes influence thoughts, emotions, and actions. This perspective emphasizes that all psychological processes have a biological basis.

2. The Nervous System

At the core of the biological system is the neuron, which is the basic unit of the nervous system. Neurons are specialized cells responsible for transmitting information throughout the body. Each neuron consists of several parts: the dendrites, which receive incoming signals; the cell body, which processes the information; and the axon, which transmits signals to other neurons. Communication between neurons occurs through both electrical and chemical processes.

When a neuron is activated, it generates an electrical impulse known as an action potential, which travels along the axon. At the end of the axon, the signal reaches a small gap called the synapse. Here, chemical substances known as neurotransmitters are released. These neurotransmitters cross the synaptic gap and bind to receptors on the next neuron, allowing the signal to continue. Different neurotransmitters have different effects on behaviour. For example, dopamine is associated with reward and motivation, while serotonin plays a role in mood regulation.

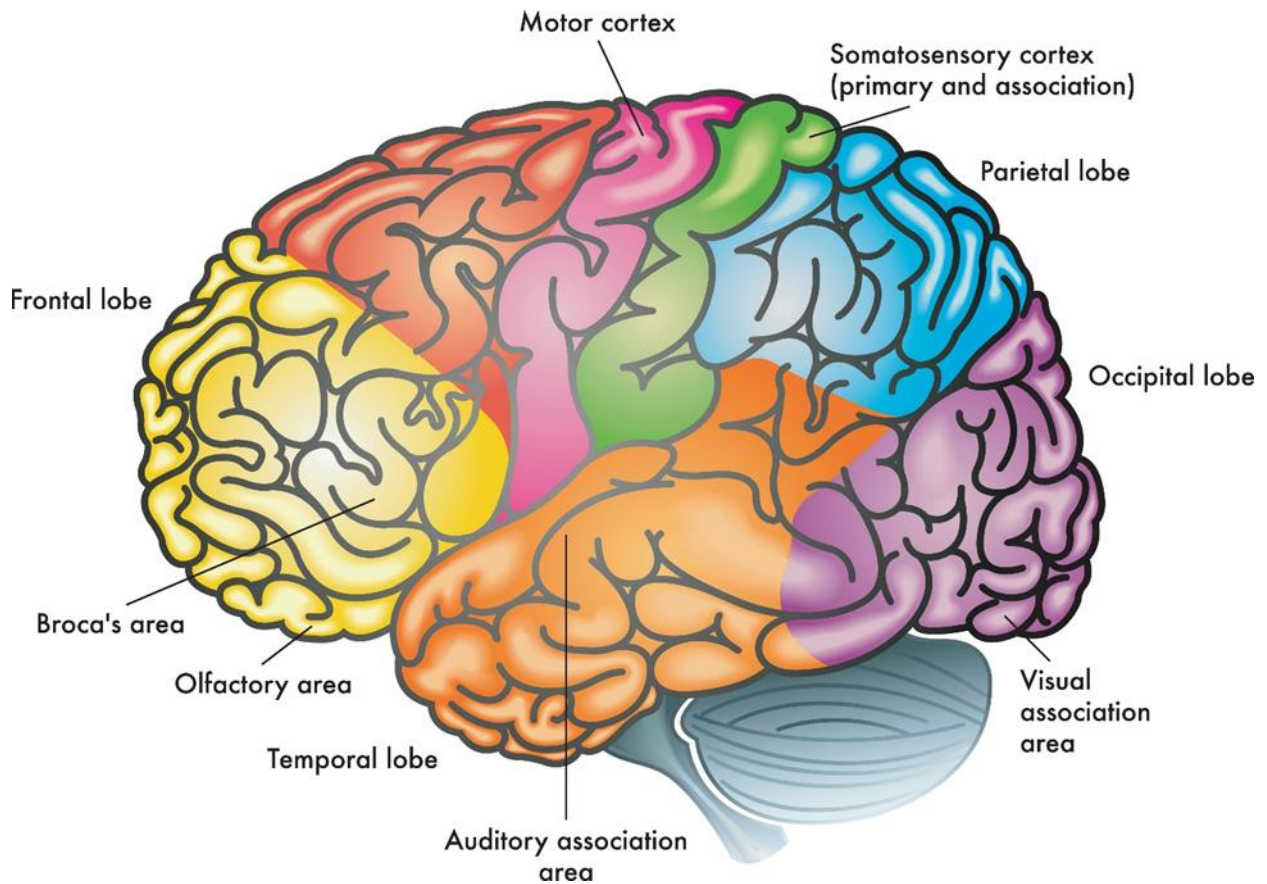
The nervous system is divided into two main parts: the central nervous system (CNS) and the peripheral nervous system (PNS). The central nervous system consists of the brain and spinal cord and is responsible for processing information and coordinating activity. The peripheral nervous system connects the CNS to the rest of the body and is involved in transmitting sensory and motor information.

The peripheral nervous system can be further divided into the somatic nervous system and the autonomic nervous system. The somatic system controls voluntary movements, such as walking or writing, while the autonomic system regulates involuntary functions, such as heart rate and digestion. The autonomic nervous system itself has two branches: the sympathetic nervous system, which prepares the body for action in stressful situations (often referred to as the “fight or flight” response), and the parasympathetic nervous system, which helps the body return to a state of rest and relaxation.

3. The Brain Structure and Function

The brain is the most complex organ in the human body and plays a central role in behaviour and mental processes. One of the key structures is the cerebral cortex, the outer layer of the brain, which is responsible for higher cognitive functions such as thinking, reasoning, and decision making. The cortex is divided into two hemispheres, each controlling the opposite side of the body.

Graph 1: The Brain Structure



Different areas of the brain have specialized functions. The **frontal lobe** is involved in decision-making, problem solving, and personality. The **parietal lobe** processes sensory information such as touch and temperature. The **temporal lobe** is important for memory and language, while the **occipital lobe** is responsible for visual processing.

Other important brain structures include the **limbic system**, which is involved in emotions and motivation. Within this system, the amygdala plays a role in processing emotions such as fear, while the hippocampus is essential for memory formation. These structures demonstrate how closely emotions and cognition are linked to biological processes.

Advances in technology have allowed psychologists to study the brain in increasingly sophisticated ways. Techniques such as brain imaging enable researchers to observe brain activity while individuals perform specific tasks. These methods have contributed significantly to our understanding of how different areas of the brain are involved in behaviour.

The biological approach has had a major impact on psychology, particularly in areas such as neuroscience, medicine, and mental health. It has helped researchers understand the biological basis of psychological disorders and has contributed to the development of treatments, including medication and other medical interventions.

Assignment

Understanding the Biological Basis of Behaviour

Write a response answering the following questions:

1. Explain the role of the biological approach in psychology.
2. Describe the structure and function of a neuron.
3. Explain how neurotransmitters influence behaviour, providing one example.
4. Describe the main divisions of the nervous system.
5. Choose one brain structure and explain its function in behaviour.

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Lecture Thirteen: Sensation and Perception

Objectives:

- Differentiate between sensation and perception.
- Explain how sensory organs detect stimuli.
- Describe the main processes involved in perception.
- Understand the role of attention and context in perception.
- Identify key theories and researchers in perception.
- Apply concepts of perception to real-life situations.

1. Definitions

Building on the biological foundations of behaviour, psychologists have long been interested in understanding how humans experience the world. This leads us to the study of sensation and perception, two closely related but distinct processes. Sensation refers to the process by which sensory receptors and the nervous system receive and represent stimulus energies from the environment. In contrast, perception involves the organization and interpretation of these sensory inputs, allowing us to recognize meaningful objects and events.

1.1. Sensation:

The process of sensation begins with sensory receptors, which are specialized cells located in sensory organs such as the eyes, ears, skin, nose, and tongue. These receptors respond to specific types of stimuli—light, sound waves, pressure, chemical substances—and convert them into neural signals, a process known as transduction. These signals are then transmitted to the brain, where perception takes place.

An important concept in sensation is the idea of thresholds. The absolute threshold refers to the minimum level of stimulation required for a stimulus to be detected at least half the time. The difference threshold, or just noticeable difference, is the smallest detectable difference between two stimuli. Early researchers such as Ernst Weber and Gustav Fechner contributed significantly to our understanding of these sensory processes through the field of psychophysics.

1.2. Perception

While sensation provides the raw data, perception is an active process in which the brain organizes and interprets this information. One influential perspective comes from the Gestalt psychologists, including Max Wertheimer, who argued that we perceive whole forms rather than just a collection of individual elements. According to Gestalt principles such as proximity, similarity, continuity, and closure, the brain tends to organize sensory input into meaningful patterns.

Perception is also influenced by top-down and bottom-up processing. Bottom-up processing begins with the sensory input itself, building up to a final perception. In contrast, top-down processing is guided by our expectations, prior knowledge, and experiences. This means that perception is not purely objective; it is shaped by what we already know and believe.

For example, imagine reading a sentence where some letters are missing or unclear. You are still able to understand the message because your brain uses context and prior knowledge to fill in the gaps. Similarly, when looking at an ambiguous image, different people may perceive it in different ways depending on their expectations and experiences.

Another important factor in perception is attention, which refers to the process of focusing awareness on specific stimuli while ignoring others. Research by Donald Broadbent showed that individuals can selectively attend to certain information while filtering out other stimuli. However, attention is limited, and we may fail to notice important changes in our environment—a phenomenon known as *inattention blindness*.

A clear real-life example of perception can be seen in social interactions. Imagine you receive a short message from a colleague that simply says, “We need to talk.” From a purely sensory perspective, the words are neutral. However, your perception may vary: you might interpret it as something serious or negative, depending on your past experiences or emotional state. This demonstrates how perception goes beyond the sensory input and involves interpretation.

Cultural and social factors also play a role in shaping perception. What people perceive and how they interpret events can vary across cultures, highlighting the influence of the environment on cognitive processes.

The study of sensation and perception has important applications in many areas, including design, communication, health, and safety. Understanding how people perceive information can help improve user interfaces, enhance learning environments, and reduce errors in high-risk situations.

Assignment

Exploring Sensation and Perception

Address the following:

1. Explain the difference between sensation and perception.
2. Describe the concept of transduction and give an example.
3. Explain one Gestalt principle with an example from daily life.
4. Discuss the role of top-down processing in perception.
5. Provide one real-life situation where perception may differ between individuals and explain why.

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Lecture Fourteen: Memory

Objectives:

- Define memory and explain its importance in human behaviour.
- Describe the main stages of memory: encoding, storage, and retrieval.
- Identify the different types of memory systems.
- Explain key models and theories of memory.
- Understand factors that influence remembering and forgetting.
- Apply memory concepts to real-life situations.

1. The Information Processing Model

Following the study of sensation and perception, which explain how we receive and interpret information from the environment, we now turn to memory, the process that allows us to retain and use this information over time. Memory is essential for learning, decision making, and everyday functioning. Without memory, it would be impossible to store past experiences or use them to guide future behaviour.

Psychologists generally define memory as the processes involved in *encoding*, *storing*, and *retrieving information*. Encoding refers to the transformation of sensory input into a form that can be stored in the brain. This process can occur in different ways, such as visual encoding (images), acoustic encoding (sounds), and semantic encoding (meaning). Research has shown that semantic encoding tends to lead to deeper and more durable memories.

Once information is encoded, it enters the stage of storage, where it is maintained over time. The way information is stored depends on the type of memory system involved. Finally, retrieval refers to the process of accessing stored information when it is needed. Retrieval can sometimes fail, even when the information is still stored in memory, which explains experiences such as the “tip-of-the-tongue” phenomenon.

2. The Atkinson-Shiffrin Model

One of the most influential models of memory was proposed by Richard Atkinson and Richard Shiffrin (1968). Their *multi-store model* suggests that memory consists of three main stages: *sensory memory*, *short-term memory*, and *long-term memory*.

Sensory memory is the initial stage that briefly holds incoming sensory information for a fraction of a second. For example, when you see a flash of light, the image remains for a very short time even after the stimulus has disappeared. This allows the brain to process continuous streams of information.

Short-term memory (STM), also known as working memory, temporarily holds a limited amount of information. Research by George A. Miller suggested that people can hold about seven (plus or minus two) items in short-term memory. However, this capacity can be improved through a process called chunking, where information is grouped into meaningful units.

The concept of working memory was further developed by Alan Baddeley (2000), who proposed that short-term memory is not a single system but consists of multiple components, including *the central executive*, *the phonological loop*, and *the visuospatial sketchpad*. This model emphasizes the active role of memory in processing information.

Long-term memory (LTM) is responsible for storing information over extended periods, ranging from minutes to a lifetime. It has a virtually unlimited capacity. Long-term memory can be divided into different types. *Explicit (declarative) memory* involves conscious recall of facts and events, while *implicit (non-declarative) memory* involves unconscious memory, such as skills and habits.

Explicit memory includes *episodic memory*, which refers to personal experiences, and *semantic memory*, which involves general knowledge about the world. Implicit memory includes *procedural memory*, such as knowing how to ride a bicycle or type on a keyboard.

Research has also shown that memory is not a perfect recording of reality. Instead, it is *reconstructive*, meaning that we actively rebuild memories based on our knowledge and expectations. The work of Frederic Bartlett demonstrated that people often distort memories to make them more consistent with their existing schemas. This explains why different individuals may remember the same event in different ways.

Forgetting is another important aspect of memory. One explanation for forgetting is *decay theory*, which suggests that memory traces fade over time. Another explanation is *interference*, where other information disrupts the retrieval of a memory. Interference can be *proactive* (old information interferes with new information) or *retroactive* (new information interferes with old information).

Additionally, forgetting can occur due to *retrieval failure*, when cues needed to access a memory are absent. This highlights the importance of *context* in memory. For example, people often recall information better when they are in the same environment in which they originally learned it.

Emotion also plays a significant role in memory. Emotional events are often remembered more vividly, a phenomenon sometimes referred to as *flashbulb memory*. However, even these memories are not always accurate and can be influenced by later experiences.

A simple real-life example of memory processes can be seen when studying for an exam. A student may encode information by reading and understanding the material, store it through repetition and organization, and later retrieve it during the test. If the student forgets certain information, it may be due to interference, lack of retrieval cues, or insufficient encoding.

The study of memory has important applications in many areas, including education, clinical psychology, and legal settings. For example, understanding memory distortions is crucial when evaluating eyewitness testimony.

Assignments

1.Understanding Memory Processes

Answer the following questions:

1. Define memory and explain its three main processes.
2. Describe the multi-store model of memory.
3. Explain the difference between short-term and long-term memory.
4. Discuss the role of working memory according to Alan Baddeley.
5. Explain one theory of forgetting with an example.
6. Provide a real-life example showing how memory can be inaccurate or reconstructive.

Instructions:

- Provide clear explanations and examples
- Use appropriate psychological terminology
- Focus on understanding, not memorization

2. Memory in Real Life – Case Analysis

You are asked to analyse how memory works in a real-life situation.

Choose **one of the following scenarios**:

Option 1: Personal Experience

Describe a situation where you **forgot something important** (e.g., an exam answer, a name, an event) OR where you **remembered something incorrectly**.

Option 2: Observation

Observe someone (friend, family member, or public situation) where memory seems to play a role (e.g., someone misremembering a story, forgetting instructions, or recalling an emotional event).

-Write a short analysis in which you:

- Describe the situation clearly
- Explain what type of memory was involved (e.g., short-term, long-term, episodic, etc.)
- analyse the memory process (encoding, storage, retrieval)
- Explain what may have caused the forgetting or distortion
 - (e.g., interference, lack of attention, emotional factors, reconstruction)
- Suggest how the memory could have been improved or made more accurate

Students should:

- Focus on psychological explanation, not just description
- Use key concepts from the lecture
- Provide clear and logical analysis

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Lecture Fifteen: Learning

Objectives:

- Define learning from a psychological perspective.
- Identify the key contributions of Abraham Maslow and Carl Rogers.
- Describe operant conditioning and the role of reinforcement and punishment.
- Understand observational learning and its mechanisms.
- Compare different learning theories.
- Apply learning principles to real-life situations.

After exploring memory, which explains how information is stored and retrieved, we now turn to learning, the process through which experience leads to relatively permanent changes in behaviour or knowledge. Learning is central to adaptation, allowing individuals to adjust to their environment and develop new skills.

1. Classical Conditioning:

One of the earliest and most influential approaches to learning is classical conditioning, first studied by Ivan Pavlov. Pavlov, a Russian physiologist, discovered that dogs could learn to associate a neutral stimulus with a meaningful one. In his experiments, food naturally caused dogs to salivate. However, after repeatedly pairing the presentation of food with the sound of a bell, the dogs began to salivate in response to the bell alone.

In classical conditioning, several key concepts are important. The *unconditioned stimulus (UCS)* naturally produces a response, while the *unconditioned response (UCR)* is the automatic reaction to that stimulus. A *neutral stimulus (NS)* becomes a *conditioned stimulus (CS)* after being paired with the UCS, and it then produces a *conditioned response (CR)*. This process demonstrates how learning can occur through association. For decades, advertisers have used classical conditioning to influence consumers (Hawkins, Best, & Coney, 1998). The process works by creating a "feel-good" ad that naturally makes a person happy. The enjoyable ad serves as the unconditioned stimulus (US), and the enjoyment is the unconditioned response (UR). Since the product is featured in that happy ad, the brain starts to link the two together- it becomes associated with the US, and then becomes the conditioned stimulus (CS). Eventually,

the product itself becomes the Conditioned Stimulus. When a shopper sees that item on a shelf later, they experience a "conditioned" burst of positivity that encourages them to buy it.

2. Operant Conditioning:

Another major form of learning is operant conditioning, developed by B. F. Skinner. Unlike classical conditioning, which focuses on automatic responses, operant conditioning involves voluntary behaviours that are influenced by their consequences. According to Skinner, behaviours that are followed by positive outcomes are more likely to be repeated, while those followed by negative outcomes are less likely to occur again. John B. Watson and B. F. Skinner believed that all learning was the result of reinforcement, and thus that reinforcement could be used to educate children. For instance, Watson wrote in his book on Behaviorism,

Give me a dozen healthy infants, well-formed, and my own specified world to bring them up in and I'll guarantee to take any one at random and train him to become any type of specialist I might select—doctor, lawyer, artist, merchant-chief and, yes, even beggar-man and thief, regardless of his talents, penchants, tendencies, abilities, vocations, and race of his ancestors. I am going beyond my facts and I admit it, but so have the advocates of the contrary and they have been doing it for many thousands of years (Watson, 1930, p. 82).

A key concept in operant conditioning is *reinforcement*, which increases the likelihood of a behaviour. Reinforcement can be positive (adding a desirable stimulus, such as praise) or negative (removing an unpleasant stimulus, such as turning off a loud noise). In contrast, punishment is used to decrease behaviour and can also be positive (adding something unpleasant) or negative (removing something desirable).

For example, a person who studies regularly and receives good results is likely to continue studying (positive reinforcement). On the other hand, if someone touches a hot object and feels pain, they are less likely to repeat that behaviour (punishment).

Learning principles are among the most powerful tools in psychology because they explain a lot of different behaviours with just a few simple ideas. These theories are not just for textbooks; they are used every day in many different ways. For example, operant conditioning—a type of learning based on rewards—has been used to help parents train children, improve how athletes play, and motivate people at work (Simek & O'Brien, 1981; McGlynn, 1990).

3. Observational learning:

A third important perspective on learning is observational learning, introduced by Albert Bandura (1963). Bandura argued that people can learn simply by observing others, without direct reinforcement. In his famous Bobo doll experiment, children who observed an adult behaving aggressively toward a doll were more likely to imitate that behaviour. Bandura and his colleagues had demonstrated that these children had learned new behaviors, simply by observing and imitating others.

Observational learning involves several key processes: *attention*, *retention*, *reproduction*, and *motivation*. This means that individuals must notice the behaviour, remember it, be able to reproduce it, and have a reason to do so. An everyday example of observational learning can be seen when a child learns how to use a smartphone by watching an older sibling. Even without direct instruction, the child can imitate the actions and gradually master the skill.

Although these three approaches differ, they are complementary. Classical conditioning explains how we learn associations between stimuli, operant conditioning explains how consequences shape behaviour, and observational learning highlights the role of social context and imitation.

Learning theories have had a major impact on psychology, helping researchers understand behaviour in humans and animals. They also provide insight into how habits are formed, how behaviours change, and how individuals adapt to their environment.

Assignments

Task 1: Understanding Learning Theories

Answer the following questions:

1. Define learning and explain its importance in everyday life.
2. Describe the process of classical conditioning using an original example.
3. Explain the difference between reinforcement and punishment in operant conditioning.
4. Compare classical and operant conditioning.
5. Explain how observational learning differs from other forms of learning.
6. Provide a real-life example where more than one type of learning is involved.

Task 2: Learning in Everyday Behaviour

Choose one behaviour (your own or someone else's), such as:

- studying habits
 - using a phone
 - exercising
 - reacting to stress ; then:
-
- Describe the behaviour
 - Explain how it was learned (classical, operant, or observational)
 - Identify any reinforcements or associations involved
 - Explain how the behaviour could be changed or improved

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Lecture Sixteen: Thinking, Language, and Intelligence

Objectives:

- Define thinking and explain its main components.
- Understand the relationship between language and thought.
- Identify different types of thinking and problem-solving strategies.
- Explain the concept of intelligence and how it is measured.
- Recognize major theories of intelligence.
- Apply concepts of thinking and intelligence to real-life situations.

Following the study of learning and memory, which explain how information is acquired and stored, we now focus on how this information is used. In the study of psychology, we often look at the "triad" of human cognitive experience: how we process information (**thinking**), how we communicate those thoughts (**language**), and how we adapt that knowledge to the world (**intelligence**). These are not just mechanical functions; they are the tools we use to navigate the complexities of existence and create meaning in our lives.

1. The Nature of Thinking: Concepts and Problem-Solving

Thinking, or *cognition*, is the mental activity associated with processing, understanding, remembering, and communicating. In other words, thinking refers to the mental processes involved in manipulating information, such as reasoning, problem solving, decision making, and forming concepts. These processes allow individuals to interpret the world, make judgments, and adapt to new situations.

At the heart of thinking is the use of concepts, which are mental groupings or categories used to group (similar objects), events, ideas, or people that share common characteristics. Concepts help simplify information and make it easier to process. For instance, the concept of a "chair" includes everything from a high-tech office seat to a wooden stool. Another example, the concept of "teacher" includes a set of expectations and characteristics that allow us to quickly understand the role. We use prototypes, or the best examples of a category, to quickly identify the world around us.

When we face challenges, our thinking moves into another key element of thinking which is problem-solving. Psychologists have identified different strategies that individuals use to solve

problems. One common method is the use of algorithms, which are step-by-step procedures (or logical rules) that guarantee a solution if followed correctly; or *heuristics*, which are mental shortcuts (or 'rules of thumb') that simplify decision making but may sometimes lead to *errors*-while heuristics are faster, they often lead to biases. For example, the *availability heuristic* causes us to fear plane crashes more than car accidents simply because vivid images of crashes are more "available" in our memory. Humanistic psychology reminds us that our thinking is not always rational; it is deeply influenced by our emotions and our subjective "frame" of reality. Indeed, research by Daniel Kahneman and Amos Tversky showed that while heuristics are efficient, they can result in **cognitive biases**, such as overconfidence or incorrect judgments. This highlights that human thinking is not always rational.

2. Language: The Vehicle of Thought

Language plays a crucial role in thinking. It is perhaps the most uniquely human achievement. It allows individuals to represent ideas, communicate with others, and organize thoughts. One important question in psychology is whether language determines thought or simply influences it. Psychologists often debate the relationship between language and thought. The *linguistic relativity hypothesis* (the Sapir-Whorf hypothesis) suggests that the language we speak affects or *shapes* how we think and perceive the world. For example, people who speak languages with many words for specific concepts (such as colours or emotions) may perceive these distinctions more clearly. For instance, if a culture has many words for "love," the people in that culture may perceive nuances of affection that others do not. However, research generally suggests that language influences thought rather than completely determining it.

Language development begins with *phonemes* (the smallest sound units) and *morphemes* (the smallest units that carry meaning). As we grow, we learn *syntax* (the rules for combining words into sentences). Beyond the mechanics, language serves a humanistic purpose: it allows for *intersubjectivity*, the sharing of internal states between two people. Through language, we move from being isolated individuals to being part of a shared human narrative.

3. Intelligence: Defining Human Potential

Another central concept in this lecture is intelligence. Intelligence is one of the most debated topics in psychology. Traditionally, it was defined by the Intelligence Quotient (IQ), focusing on mathematical and verbal reasoning. One of the earliest theories of intelligence was proposed by Charles Spearman, who suggested the existence of a general intelligence factor, known as **g**, that underlies all cognitive abilities. However, modern humanistic views prefer broader definitions. Howard Gardner's Theory of Multiple Intelligences suggests that we are not just "smart" or "not smart," but that we have different types of brilliance, such as linguistic, logical-mathematical, spatial, musical, kinesthetic (movement), intrapersonal, or interpersonal (social) intelligence.

Another influential theory was developed by Robert Sternberg, who proposed the triarchic theory of intelligence, which includes analytical intelligence (problem solving), creative intelligence (dealing with new situations), and practical intelligence (adapting to everyday life). In this sense, intelligence refers to the ability to learn from experience, solve problems, and adapt to new situations. To conclude, Intelligence is not a single, simple ability but a complex set of cognitive skills.

Furthermore, Emotional Intelligence (EQ)—the ability to perceive, understand, and manage emotions—is often more predictive of success and happiness than traditional IQ. Intelligence is not just about the "capacity to learn"; it is the ability to adapt to one's environment and use one's unique strengths to solve life's problems. In this light, intelligence is seen as a fluid, growing potential rather than a fixed number assigned at birth.

Psychologists have also developed various intelligence tests to measure cognitive abilities. These tests aim to assess skills such as reasoning, memory, and problem solving. However, intelligence testing has raised important debates, including concerns about cultural bias and the extent to which intelligence can be accurately measured.

A real-life example of thinking and intelligence can be seen when a person is faced with a complex decision, such as choosing a career path. The individual must evaluate options, consider consequences, use prior knowledge, and possibly rely on both logical reasoning and intuition. At the same time, language helps organize thoughts and communicate decisions, while intelligence supports the ability to analyse and adapt.

This lecture highlights that thinking, language, and intelligence are deeply interconnected processes that shape how individuals understand and interact with the world.

Thinking, language, and intelligence do not exist in isolation. Our thoughts are framed by our language, and our intelligence is the application of those thoughts to the real world. Together, they form the "Human Spirit"—the ability to look at a problem, name it, and find a creative solution. As students of psychology, we must remember that every person's cognitive world is a unique landscape, shaped by their culture, their education, and their personal choices.

Assignment 1 /group work

Exploring Thinking and Intelligence

Answer one of the following questions:

1. Define thinking and explain its main functions.
2. Explain the difference between algorithms and heuristics, with examples.
3. Describe one cognitive bias and explain how it affects decision-making.
4. Discuss the relationship between language and thought.
5. Compare two theories of intelligence.
6. Provide a real-life example of problem solving and explain the thinking process involved.

Assignment 2

Analysing Thinking in Real Life

Choose a real-life situation where you had to make a decision (e.g., academic, personal, or social). Then:

- Describe the situation
- Explain the thinking process you used
- Identify whether you used heuristics or systematic reasoning
- Discuss any biases or influences on your decision
- Reflect on whether your decision was effective or could be improved

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Lecture Seventeen: Personality

Objectives:

- Define personality from a psychological perspective
- Explain the concept of individual differences
- Identify and describe major theories of personality
- Discuss trait theories, including the Big Five model
- Analyse factors influencing personality development (biological, environmental, and cultural)
- Explain the role of personality in learning and behaviour
- Apply personality concepts to educational and real-life contexts

1. Personality: Definition and Core Features

Personality is commonly defined as a set of enduring characteristics that influence how individuals perceive, think, feel, and behave across different situations. These characteristics are relatively stable over time, although they may evolve through experience and development. Personality is not a single trait but rather a complex organization of multiple traits and processes that interact dynamically. It includes observable behaviours, internal thoughts, emotional responses, and unconscious processes.

One of the key features of personality is its consistency. Individuals tend to behave in similar ways across different situations, which allows others to form expectations about their behaviour. For example, a person who is generally outgoing and sociable is likely to display similar tendencies in various social contexts. At the same time, personality also allows for flexibility, as individuals may adapt their behaviour depending on circumstances. This balance between stability and adaptability makes personality a rich and complex area of study.

2. Individual Differences

Individual differences refer to the ways in which people vary from one another. These differences can be observed in personality traits, intelligence, abilities, attitudes, and emotional responses. In psychological research, the study of individual differences aims to identify patterns of variation and understand their causes. These variations arise from a combination of genetic, environmental, and cultural factors.

In educational contexts, individual differences are particularly important because they influence how students learn, interact, and perform. Some students may be highly motivated and

confident, while others may struggle with anxiety or lack of motivation. Recognizing these differences allows educators to adopt more inclusive and flexible teaching strategies that cater to diverse learner needs. Rather than treating learners as a homogeneous group, understanding individual differences encourages a more personalized approach to education.

3. Theories of Personality

Psychologists have developed several theoretical perspectives to explain personality. Each theory offers a different lens through which personality can be understood, emphasizing various aspects such as unconscious processes, observable behaviour, or cognitive patterns.

The psychodynamic perspective, introduced by Sigmund Freud (1923), emphasizes the role of unconscious processes and early childhood experiences in shaping personality. According to this theory, personality is structured into three components: the id, the ego, and the superego. The id represents instinctual desires, the ego mediates between desires and reality, and the superego reflects moral standards. Freud argued that conflicts among these components influence behaviour and personality development.

In contrast, the humanistic perspective focuses on personal growth, self-awareness, and the inherent potential of individuals. Carl Rogers (1951) emphasized the importance of self-concept and unconditional positive regard in shaping personality. According to Rogers, individuals strive toward self-actualization, which involves realizing their full potential. Similarly, Abraham Maslow (1943) proposed that personality development is driven by the fulfillment of hierarchical needs, culminating in self-actualization.

Behavioral and social-cognitive perspectives offer a different approach by focusing on observable behaviour and environmental influences. Albert Bandura (1986) introduced the concept of reciprocal determinism, which suggests that behaviour, personal factors, and the environment interact continuously. Bandura also emphasized the role of observational learning and self-efficacy in shaping personality.

4. Trait Theories of Personality

Personalities are made up of *traits*, which are lasting qualities that affect how we act in many different situations. Qualities like being shy, friendly, organized, honest, or helpful are important because they explain why people tend to act in predictable ways over time.

The most common way to measure these traits is through personality tests, where people describe their own characteristics. Psychologists have studied hundreds of traits this way, finding many that significantly impact how people act. One of the challenges of the trait approach to personality is the large amount of descriptors available; for instance, there are over 18,000 words in the English language used to describe human characteristics (Allport & Odbert, 1936). Because many of these words overlap in meaning, a primary goal for psychologists is to condense this massive list into a smaller set of essential or "core" personality traits (John, Angleitner, & Ostendorf, 1988).

The foundation of the trait approach was established by influential psychologists such as Gordon Allport, Raymond Cattell, and Hans Eysenck. While their specific theories varied, they shared the fundamental belief that traits represent the stable, core components of human personality. To map out these characteristics, they developed taxonomies of the most critical trait dimensions. Their research methodology typically involved:

- **Self-Report Measures:** Collecting data directly from individuals about their own behaviours and tendencies.
- **Statistical Analysis:** Utilizing techniques to identify "clusters" or "factors" based on how frequently certain traits appeared together in respondents.

Gordon Allport (1937) sought to bring order to the massive vocabulary of personality. He narrowed down approximately 18,000 descriptors to 4,500 trait-like terms, which he then organized into a three-tiered hierarchy based on their influence:

- **Cardinal Traits** (dominant traits): The most dominant characteristics that shape a person's entire life.
- **Central Traits** (general characteristics): The core characteristics that form the basic foundations of personality.
- **Secondary Traits (context-specific tendencies):** Less consistent attributes that only appear in specific situations.

Raymond Cattell (1990) took a more mathematical approach by utilizing *factor analysis* to examine correlations between different behaviours. Through this statistical lens, he distinguished between:

- **Source Traits:** The deep, underlying variables that determine surface manifestations.

- **Surface Traits:** The visible behaviours that are easily observed by others.

By analysing personality adjectives from everyday language, Cattell identified 16 primary trait dimensions, leading to the development of a standardized assessment tool to measure these specific factors.

Hans Eysenck (1998) focused on the genetic and biological origins of personality. He made significant contributions to our understanding of the *extraversion-introversion* dimension. Eysenck proposed that these differences are rooted in the body's natural state of arousal:

- **Extroverts:** Possess lower levels of naturally occurring arousal. They seek out social interaction and stimulation to "up-regulate" their internal state to a more comfortable level.
- **Introverts:** Possess naturally high levels of internal arousal. Because they are already easily stimulated, they tend to avoid intense social activities to prevent becoming overwhelmed or "over-stimulated."

Trait theories represent one of the most influential approaches to understanding personality. Building on these work, later researchers developed more structured models of personality. One of the most widely accepted models is the Big Five personality traits, developed through the work of researchers such as Paul Costa (1992) and Robert McCrae (1992). This model identifies five broad dimensions of personality: openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism. These traits provide a comprehensive framework for describing personality and have been supported by extensive research across different cultures.

The Big Five model, also known as the OCEAN model, suggests that individuals vary along each of these dimensions rather than fitting into fixed categories. For example, a person may score high on extraversion and low on neuroticism, indicating a sociable and emotionally stable personality. This dimensional approach allows for a more nuanced understanding of personality and highlights the diversity of human behaviour.

Table 1: The Big Five Personality Traits (OCEAN Model)

Trait	Description	High Score Characteristics	Low Score Characteristics
Openness to Experience	Reflects the degree of intellectual curiosity, creativity, and preference for novelty	Imaginative, curious, open-minded, creative, willing to try new experiences	Conventional, practical, resistant to change, prefers routine
Conscientiousness	Refers to self-discipline, organization, and goal-directed behaviour	Organized, reliable, responsible, hardworking, disciplined	Disorganized, careless, impulsive, less reliable
Extraversion	Describes the tendency to seek social interaction and external stimulation	Sociable, energetic, talkative, assertive, outgoing	Reserved, quiet, introverted, prefers solitude
Agreeableness	Reflects interpersonal orientation and concern for others	Kind, cooperative, empathetic, trusting, helpful	Competitive, critical, less cooperative, sometimes antagonistic
Neuroticism	Indicates emotional stability and tendency to experience negative emotions	Anxious, moody, emotionally reactive, prone to stress	Calm, emotionally stable, resilient, less reactive

5. Factors Influencing Personality Development

Personality development is influenced by a combination of biological, environmental, and cultural factors. Biological influences include genetic predispositions and neurological processes that shape temperament and behaviours. Research suggests that certain personality traits, such as extraversion and emotional stability, have a genetic component, indicating that personality is partly inherited.

Environmental factors also play a crucial role in shaping personality. Family, education, social interactions, and life experiences contribute to the development of personality traits over time. For example, supportive and nurturing environments may foster confidence and emotional stability, while stressful or negative experiences may contribute to anxiety or insecurity.

Cultural factors further influence personality by shaping values, norms, and expectations. Different cultures emphasize different traits, such as independence or collectivism, which in turn affect how individuals perceive themselves and interact with others. Understanding the role of culture is essential for appreciating the diversity of personality across different societies.

- Personality and Learning

Personality has significant implications for learning and academic performance. Different personality traits influence how students approach learning tasks, interact with peers, and respond to challenges. For example, students who are high in conscientiousness tend to be organized, disciplined, and persistent, which contributes to academic success. In contrast, students who are high in neuroticism may experience anxiety and stress, which can negatively affect their performance.

Extraverted students may thrive in interactive and collaborative learning environments, while introverted students may prefer independent and reflective tasks. Recognizing these differences allows educators to design teaching strategies that accommodate diverse learning styles and promote engagement. By understanding the role of personality in learning, teachers can create more inclusive classrooms that support all students.

6. Applications in Education and Everyday Life

Understanding personality and individual differences has practical implications beyond the classroom. In education, it helps teachers adapt their teaching methods to meet the needs of diverse learners. In professional settings, it can inform teamwork, leadership, and communication. In everyday life, awareness of personality differences can improve interpersonal relationships and self-understanding.

For example, recognizing that individuals differ in their emotional responses and communication styles can help reduce misunderstandings and conflicts. It also encourages

empathy and respect for diversity. By applying psychological knowledge of personality, individuals can develop better self-awareness and improve their interactions with others.

To conclude this lecture, we may say that personality and individual differences are central to understanding human behaviour. While personality provides a framework for understanding consistent patterns of thought and behaviour, individual differences highlight the diversity that exists among people. Together, they offer valuable insights into how individuals learn, interact, and develop over time. In educational contexts, recognizing and respecting these differences is essential for creating inclusive and effective learning environments. By integrating psychological knowledge into practice, educators and learners can better understand themselves and others, ultimately enhancing both personal and academic development.

Assignment Understanding Personality through the Big Five Model

In this assignment, students will engage in a structured exploration of personality using the Big Five model. They will begin by reflecting on their own personality traits, then extend their analysis to others, and finally connect their findings to learning and behaviour in educational settings.

Part 1: Self-Assessment (Individual Work)

Students are required to assess their own personality using the Big Five dimensions: openness, conscientiousness, extraversion, agreeableness, and neuroticism. They may use an online questionnaire or conduct a self-reflection based on trait descriptions. In a short paragraph for each trait, students should describe where they believe they fall on the continuum and provide concrete examples from their daily life or academic experience to justify their evaluation.

Part 2: Peer Analysis (Pair or Group Work)

Students will work with a partner or in a small group. Each student will observe and discuss personality traits within the group, focusing on similarities and differences. They should identify at least two traits where members differ significantly and explain how these differences are expressed in behaviour, communication, or group interaction. This part should be written in paragraph form and supported with examples.

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Lecture Eighteen : Emotions and Motivations

Objectives

- Define motivation and emotion from a psychological perspective
- Distinguish between intrinsic and extrinsic motivation
- Explain major theories of motivation (biological, behavioural, cognitive, and humanistic)
- Describe the components and functions of emotions
- Understand and compare major theories of emotion
- Analyse the relationship between motivation and emotion
- Apply motivational and emotional concepts to real-life and educational contexts

1. The Psychological Forces behind Behaviour

Human behaviour is neither random nor accidental; rather, it is guided by internal processes that energize, direct, and sustain action. Among the most important of these processes are motivation and emotion. Motivation refers to the forces that initiate and guide behaviour toward specific goals, while emotion refers to the subjective experiences and physiological responses that accompany these behaviours. These two processes are deeply interconnected, as motivation often determines why individuals act, and emotion shapes how they experience and interpret those actions. In everyday life, individuals constantly make decisions, pursue goals, and react to situations, all of which are influenced by their motivational states and emotional experiences. Understanding these processes is essential not only in psychology but also in education, where they significantly influence learning, engagement, and performance.

2. Motivation

Motivation can be understood as the process that activates, directs, and sustains goal-oriented behaviour over time. It involves the initiation of behaviour, the persistence to continue despite challenges, and the intensity or effort invested in achieving a goal. For instance, a student who decides to study for an exam, continues studying despite difficulties, and invests significant effort demonstrates all three aspects of motivation. Psychologists typically distinguish between two major types of motivation: intrinsic and extrinsic motivation. Intrinsic motivation occurs when individuals engage in activities for their own sake, driven by interest, curiosity, or personal satisfaction. For example, a student who reads additional materials because they

genuinely enjoy learning is intrinsically motivated. In contrast, extrinsic motivation occurs when behaviour is driven by external rewards or pressures, such as studying to obtain high grades or to avoid failure.

Several theoretical perspectives have been proposed to explain the mechanisms underlying motivation. Early biological approaches emphasized innate tendencies and physiological needs. For example, William James argued that behaviour is guided by instincts, which are inborn patterns of action. Similarly, Clark Hull developed the drive-reduction theory, suggesting that individuals are motivated to reduce internal states of tension caused by unmet biological needs. According to this view, behaviours such as eating and drinking are driven by the need to maintain physiological balance, also known as homeostasis.

Behavioural perspectives shifted the focus from internal states to external influences, emphasizing the role of reinforcement and incentives in shaping behaviour. According to the incentive theory, individuals are motivated by the prospect of rewards or the avoidance of punishment. This perspective highlights how environmental factors, such as praise, grades, or financial rewards, can significantly influence behaviour. In educational settings, for example, students may be motivated to study harder when they expect positive reinforcement, such as recognition or high marks.

Cognitive theories introduced a more complex understanding of motivation by emphasizing the role of mental processes, beliefs, and expectations. These theories suggest that individuals actively evaluate their goals and their likelihood of success before deciding to act. Goal-setting theory, developed by Edwin Locke, proposes that specific and challenging goals enhance motivation by focusing attention and increasing effort. Similarly, expectancy-value theories suggest that motivation depends on the perceived likelihood of achieving a goal and the value placed on that goal. If individuals believe they can succeed and consider the outcome important, they are more likely to be motivated.

Humanistic approaches provide a broader and more holistic perspective on motivation by focusing on personal growth and self-fulfilment. One of the most influential theories in this tradition is the hierarchy of needs proposed by Abraham Maslow. According to Maslow, human needs are organised in a hierarchy, starting with basic physiological needs such as food and shelter, followed by safety, love and belonging, esteem, and finally self-actualization. Individuals are motivated to satisfy lower-level needs before progressing to higher-level needs.

Another important contribution comes from self-determination theory, developed by Edward Deci and Richard Ryan, which emphasizes the importance of autonomy, competence, and relatedness as fundamental psychological needs that support intrinsic motivation and well-being.

3. Emotion

Emotion is a complex psychological state that involves a combination of physiological arousal, expressive behaviour, and conscious experience. It reflects how individuals respond to and interpret events in their environment. Emotions such as happiness, fear, anger, and sadness are universal experiences that play a central role in human life. They influence attention, memory, decision-making, and social interaction, making them essential for both individual survival and social functioning.

The experience of emotion can be understood through its three main components. The physiological component refers to bodily changes, such as increased heart rate, sweating, and hormonal activity, which are regulated by the autonomic nervous system. These changes prepare the body to respond to different situations, such as danger or excitement. The behavioural component involves observable expressions, including facial expressions, body language, and tone of voice, which communicate emotional states to others. The cognitive component refers to the subjective interpretation of the situation, which determines how the emotion is experienced and labelled. For example, the same physiological arousal may be interpreted as excitement in one context and fear in another.

Emotions serve several important functions. From an evolutionary perspective, they have adaptive value, as they help individuals respond quickly to threats and opportunities. Fear, for instance, prepares the body for action in dangerous situations, while happiness reinforces behaviours that promote well-being. Emotions also have a motivational function, as they energize and direct behaviour, and a social function, as they facilitate communication and strengthen interpersonal relationships.

4. Theories of Emotion

Psychologists have proposed several theories to explain how emotions are generated and experienced. The James-Lange theory, developed by William James and Carl Lange, suggests that emotions arise from physiological reactions to stimuli. According to this theory, individuals

experience emotion because they become aware of their bodily changes. In contrast, the Cannon-Bard theory, proposed by Walter Cannon and Philip Bard, argues that physiological arousal and emotional experience occur simultaneously but independently.

A more comprehensive explanation is provided by the Schachter-Singer two-factor theory, developed by Stanley Schachter and Jerome Singer. This theory proposes that emotion is the result of both physiological arousal and cognitive interpretation. According to this view, individuals first experience arousal and then use contextual cues to interpret and label that arousal as a specific emotion. Similarly, cognitive appraisal theory, introduced by Richard Lazarus, emphasizes that emotions depend on how individuals evaluate and interpret events, highlighting the central role of perception and meaning in emotional experience.

- Relationship between Motivation and Emotion

Motivation and emotion are closely interconnected and influence each other in significant ways. Emotions can enhance or hinder motivation depending on their nature and intensity. Positive emotions such as interest, curiosity, and enjoyment tend to increase engagement and persistence, while negative emotions such as anxiety or fear may either motivate action or lead to avoidance. At the same time, motivation can shape emotional experiences, as achieving goals often leads to feelings of satisfaction and pride, whereas failure may result in frustration or disappointment. This dynamic relationship is particularly important in educational contexts, where students' emotional experiences can influence their motivation to learn and their overall academic performance.

- Applications in Education

The study of motivation and emotion has important implications for teaching and learning. Educators can enhance student motivation by setting clear and meaningful goals, providing constructive feedback, and creating a supportive learning environment that encourages autonomy and competence. Promoting intrinsic motivation is especially important, as it leads to deeper engagement and long-term learning. At the same time, addressing students' emotional needs is essential for effective learning. By fostering emotional awareness, teaching self-regulation strategies, and creating a positive classroom climate, educators can help students manage stress and develop resilience, ultimately improving both their academic performance and well-being.

As a conclusion, motivation and emotion are fundamental to understanding human behavior, as they explain why individuals act and how they experience their actions. While motivation provides the energy and direction for behaviour, emotion gives it meaning and depth. Together, they shape how individuals learn, interact, and achieve their goals. In educational contexts, recognizing the importance of both processes allows educators to create more effective and supportive learning environments that foster not only academic success but also emotional well-being.

Assignment

Students will work in pairs or small groups to observe and discuss motivational and emotional differences among individuals. Each group should identify at least two contrasting profiles (for example, a highly motivated student versus a less motivated one, or a student who manages emotions well versus one who struggles). They should describe these differences in paragraph form and explain them using relevant theories of motivation and emotion. Examples from real academic settings should be included to support their analysis.

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Lecture Nineteen: Psychological Disorders and Mental Health

Objectives:

- Define psychological disorders and distinguish between normal and abnormal behaviour
- Identify major categories of psychological disorders
- Explain the bio-psychosocial causes of mental disorders
- Describe basic approaches to treatment
- Develop awareness of mental health and well-being in student life

1. Understanding Mental Health and Psychological Disorders

Mental health is a fundamental dimension of human functioning, encompassing emotional, psychological, and social well-being. It influences how individuals think, feel, and behave in daily life. According to the World Health Organization, mental health is not merely the absence of illness, but a state in which individuals can cope with stress, work productively, and contribute to their communities. However, when patterns of thought, emotion, or behaviour become maladaptive and interfere significantly with daily functioning, psychologists may refer to them as psychological disorders.

Defining what constitutes a psychological disorder is complex. Early approaches often relied on rigid distinctions between “normal” and “abnormal,” but contemporary psychology recognizes that such distinctions exist on a continuum. Rosenhan and Seligman (1989) proposed several criteria for identifying abnormality, including distress, dysfunction, irrationality, unpredictability, and violation of moral or social standards. For example, feeling anxious before an exam is normal; however, experiencing constant, overwhelming anxiety that prevents a student from attending classes may be considered maladaptive.

Importantly, cultural context plays a crucial role in defining abnormal behaviour. Behaviours considered unusual in one culture may be acceptable in another. This highlights the importance of adopting a culturally sensitive perspective when studying mental health.

2. Classification of Psychological Disorders

To ensure consistency in diagnosis and research, psychologists and psychiatrists use standardized classification systems such as the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), developed by the American Psychiatric Association. This manual provides detailed descriptions, symptoms, and diagnostic criteria for a wide range of psychological disorders.

The DSM-5 represents an attempt to bring scientific rigor to the classification of mental disorders. However, it has also been subject to criticism. Scholars such as Horwitz (2002) argue that it may contribute to the medicalization of everyday problems, while others point to cultural bias in diagnostic criteria. For instance, expressions of depression may differ across cultures, yet the DSM framework is largely based on Western conceptualizations of mental health.

Despite these limitations, the DSM remains an essential tool in both clinical practice and research, allowing professionals to communicate effectively and design appropriate interventions.

3. Major Categories of Psychological Disorders

3.1 Anxiety Disorders

Anxiety disorders are among the most common psychological disorders and are characterized by excessive fear, worry, and physiological arousal. According to Barlow (2002), anxiety becomes pathological when it is persistent, disproportionate to the situation, and interferes with daily functioning.

For example, a student may feel nervous before giving a presentation, which is a normal reaction. However, a student with social anxiety disorder may experience intense fear of being judged, leading them to avoid presentations altogether. This avoidance can negatively impact academic performance and social development.

Common anxiety disorders include generalized anxiety disorder (chronic worry), panic disorder (sudden intense fear), and specific phobias (irrational fear of specific objects or situations).

3.2 Mood Disorders

Mood disorders involve disturbances in emotional states, particularly prolonged periods of sadness or elevated mood. Depression, one of the most prevalent disorders, is characterised by persistent sadness, loss of interest in activities, fatigue, and difficulty concentrating. Beck (1976) emphasized the role of negative cognitive patterns, such as self-critical thoughts and pessimistic beliefs, in the development of depression.

For instance, a student experiencing depression may interpret a poor grade as evidence of personal failure, reinforcing feelings of worthlessness. In contrast, bipolar disorder involves alternating episodes of depression and mania, where individuals may experience extreme energy, impulsivity, and inflated self-esteem.

Mood disorders are particularly relevant in university contexts, where academic pressure, social challenges, and uncertainty about the future can increase vulnerability.

3.3 Personality Disorders

Personality disorders are characterised by enduring patterns of thinking, feeling, and behaving that deviate from cultural expectations and are inflexible across situations. According to the DSM-5, these patterns typically emerge in adolescence or early adulthood and lead to significant impairment.

For example, individuals with borderline personality disorder may experience intense emotional instability, fear of abandonment, and unstable relationships. Similarly, antisocial personality disorder involves disregard for social norms and the rights of others.

These disorders illustrate how personality, which is typically studied as a stable trait (McCrae & Costa, 1997), can, in some cases, become maladaptive and disruptive.

3.4 Schizophrenia Spectrum Disorders

Schizophrenia is one of the most severe psychological disorders, affecting perception, thought processes, and emotional expression. Individuals may experience hallucinations (perceiving things that are not present), delusions (false beliefs), and disorganized thinking.

For example, a person with schizophrenia may believe they are being followed or controlled by external forces, despite a lack of evidence. According to Kraepelin (1919), early descriptions of schizophrenia emphasized its chronic and debilitating nature, although modern treatments have significantly improved outcomes.

These disorders highlight the importance of early diagnosis and comprehensive treatment.

4. Causes of Psychological Disorders: A Biopsychosocial Perspective

Modern psychology adopts an integrative approach to understanding mental disorders through the Biopsychosocial Model proposed by George Engel (1977). This model suggests that psychological disorders arise from the interaction of biological, psychological, and socio-cultural factors.

Biological factors include genetic predisposition and neurochemical imbalances. For instance, research has shown that depression is associated with disruptions in neurotransmitters such as serotonin (Nestler et al., 2002). Psychological factors involve early childhood experiences, trauma, and learned behaviors. Bandura (1977), for example, demonstrated how behaviors and emotional responses can be learned through observation.

Socio-cultural factors include family environment, cultural expectations, and social stressors. A student experiencing financial difficulties or family conflict may be at greater risk of developing anxiety or depression.

This model emphasizes that no single factor can fully explain mental illness, encouraging a holistic understanding of human behavior.

5. Approaches to Treatment

- Psychodynamic Approach

The psychodynamic approach, developed by Sigmund Freud (1923), focuses on unconscious conflicts and early childhood experiences. Freud believed that unresolved internal conflicts could manifest as psychological symptoms. Therapy involves exploring these unconscious processes through techniques such as free association and dream analysis.

- Humanistic Approach

The humanistic perspective, associated with Carl Rogers (1961), emphasizes personal growth, self-awareness, and the importance of a supportive therapeutic relationship. Rogers introduced the concept of unconditional positive regard, where clients are accepted without judgment, facilitating self-exploration and change.

- Behavioural and Cognitive Approaches

Behavioural approaches, influenced by B. F. Skinner (1953), focus on modifying maladaptive behaviours through conditioning techniques. Cognitive approaches, developed by Aaron Beck (1976), target dysfunctional thought patterns.

For example, a student who believes “I will always fail” may be guided to challenge and replace this thought with a more balanced perspective. Cognitive-behavioural therapy (CBT) combines these approaches and is widely supported by research.

- Biological Treatments

Biological treatments include medication, such as antidepressants and antipsychotics, which target brain chemistry. In some cases, these treatments are combined with psychotherapy for more effective outcomes (Kandel, 2001).

6. Mental Health in the University Context

University students face unique psychological challenges, including academic pressure, identity development, and social transitions. According to Arnett (2000), emerging adulthood is a critical period marked by exploration and instability, which can increase vulnerability to mental health issues.

For example, a student preparing for exams may experience stress that, if unmanaged, develops into chronic anxiety or burnout. Additionally, social comparison, fear of failure, and uncertainty about career paths can contribute to emotional distress.

Recognizing these challenges is essential for promoting mental health awareness in higher education.

Promoting mental health involves developing effective coping strategies. Lazarus and Folkman (1984) distinguish between problem-focused coping (addressing the source of stress) and emotion-focused coping (managing emotional responses).

For instance, a student struggling with workload may adopt problem-focused strategies such as time management, while practicing relaxation techniques represents emotion-focused coping. Social support is also a critical protective factor, as highlighted by Cohen and Wills (1985).

Encouraging students to seek help, maintain balance, and develop resilience is key to fostering long-term well-being.

To conclude, psychological disorders are complex phenomena that cannot be understood through a single perspective. This lecture has highlighted the importance of classification systems, major categories of disorders, and the integrative biopsychosocial model. It has also emphasized the role of treatment approaches and the relevance of mental health in students' lives.

Ultimately, studying psychological disorders not only deepens scientific understanding but also promotes empathy, awareness, and responsible attitudes toward mental health in society.

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