CATHOLIC UNIVERSITY OF RWANDA

FACULTY OF EDUCATION

PGDE Programme

MODULE CODE: PGDE6312

MODULE TITLE: KNOWLEDGE OF HUMAN BEING

UNIT 1: GENERAL PSYCHOLOGY

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Learning outcomes

By the end of this unit, students should be able to:

- Define psychology

- Explain what psychologists do

- Describe and critically analyze different psychological schools

- Apply the knowledge and skills acquired in psychology to deal with different human behaviors.

Unit Content

- Definition of psychology

- Goals of psychology

- Typology of psychologist

- Research methods in psychology

- Schools of psychology

WHAT IS PSYCHOLOGY?

The word psychology is derived from two Greek words "Psyche" and "Logos". "psyche", means SOUL and "logos", means the STUDY. Thus originally psychology was defined as the study of the SOUL or SPIRIT. But later on philosophers defined 'psyche' as MIND. For this, psychology is regarded as the study of individual's mind or mental processs. Through time, this later definition of psychology was given up because the mind cannot be observed and measured objectively. The most widely and accepted definition of psychology is: the scientific study of behavior and mental processes of humans. The field is scientific because it uses orderly and systematic methods to study both overt and covert behaviours. Overt behaviours refer to observable behaviours whereas covert behaviours refer to private mental processes that cannot be directly observed or measured and must be inferred from overt behaviours.

What are the primary goals of psychology?

As a scientific study of behavior and mental processes, the primary goals of psychology are:

- To describe behavior: What is the nature of this behavior?

- To understand and explain behaviour: Why does it occur?

- To predict behavior: Can we forecast when and under what circumstances it will occur?

- Control behaviour: What factors influence this behaviour?

Typology of psychologists

Several types of psychologists exist and they include:

- **Cognitive psychologists:** they study the ways humans perceive and understand the world around them

- **Physiological psychologists:** study the role of brain functions in behaviour

- **Developmental psychologists:** study how individuals grow and change throughout their lives.

- **Social psychologists:** they study how people influence and are influenced by others.

- **School psychologists:** They test and evaluate students, analyze learning problems, and counsel teachers and parents.

- **Industrial/organizational psychologists:** They work on a wide variety of issues in work settings

- **Forensic psychologists:** they work on behavioural issues in the legal, judicial and correctional systems.

- **Health psychologists:** they focus on ways to improve health by altering behaviour

- **Sports psychologists:** they study how psychological factors influence performance in sports, physical activity and exercise.

Most psychologists are involved in the areas of clinical and counseling psychology.

- **Clinical psychologists:** they focus on diagnosis and treatment of mental and behavioural disorders.

- **Counseling psychology:** there is some overlap between clinical and counseling psychology but the latter typically involves working with people who have less severe social, emotional and vocational problems.

RESEARCH METHODS IN PSYCHOLOGY

Psychologists employ different research methods depending on the subject matter. Common research methods include: observation, case study, self-report measures and surveys, correlational studies, and experimental studies.

a) Observation

Psychologists frequently observe behaviour and events as they occur in their natural settings. Scientific observation is made in a systematic and objective manner, with careful record keeping. The primary goal of observational methods is to describe behaviour as fully and as accurately as possible. In order to observe behaviour in the real world, psychologists may employ one of the two methods.

1) Naturalistic observation (observation without intervention)

It involves observing behaviour in normal, everyday settings in an unobstrusive manner. The observer acts as passive recorder of events and tries to be as inconspicuous as possible. E.g. observing the activities of children on playground from a distance.

2) Participant observation (observation with intervention)

Psychologists using this method observe people's behaviour while actively participating in the situation they are observing. e.g. joining a cult or sonority to observe the daily activities of its members.

In participant observation, the observer may be:

- **Disguised:** participants are not aware that they are being observed

- **Undisguised:** participants know that they are being studied.

b) Case study

In a case study, the researcher focuses on a single or few cases, providing detailed description of the behavior of interest. Case studies are often used when studying rare individuals, behaviours or occurrences. The major weakness of case studies is that it is difficult to generalize the results of case studies to other individuals.

c) Descriptive/Survey research

A survey is a type of descriptive research in which a large number of people are asked questions on the subject of interest. Surveys usually focus on attitudes, perceptions and behaviours. The results obtained in a survey are taken to be representative of the population from which the sample is drawn. The two most frequently used tools are questionnaires and interview guide.

Questionnaire: a questionnaire is a set of questions to which participants respond and fill out themselves. A good questionnaire is clearly and simply worded to avoid ambiguity and to precisely elicit the desired information. It is relatively short so that it does not overburden subjects and it avoids double questions.

Once you have developed a good questionnaire, you must decide on how you will administer it. There are several options:

- Mailing: the questionnaire is mailed to the subjects to complete it and send it back to you.

- E-mailing: in this case, you send the questionnaire to your subjects through e-mail to complete it and send it back to you.

- Telephone: In this case, you contact your subjects on the phone and ask the questions in your questionnaire.

d) Correlational studies (predicting behavior)

Correlational research attempts to determine the degree to which two or more variables are related. Hence, knowing the value of one variable can help us predict the value of the other. For example, we may want to find out the relationship between income and job satisfaction. To know the nature of this we compute a statistic called '**correlation coefficient**'.

A correlation can be either positive or negative. A positive correlation means that as variable A increases so does variable B vice versa. In our example, a positive correlation would mean that as income increase so does job satisfaction and vice versa.

In a negative correlation, when variable A increases, B decreases. In a zero correlation, there is not relationship between the variables.

Activity

Propose the type of correlation (positive, negative, zero) you would expect for the following sets of variables.

S/N	Variable A	Variable B	+	-	Zero
1	Height	Weight	V		
2	Intelligence	Hair colour			
3	Socio-economic status	Dropout rate in higher school			
4	Wealth	Happiness			
5	Watching TV	Aggression in children			
6	Religiosity	Crime rate			
7	Condom use	HIV prevalence			
8	Appetite	Body weight			

It is very important to note that **correlation does not imply causation**. Take the example of job satisfaction and income. Suppose we find a strong positive relationship between the two after collecting data on incomes and measuring the job satisfaction of all employees in one company. We cannot conclude that high income causes high job satisfaction. Why? First, it is possible that job satisfaction is caused by other variables such a cordial working environment or job security. Second, it is possible that job satisfaction itself may be the cause of the high income.

We therefore need to be cautious when making conclusions in a correlational study and to recognize that correlation is not causation. However, when we find high correlations between variables, we can use the experimental design to find out if these

variables are related in a cause-effect manner. Hence, correlational studies help us to identify variable that we can further explore in an experimental design.

e) Experiment (Explaining the cause of behavior)

An experiment is a careful and controlled study of cause and effect through manipulation of conditions to which participants are exposed. In correlational studies, researcher simply measures pre-existing differences among participants (e.g. weight and aggression) but in an experiment, they **manipulate** variables to see whether these manipulations produce differences in participants' behaviour. Hence, experimental research design is used to establish **cause-effect** relationships. It therefore allows us to say that variable A causes variable B. The variable that is manipulated by the researcher is called the **independent variable** while the observed behavior or effected is the **dependent variable**.

An experiment consists of the three characteristics:

1) Comparison of groups: A true experiment involves two groups of subjects: experimental group and control group.

- *Experimental group:* it is the group that receives a treatment of some sort.

- *Control group:* it is the group that does not receive treatment.

2) Randomization i.e. random selection and assignment of participants to conditions: participants are randomly selected and assigned to either the experimental group (which receives the treatment) or the control group (which does not).

N.B. Random assignment means that each participant has an equal chance of being selected for either group.

3) Manipulation of independent variable: the variable that is manipulated is called the independent variable (I.V.) and the variable that the researcher measures to see if the manipulation had an effect is referred to as dependent variable (D.V.). e.g. the researcher wants to determine if drug X is effective in treating anxiety.

I.V.: the presence versus absence of the drug

D.V.: level of anxiety

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The researcher randomly assign half of the participants to the experimental group, which receives drug X, and the other half to the control group, which does not receive the drug. After an appropriate length of time, researcher the measures the level of anxiety of participants in booth groups to see if the drug caused a difference.

N.B. The researcher must ensure that the experimental and control groups are treated equally in all respects, except for the manipulation of I.V. if not, there will be no way of telling if changes in the D.V. were caused by changes in the I.V. or some other variables. e.g. if persons who received drug X also received regular psycho-therapy sessions, changes in their anxiety levels might be due to these sessions not to the drug.

ETHICAL CONSIDERATIONS IN PSYCHOLOGICAL RESEARCH

Psychological research focuses on human behavior. As we have seen, it entails observing humans in naturalistic as well as controlled settings. It is important that psychological research is conducted in a manner that is ethical and respects the dignity and rights of subjects. The following will serve as guidelines to this end:

1. Ensure that you safeguard the health, safety, and welfare of participants
2. Obtain informed consent. Inform all participants about the study in simple language before seeking their consent to participate. Allow those who wish to pull out to do so without any consequences.
3. Maintain confidentiality and seek consent before divulging any information.
4. Debriefing: at the end of the study inform the subjects about the general purpose of the study including any deception that you may have used, explaining why it was necessary to do so. This should clear any anxieties that subjects may have about the study.

HISTORY OF PSYCHOLOGY

The history of psychology can be traced in the ancient schools of thought. These schools have helped to shape the field of psychology into what it is today. The following are the seven most important schools that gave birth to psychology.

1. Structuralism

Structuralism was the first school of psychology and focused on breaking down mental processes into the most basic components. Researchers tried to understand the basic elements of consciousness using a method known as introspection. Wilhelm Wundt, founder of the first psychology lab, is often associated with this school of thought despite the fact that it was his student Edward B. Titchener who first coined the term to describe this school of thought. The major structuralist thinkers are Wilhelm Wundt and Edward B. Titchener. As his experimental technique, the term introspection can be used to describe both an informal reflection process and a more formalized experimental approach. The first meaning is the one that most people are probably the most familiar with, which involves informally examining our own internal thoughts and feelings. When we reflect on our thoughts, emotions, and memories and examine what they mean, we are engaging in introspection. The term introspection is also used to describe a research technique that was first developed by psychologist Wilhelm Wundt. Also known as experimental self-observation, Wundt's technique involved training people to carefully and objectively as possible analyze the content of their own thoughts. Introspection literally means 'looking within', to try to describe a person's memory, perceptions, cognitive processes, and/or motivations.

While breaking down mental process, Titchener concluded from his research that there were three types of mental elements constituting conscious experience: Sensations (elements of perceptions), Images (elements of ideas), and affections (elements of emotions).These elements could be broken down into their respective properties, which he determined were quality, intensity, duration, clearness, and extensity. Both sensations and images contained all of these qualities; however, affections were lacking in both clearness and extensity. And images and affections could be broken down further into just clusters of sensations. Therefore by following this train of

thinking all thoughts were images, which being constructed from elementary sensations meant that all complex reasoning and thought could eventually be broken down into just the sensations which he could get at through introspection.

Criticisms of Structuralism

- By today's scientific standards, the experimental methods used to study the structures of the mind were too subjective—the use of introspection led to a lack of reliability in results.
- Other critics argue that structuralism was too concerned with internal behavior, which is not directly observable and cannot be accurately measured.

Strengths of Structuralism

- Structuralism is important because it is the first major school of thought in psychology.
- Structuralism also influenced experimental psychology.

2. Functionalism

Functionalism formed as a reaction to the structuralism and was heavily influenced by the work of William James and the evolutionary theory of Charles Darwin. Functionalists sought to explain the mental processes in a more systematic and accurate manner. Rather than focusing on the elements of consciousness, functionalists focused on the *purpose* of consciousness and behavior. Functionalism also emphasized individual differences, which had a profound impact on education. Major functionalist thinkers include: William James, John Dewey, Harvey Carr, and John Angell.

Criticisms of Functionalism

- "It is literature. It is beautiful, but it is not psychology," said Wilhelm Wundt of functionalist William James' *The Principles of Psychology*.

Strengths of Functionalism

- Influenced behaviorism and applied psychology.

- Influenced the educational system, especially with regards to John Dewey's belief that children should learn at the level for which they are developmentally prepared.

3. Psychoanalysis

Psychoanalysis was founded by Sigmund Freud (1856-1939). Freud highlights the role of unconscious and other internal processes in human behaviours and mental disorders. He believed that people could be cured by making conscious their unconscious thoughts and motivations. This implies that psychoanalysis is based on the observation that individuals are often unaware of the factors that determine their emotions and behavior. Because these factors are unconscious, the advice of friends and family, the reading of self-help books, or even the most determined efforts will often fail to provide enough relief. Psychoanalytic treatment explores how these unconscious factors affect current relationships and patterns of thought, emotion and behavior.

In fact, the main assumptions of psychoanalysis include: seeing psychological problems as rooted in the unconscious mind, manifest symptoms are caused by latent (hidden) disturbances, mental disorder is caused by the unresolved issues during development or repressed trauma, and that it is only having a **cathartic** (i.e. healing) experience that a person can be helped and "cured".

Although psychoanalysis began as a tool for ameliorating emotional suffering, it is not only a therapy. It is, in addition, a method for learning about the mind, and also a theory, a way of understanding the processes of normal everyday mental functioning and the stages of normal development from infancy to old age. Furthermore, since psychoanalysis seeks to explain how the human mind works, it contributes insight into whatever the human mind produces.

Psychoanalysis is assumed to effectively work:
Anxiety disorders: such as phobias, panic attacks, obsessive-compulsive disorders and post-traumatic stress disorder. The aim is to assist the client to recognize the origin of their current anxiety in childhood relationships that are being relived in adulthood.
 Depression: may be treated with a psychoanalytic approach to some extent. Psychoanalysts relate depression back to the loss every child experiences when

realizing our separateness from our parents early in childhood. The aim is for clients to become less dependent and to develop a more functional way of understanding and accepting loss/rejection/change in their lives.

Strengths

- It is an effective treatment for many people with moderate to severe difficulties and who have had unsuccessful attempts with briefer therapies

- It helps patients bring traumatic memories and their accompanying effect into consciousness in ways that would allow them to form associative connection with other conscious thoughts and achieve expression.

Weaknesses of psychoanalysis

Therapy is very time-consuming and is unlikely to provide answers quickly.

- People must be prepared to invest a lot of time and money into the therapy; they must be motivated.

- They might discover some painful and unpleasant memories that had been repressed, which causes them more distress.

- This type of therapy does not work for all people and for all types of disorders.

- The nature of Psychoanalysis creates a power imbalance between therapist and client that could raise ethical issues.

4. Behaviourism

Behaviorism (also called the behaviorist approach) was the primary paradigm in psychology between 1920s to 1950s. The measure thinkers of behaviorism include: Ivan Pavlov, B.F. Skinner, Edward Thorndike, John B. Watson, and Clark Hull. Behaviorist approach is based on a number of underlying assumptions regarding methodology and behavioral analysis:

- Psychology should be seen as a science. Theories need to be supported by empirical data obtained through careful and controlled observation and measurement of behavior.

- Behaviorism is primarily concerned with observable behavior, as opposed to internal events like thinking and emotion. Observable (i.e. external) behavior can be objectively and scientifically measured. Internal events, such as thinking should be explained through behavioral terms (or eliminated altogether).

- People have no free will – a person's environment determines their behavior

- When born our mind is 'tabula rasa' (a blank slate).

- There is little difference between the learning that takes place in humans and that in other animals. Therefore research can be carried out on animals as well as humans.

- Behavior is the result of stimulus – response (i.e. all behavior, no matter how complex, can be reduced to a simple stimulus – response association). Watson described the purpose of psychology as: "*To predict, given the stimulus, what reaction will take place; or, given the reaction, state what the situation or stimulus is that has caused the reaction*"

- All behavior is learnt from the environment. We learn new behavior through classical or operant conditioning.

A) Classical Conditioning

It is a movement of psychology that was launched by Watson based on Pavlov's the results of an experiment on conditioning after originally studying digestion in dogs. Based o Pavlov's observations, John Watson proposed that the process of classical conditioning was able to explain all aspects of human psychology. For him, everything from speech to emotional responses were simply patterns of stimulus and response. Watson denied completely the existence of the mind or consciousness. Watson believed that all individual differences in behavior were due to different experiences of learning. He famously said:

"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 the race of his ancestors" (Watson, 1924, p. 104).

Classical conditioning theory involves learning a new behavior via the process of association. In simple terms two stimuli are linked together to produce a new learned response in a person or animal. There are three stages to classical conditioning. In each stage the stimuli and responses are given special scientific terms:

Stage 1: Before Conditioning:
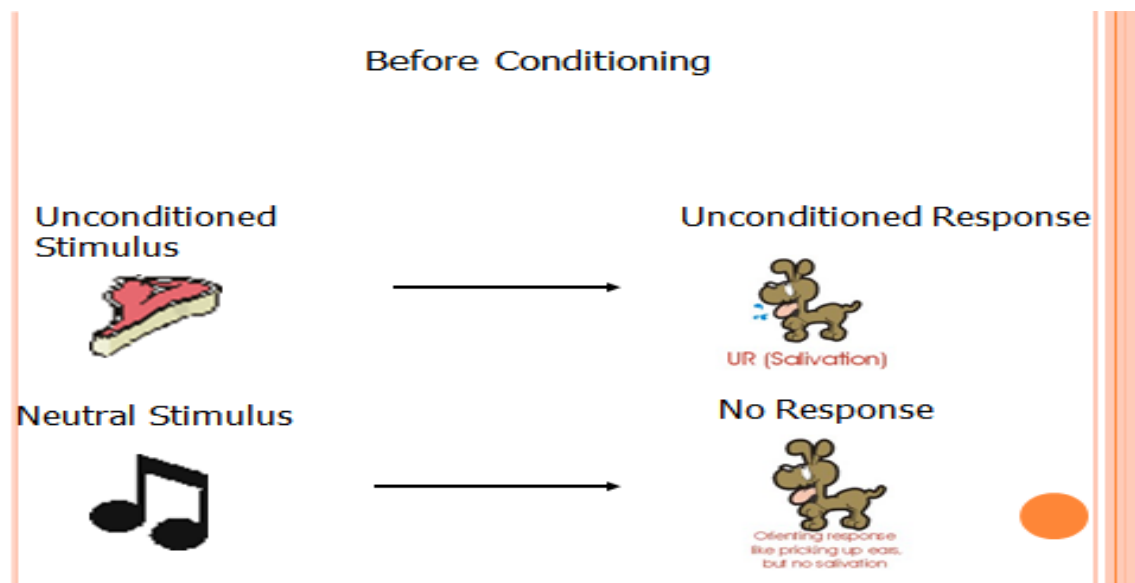
In this stage, the **unconditioned stimulus (UCS)** produces an **unconditioned response (UCR)** in an organism. In basic terms this means that a stimulus in the environment has produced a behavior / response which is unlearned (i.e. unconditioned) and therefore is a natural response which has not been taught. In this respect no new behavior has been learned yet.

For example, a stomach virus (UCS) would produce a response of nausea (UCR). In another example a perfume (UCS) could create a response of happiness or desire (UCR).

This stage also involves another stimulus which has no effect on a person and is called the **neutral stimulus (NS)**. The NS could be a person, object, place etc. The neutral stimulus in classical conditioning does not produce a response until it is paired with the unconditioned stimulus.

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Stage 2: During Conditioning:
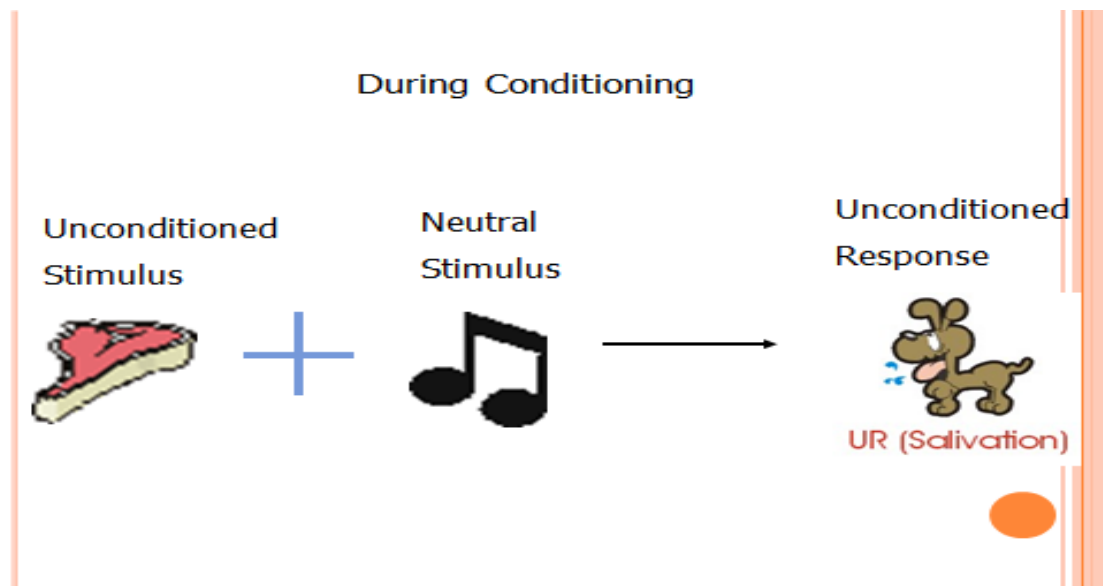
During this stage a stimulus which produces no response (i.e. neutral) is associated with the unconditioned stimulus at which point it now becomes known as the **conditioned stimulus (CS)**.

For example a stomach virus (UCS) might be **associated** with eating a certain food such as chocolate (CS). Also perfume (UCS) might be **associated** with a specific person (CS).

Often during this stage the UCS must be associated with the CS on a number of occasions, or trials, for learning to take place. However, one trail learning can happen on certain occasions when it is not necessary for an association to be strengthened over time (such as being sick after food poisoning or drinking too much alcohol).

Stage 3: After Conditioning:

After Conditioning

Conditioned Stimulus → Conditioned Response

CR (Salivation)
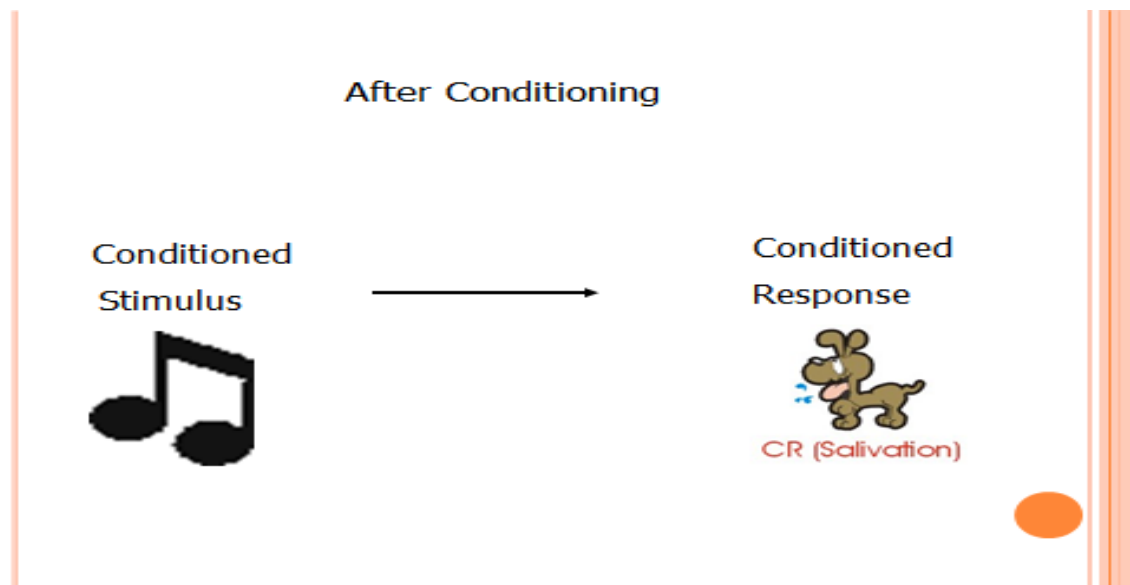
Now the conditioned stimulus (CS) has been associated with the unconditioned stimulus (UCS) to create a new conditioned response (CR).

For example a person (CS) who has been associated with nice perfume (UCS) is now found attractive (CR). Also chocolate (CS) which was eaten before a person was sick with a virus (UCS) is now produces a response of nausea (CR).

Ivan Pavlov showed that classical conditioning applied to animals. Did it also apply to humans? In a famous (though ethically dubious) experiment **Watson and Rayner (1920)** showed that it did.

Little Albert was a 9-month-old infant who was tested on his reactions to various stimuli. He was shown a white rat, a rabbit, a monkey and various masks. Albert described as "on the whole stolid and unemotional" showed no fear of any of these stimuli. However what did startle him and cause him to be afraid was if a hammer was struck against a steel bar behind his head. The sudden loud noise would cause "little Albert to burst into tears.

When "**Little Albert**" was just over 11 months old the white rat was presented and seconds later the hammer was struck against the steel bar. This was done 7 times over the next 7 weeks and each time "little Albert" burst into tears. By now "little Albert only had to see the rat and he immediately showed every sign of fear. He would cry

(whether or not the hammer was hit against the steel bar) and he would attempt to crawl away.

Watson and Rayner had shown that classical conditioning could be used to create a phobia. A phobia is an irrational fear, i.e. a fear that is out of proportion to the danger. Over the next few weeks and months "**Little Albert**" was observed and 10 days after conditioning his fear of the rat was much less marked. This dying out of a learned response is called extinction. However even after a full month it was still evident.

Classical Conditioning in the Classroom

The implications of classical conditioning in the classroom are less important than those of operant conditioning, but there is a still need for teachers to try to make sure that students associate positive emotional experiences with learning.

If a student associates negative emotional experiences with school then this can obviously have bad results, such as creating a school phobia

For example, if a student is bullied at school they may learn to associate school with fear. It could also explain why some students show a particular dislike of certain subjects that continue throughout their academic career. This could happen if a student is humiliated or punished in class by a teacher.

B) Operant conditioning
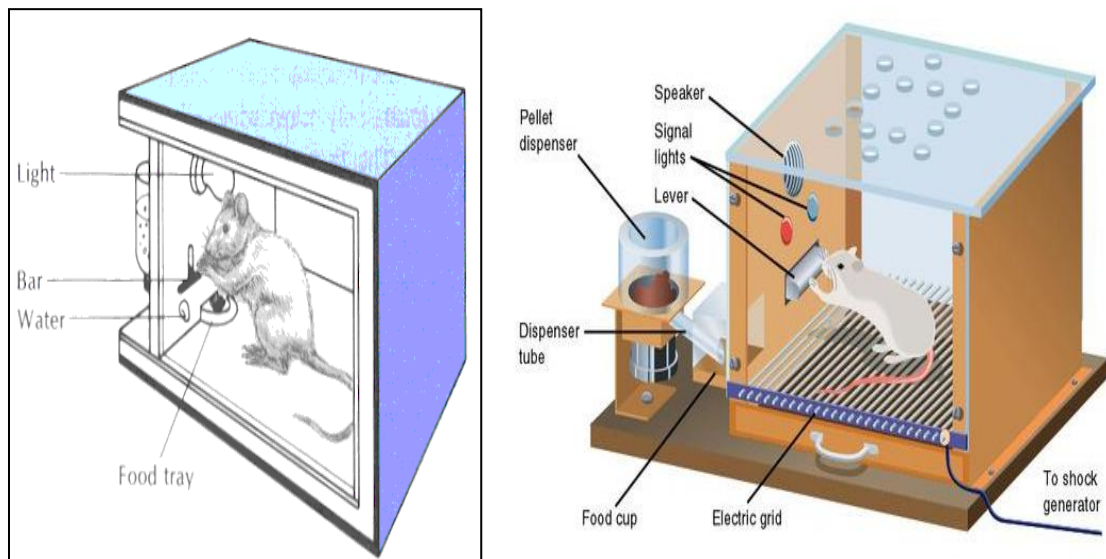
Burrhus Frederic Skinner is regarded as the father of Operant Conditioning, but his work was based on Thorndike's law of effect. He believed that the best way to understand behavior is to look at the causes of an action and its consequences. He called this approach operant conditioning. He introduced the term of Reinforcement in the study of behaviour. According to him Behavior which is reinforced tends to be repeated (i.e. strengthened); behavior which is not reinforced tends to die out-or be extinguished (i.e. weakened). When he coined the term operant conditioning, he wanted to mean roughly changing of behavior by the use of reinforcement which is given after the desired response. Skinner identified three types of responses or operant that can follow behavior:

• **Neutral operants**: responses from the environment that neither increase nor decrease the probability of a behavior being repeated.

• **Reinforcers**: Responses from the environment that increase the probability of a behavior being repeated. Reinforcers can be either positive or negative.

• **Punishers**: Responses from the environment that decrease the likelihood of a behavior being repeated. Punishment weakens behavior.

For example, if when you were younger you tried smoking at school, and the chief consequence was that you got in with the crowd you always wanted to hang out with, you would have been positively reinforced (i.e. rewarded) and would be likely to

repeat the behavior. If, however, the main consequence was that you were caught, caned, suspended from school and your parents became involved you would most certainly have been punished, and you would consequently be much less likely to smoke now.

Positive Reinforcement

Skinner showed how positive reinforcement worked by placing a hungry rat in his Skinner box. The box contained a lever in the side and as the rat moved about the box it would accidentally knock the lever. Immediately it did so a food pellet would drop into a container next to the lever. The rats quickly learned to go straight to the lever after a few times of being put in the box. The consequence of receiving food if they pressed the lever ensured that they would repeat the action again and again.

Positive reinforcement strengthens a behavior by providing a consequence an individual finds rewarding. For example, if your teacher gives you £5 each time you complete your homework (i.e. a reward) you are more likely to repeat this behavior in the future, thus strengthening the behavior of completing your homework.

Negative Reinforcement

The removal of an unpleasant reinforcer can also strengthen behavior. This is known as negative reinforcement because it is the removal of an adverse stimulus which is 'rewarding' to the animal. Negative reinforcement strengthens behavior because it stops or removes an unpleasant experience.

For example, if you do not complete your homework you give your teacher £5. You will complete your homework to avoid paying £5, thus strengthening the behavior of completing your homework.

Skinner showed how negative reinforcement worked by placing a rat in his Skinner box and then subjecting it to an unpleasant electric current which caused it some discomfort. As the rat moved about the box it would accidentally knock the lever. Immediately it did so the electric current would be switched off. The rats quickly learned to go straight to the lever after a few times of being put in the box. The consequence of escaping the electric current ensured that they would repeat the action again and again.

In fact Skinner even taught the rats to avoid the electric current by turning on a light just before the electric current came on. The rats soon learned to press the lever when the light came on because they knew that this would stop the electric current being switched on.

Punishment (weakens behavior)

Punishment is defined as the opposite of reinforcement since it is designed to weaken or eliminate a response rather than increase it.

Like reinforcement, punishment can work either by directly applying an unpleasant stimulus like a shock after a response or by removing a potentially rewarding stimulus, for instance, deducting someone's pocket money to punish undesirable behavior.

Note: It is not always easy to distinguish between punishment and negative reinforcement.

Strengths of Behaviorism

- Behaviorism is based upon observable behaviors, so it is easier to quantify and collect data and information when conducting research.

- Behaviorism provides very useful approach in changing maladaptive or harmful behaviors in both children and adults

Weaknesses of Behaviorism

- Many critics argue that behaviorism is a one-dimensional approach to understanding human behavior and that behavioral theories do not account for free will and internal influences such as moods, thoughts, and feelings.
- Behaviorism does not account for other types of learning, especially learning that occurs without the use of reinforcement and punishment.

5. Gestalt psychology

Gestalt psychology is a school of thought that looks at the human mind and behavior as a whole. Originating in the work of Max Wertheimer, Gestalt psychology formed partially as a response to the structuralism of Wilhelm Wundt. The development of this area of psychology was influenced by a number of thinkers, including Immanuel Kant, Ernst Mach and Johann Wolfgang von Goethe. Gestalt school provided the foundation for the modern study of perception. It emphasizes that the whole of anything is greater than its parts. That is, the attributes of the whole are not deducible from analysis of the parts in isolation. In this way," Max Wertheimer wrote: "There are wholes, the behaviour of which is not determined by that of their individual elements, but where the part-processes are themselves determined by the intrinsic nature of the whole. It is the hope of Gestalt theory to determine the nature of such wholes". The word *Gestalt* is used in modern German to mean the way a thing has been "placed," or "put together." There is no exact equivalent in English. "Form" and "shape" are the usual translations; in psychology the word is often interpreted as "pattern" or "configuration."

The school of gestalt practiced a series of theoretical and methodological principles that attempted to redefine the approach to psychological research.

The theoretical principles are the following:

- **Principle of Totality**—The conscious experience must be considered globally (by taking into account all the physical and mental aspects of the individual simultaneously) because the nature of the mind demands that each component be considered as part of a system of dynamic relationships.
- **Principle of psychophysical isomorphism** – A correlation exists between conscious experience and cerebral activity.

Based on the principles above the following methodological principles are defined:

- **Phenomenon experimental analysis**—In relation to the Totality Principle any psychological research should take phenomena as a starting point and not be solely focused on sensory qualities.

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- **Biotic experiment**—The school of gestalt established a need to conduct *real experiments* that sharply contrasted with and opposed classic laboratory experiments. This signified experimenting in natural situations, developed in real conditions, in which it would be possible to reproduce, with higher fidelity, what would be habitual for a subject.

Gestalt views in psychology

Gestalt psychologists find it is important to think of problems as a whole. Max Wertheimer considered thinking to happen in two ways: productive and reproductive.

Productive thinking is solving a problem with insight.

This is a quick insightful unplanned response to situations and environmental interaction.

Reproductive thinking is solving a problem with previous experiences and what is already known. (1945/1959).

This is a very common thinking. For example, when a person is given several segments of information, he/she **deliberately** examines the relationships among its parts, analyzes their purpose, concept, and totality, he/she reaches the "aha!" moment, using what is already known. Understanding in this case happens **intentionally** by reproductive thinking.

Another gestalt psychologist, Perkins, believes insight deals with three processes:

1. Unconscious leap in thinking.
2. The increased amount of speed in mental processing.
3. The amount of short-circuiting that occurs in normal reasoning.

6. Humanistic psychology

Humanistic psychology, also often referred to as humanism, emerged during the 1950s as a reaction to the psychoanalysis and behaviorism that dominated psychology at the time. Psychoanalysis was focused on understanding the unconscious motivations that drive behavior while behaviorism studied the conditioning processes that produce behavior. Humanist thinkers felt that both psychoanalysis and behaviorism were too pessimistic, either focusing on the most tragic of emotions or failing to take into account the role of personal choice.

Humanistic psychology was instead focused on each individual's potential and stressed the importance of growth and self-actualization. The fundamental belief of humanistic psychology is that people are innately good and that mental and social problems result from deviations from this natural tendency. They suggest that people possess personal agency and that they are motivated to use this free will to pursue things that will help them achieve their full potential as human beings. This need for fulfillment and personal growth is a key motivator of all behavior. People are continually looking for new ways to grow, to become better, to learn new things, and to experience psychological growth and self-actualization.

The humanist movement had an enormous influence on the course of psychology and contributed new ways of thinking about mental health. It offered a new approach to understand human behaviors and motivations and led to the development of new techniques and approaches to psychotherapy. Major Thinkers in Humanistic Psychology include: Abraham Maslow, Carl Rogers, Rollo May, and Erich Fromm. Some of the major ideas and concepts that emerged as a result of the humanist movement include an emphasis on things such as: Self-concept and Hierarchy of needs.

a) Self-concept

According to Pastorino and Doyle-Portillo (2013) "Self-concept is our perception or image of our abilities and our uniqueness. At first one's self-concept is very general and changeable... As we grow older, these self-perceptions become much more organized, detailed, and specific." Weiten, Dunn, and Hammer (2012) emphasise "A

self-concept is a collection of beliefs about one's own nature, unique qualities, and typical behavior. Your self-concept is your mental picture of yourself. It is a collection of self-perceptions. For example, a self-concept might include such beliefs as 'I am easygoing' or 'I am pretty' or 'I am hardworking."

Components of Self-Concept

Self-concept is composed of two key parts: personal identity and social identity. Our personal identity includes such things as personality traits and other characteristics that make each person unique. Social identity includes the groups we belong to including our community, religion, college, and other groups.

Humanist psychologist Carl Rogers believed that there are three different parts of self-concept:

1. **Self-image**, or how you see yourself. It is important to realize that self-image does not necessarily coincide with reality. People might have an inflated self-image and believe that they are better at things than they really are. Conversely, people are also prone to having negative self-images and perceive or exaggerate flaws or weaknesses. For example, a teenage boy might believe that he is clumsy (not elegant) and socially awkward (ill-chosen) when he is really quite charming and likeable. A teenage girl might believe that she is overweight, when she is really quite thin. Each individual's self-image is probably a mix of different aspects including your physical characteristics, personality traits, and social roles.

2. **Self-esteem,** or how much you value yourself. A number of different factors can impact self-esteem, including how we compare ourselves to others and how others respond to us. When people respond positively to our behavior, we are more likely to develop positive self-esteem. When we compare ourselves to others and find ourselves lacking, it can have a negative impact on our self-esteem.

3. **Ideal self,** or how you wish you could be. In many cases, the way we see ourselves and how we would like to see ourselves do not quite match up.

Congruence and Incongruence

As mentioned earlier, our self-concepts are not always perfectly aligned with reality. Some students might believe that they are great at academics, but their school transcripts might tell a different story. According to Carl Rogers, the degree to which a person's self-concept matches up to reality is known as congruence and incongruence. While we all tend to distort reality to a certain degree, congruence occurs when self-concept is fairly well aligned to reality. Incongruence happens when reality does not match up to our self-concept.

Rogers believed that incongruence has its earliest roots in childhood. When parents place conditions on their affection for their children (only expressing love if children "earn it" through certain behaviors and living up to the parents' expectations), children begin to distort the memories of experiences that leave them feeling unworthy of their parents' love.

Unconditional love, on the other hand, helps to foster congruence. Children who experience such love feel no need to continually distort their memories in order to believe that other people will love and accept them as they are.

b) Hierarchy of needs

What motivates behavior? According to humanist psychologist Abraham Maslow, our actions are motivated in order to achieve certain needs. Maslow first introduced his concept of a hierarchy of needs in his 1943 paper "A Theory of Human Motivation" and his subsequent book *Motivation and Personality*. This hierarchy suggests that people are motivated to fulfill basic needs before moving on to other, more advanced needs.

While some of the existing school's of thought at the time (such as psychoanalysis and behaviorism) tended to focus on problematic behaviors, Maslow was much more interested in learning more about what makes people happy and the things that they do to achieve that aim. As a humanist, Maslow believed that people have an inborn desire to be self-actualized, to be all they can be. In order to achieve this ultimate goals,

however, a number of more basic needs must be met first such as the need for food, safety, love, and self-esteem.

From Basic to More Complex Needs

This hierarchy is most often displayed as a pyramid. The lowest levels of the pyramid are made up of the most basic needs, while the more complex needs are located at the top of the pyramid. Needs at the bottom of the pyramid are basic physical requirements including the need for food, water, sleep, and warmth. Once these lower-level needs have been met, people can move on to the next level of needs, which are for safety and security.

As people progress up the pyramid, needs become increasingly psychological and social. Soon, the need for love, friendship, and intimacy become important. Further up the pyramid, the need for personal esteem and feelings of accomplishment take priority. Like Carl Rogers, Maslow emphasized the importance of self-actualization, which is a process of growing and developing as a person in order to achieve individual potential.

Types of Needs

Maslow believed that these needs are similar to instincts and play a major role in motivating behavior. Physiological, security, social, and esteem needs are **deficiency needs** (also known as *D-needs*), meaning that these needs arise due to deprivation. Satisfying these lower-level needs is important in order to avoid unpleasant feelings or consequences. Maslow termed the highest-level of the pyramid as **growth needs** (also known as *being needs* or *B-needs*). Growth needs do not stem from a lack of something, but rather from a desire to grow as a person.

Five Levels of the Hierarchy of Needs

There are five different levels in Maslow's hierarchy of needs:
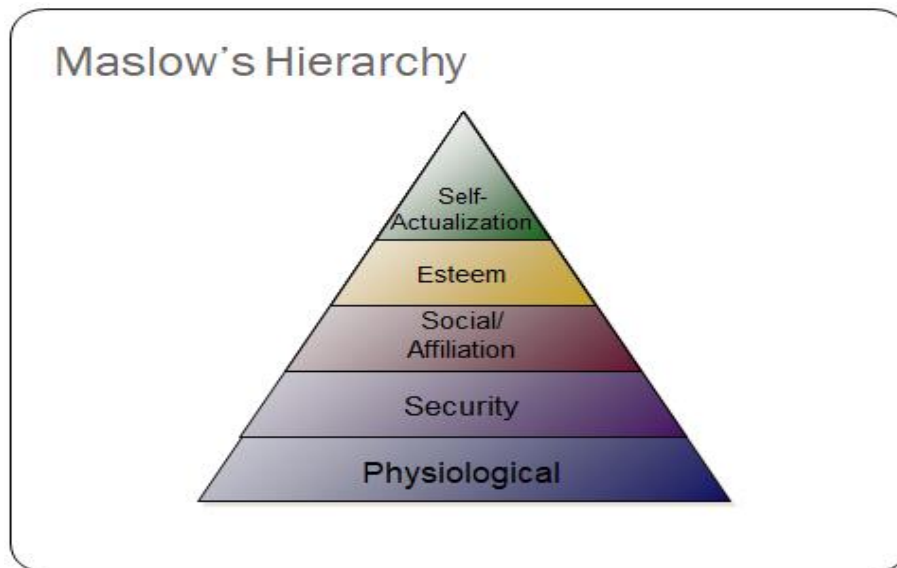
1. **Physiological Needs:** These include the most basic needs that are vital to survival, such as the need for water, air, food, and sleep. Maslow believed that these needs are the most basic and instinctive needs in the hierarchy because all needs become secondary until these physiological needs are met.

2. **Security Needs:** These include needs for safety and security. Security needs are important for survival, but they are not as demanding as the physiological needs. Examples of security needs include a desire for steady employment, health care, safe neighborhoods, and shelter from the environment.

3. **Social Needs:** These include needs for belonging, love, and affection. Maslow described these needs as less basic than physiological and security needs. Relationships such as friendships, romantic attachments, and families help fulfill this need for companionship and acceptance, as does involvement in social, community, or religious groups.

4. **Esteem Needs:** After the first three needs have been satisfied, esteem needs becomes increasingly important. These include the need for things that reflect on self-esteem, personal worth, social recognition, and accomplishment.

5. **Self-actualizing Needs:** This is the highest level of Maslow's hierarchy of needs. Self-actualizing people are self-aware, concerned with personal growth,

less concerned with the opinions of others, and interested fulfilling their potential.

Criticisms of Humanistic Psychology

- Humanistic psychology is often seen as too subjective; the importance of individual experience makes it difficult to objectively study and measure humanistic phenomena. How can we objectively tell if someone is self-actualized? The answer, of course, is that we cannot. We can only rely upon the individual's own assessment of their experience.
- Another major criticism is that observations are unverifiable; there is no accurate way to measure or quantify these qualities.

Strong Points of Humanistic Psychology

- One of the major strengths of humanistic psychology is that it emphasizes the role of the individual. This school of psychology gives people more credit in controlling and determining their state of mental health.
- It also takes environmental influences into account. Rather than focusing solely on our internal thoughts and desires, humanistic psychology also credits the environment's influence on our experiences.
- Humanistic psychology continues to influence therapy, education, healthcare, and other areas.

7. Positive psychology

Positive psychology is one of the newest branches of psychology to emerge. This particular area of psychology focuses on how to help human beings prosper and lead healthy, happy lives. While many other branches of psychology tend to focus on dysfunction and abnormal behavior, positive psychology is centered on helping people become happier.

Martin Seligman and Mihaly Csikszentmihalyi describe positive psychology in the following way: "We believe that a psychology of positive human functioning will arise that achieves a scientific understanding and effective interventions to build thriving in

individuals, families, and communities." Shortly after WWII, the primary focus of psychology shifted to the first priority: treating abnormal behavior and mental illness. During the 1950s, humanist thinkers such as Carl Rogers, Erich Fromm, and Abraham Maslow helped renew interest in the other two areas by developing theories that focused on happiness and the positive aspects of human nature. The most important People in Positive Psychology, include: Martin Seligman, Mihaly Csikszentmihalyi, Christopher Peterson, Carol Dweck, Daniel Gilbert, Kennon Sheldon, and Albert Bandura.

Some of the major topics of interest in positive psychology include:

- Happiness
- Optimism and helplessness
- Mindfulness
- Character strengths and virtues
- Hope
- Positive thinking
- Resilience

Research Findings in Positive Psychology

Some of the major findings of positive psychology include:

- People are generally happy.
- Money doesn't necessarily buy well-being; but spending money on other people can make individuals happier.
- Some of the best ways to combat disappointments and setbacks include strong social relationships and character strengths.
- Work can be important to well-being, especially when people are able to engage in work that is purposeful and meaningful.
- While happiness is influenced by genetics, people can learn to be happier by developing optimism, gratitude, and altruism.

Applications of Positive Psychology

Positive psychology can have a range of real-world applications in areas including education, therapy, self-help, stress management, and workplace issues. Using strategies from positive psychology, teachers, coaches, therapists, and employers can motivate others and help individuals understand and develop their personal strengths. For instance, in education, Positive psychology is beneficial to schools and students because it encourages individuals to strive to do their best; whereas, scolding has the opposite effect. Clifton and Rath discussed research conducted by Dr. Elizabeth Hurlock in 1925, where fourth, fifth and sixth graders were either praised, criticized or ignored, based on their work on math problems. Praised students improved by 71%, those criticized improved by 19%, and students provided with no feedback improved a mere 5%. Praise seems an effective method of fostering improvement.

THE CONCEPT OF EMOTION

Donald Hebb wrote that *man is the most emotional of all animals*
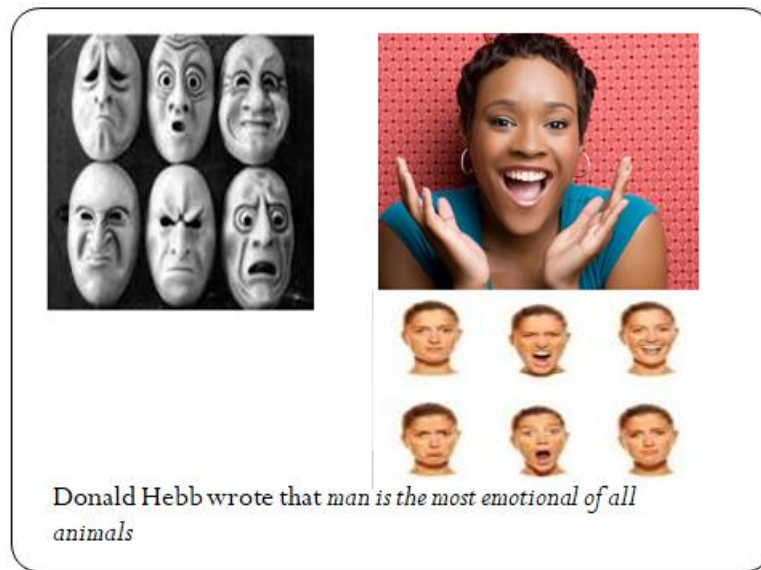
Emotions are what make us seem most human: we laugh, cry, fear and we love. Having feelings is an important part of being human. Do babies have feelings? There is reliable evidence that young infants are emotional creatures. In this section, we will discuss development of emotions; expression of emotions; recognition and interpretation of emotions; emotional attachment; and finally factors influencing expression of emotions.

Development of emotions

Various emotions appear at different times over the first two years of life. At birth, babies show interest, distress, disgust and contentment. From two and half to seven months, emotions such as anger, sadness, joy, surprise and fear emerge. These emotions up to seven months are called primary (or basic emotions). They are present at birth or emerge early in the first year. They are believed to be biologically programmed, for they emerge in all normal infants at roughly the same ages and are displayed and interpreted similarly in all cultures (Camras *et* al 1992; Izard 1982; 1993).

From two years, infants begin to display emotions such as shame, embarrassment guilty; envy; and pride. These emotions are called secondary (or complex) emotions. They are sometimes called self-conscious emotions, because each involves some damage to or

embarrassment of our sense of self. They depend in part on cognitive development (self-recognition) and the ability to evaluate ones performance as good or bad.

However, children are likely to display self-evaluative emotions when someone else is present to observe their behavior. It is usually at elementary school period that children feel socially prideful or shameful about their conduct in the absence of external surveillance.

EXPRESSION OF EMOTIONS

Each society has a set of emotional display rules that specify the circumstances under which various emotions should or should not be expressed. For example, American babies learn that intense emotion is okay as long as it is positive, whereas Rwandan babies learn to restrain both positive and negative emotions. To comply with a culture's emotional display rules, the child needs to acquire the following skills:

a) Emotional self-regulation. This includes strategies for regulating and controlling emotions, or adjusting emotional arousal to a comfortable level of intensity.

b) Acquiring emotional display rules. This involves suppressing the unacceptable emotion one is experiencing and replacing them (outwardly) with whatever feeling that the display rule calls for in that situation. For example, acting happy after receiving a disappointing gift. This is involves emotional deceit.

As early as two years, children have the same emotions as older children and adults. However, what differs is their expression of these emotions. At infancy, inner feelings and outward expressions are clearly matched. In general, two year olds express their emotions in an immediate, impulsive and direct manner. They cannot wait to have their needs satisfied. They cry, throw temper tantrums, hit out until they have their needs satisfied. Pre-school children begin to mask their feelings, but in most cases, they wear their feelings on their face and express them freely.

During the elementary school years, children become more aware of socially sanctioned display rules, that is, what emotions to express and which ones to hide in particular

situations. They are more verbal and thoughtful in their expression of emotions. They take longer to build and express their emotions.

Factors influencing expression of Emotions

1. Interaction with parents, other relatives and peers
2. Informal teaching. For example when boys cry, they are scolded and told that men don't cry but girls are tolerated even encouraged to cry.
3. Reward and punishment
4. Modeling
5. Direct instruction
6. Culture

RECOGNIZING AND INTERPRETING EMOTIONS

At three months, babies can discriminate their mother's happy, sad or angry expressions when the facial configurations are accompanied by a happy, sad or angry tone of voice, but they become gleeful in response to a happy expression and distressed by their mothers anger or sadness.

Eight to ten months, infants' ability to interpret emotional expressions becomes more obvious. They begin to monitor their parent's emotional reactions to uncertain situations and then use this information to regulate their own behavior. This ability is called **social referencing** and increases with age and is soon extended to strangers as well (Feinman, 1 992).

By twelve months, infants will approach and play with unfamiliar toys if a nearby stranger is smiling, but will avoid these objects if the stranger displays a fearful expression.

By two years, children will look to their companions after appraising a new object or situation. This shows they are using others' emotional reactions to assess the accuracy of their own judgments.

Two to three years, children become better at interpreting others' emotions. This is enhanced by the ability to talk about emotions in family conversations.

Four to five years, children can explain why playmates are happy, sad or angry, but they focus more on external events as causes than on internal needs, desires moods or motives.

Six to nine years, children achieve important breakthroughs in emotional understanding. For instance:

- They rely more on internal and external information to interpret emotions
- They recognize that many situations elicit different emotional reactions from different individuals
- A person can experience more than one emotion
- They display some ability to integrate contrasting facial behavioral and situational cues to infer what the emotions might be.

EMOTIONAL ATTACHMENT

Attachment refers to the formation of an enduring social-emotional relationship between an infant and another person. Bowlby (1969) used the term to describe the strong affectional ties that bind a person to an intimate companion. The first attachment is always between the infant and the mother/ caregiver. There are 3 qualities of attachment:

1. **Secure attachment** — Infant explores while alone with the mother and is visibly upset by separation. When the mother returns, infant is happy and welcomes physical contact with her. The child is outgoing with strangers when mother is present.

2. **Insecure attachment** (anxious and resistant) — Child appears anxious and are unlikely to explore while mother is present. They become very distressed when the mother departs. When mother returns they are ambivalent, that is they are unlikely to initiate contact.

3. **Insecure attachment** (anxious and avoidant) — Uninterested in exploring when alone with their mothers. They show little distress when separated from the mother and will avoid contact with her when she returns.

Stages of Attachment (Schaffer and Emerson, 1964)

The asocial stage (0-6 weeks)

The baby is "asocial" in that many kinds of social and unsocial stimuli produce favorable reaction, and few produce any protest.

The stage of indiscriminate attachments (6 weeks - 7 months). They enjoy human contact but they are somewhat indiscriminate. Will protest if any adult puts them down or leaves them alone. They enjoy attention from anyone.

The stage of specific attachment (7 months)

They begin to protest if separated from one particular individual, usually the mother. They begin to fear strangers. This shows they have formed their first genuine attachments.

The stage of multiple attachments

They become attached to other people - father, siblings, grandparents or a regular baby sitter.

Factors promoting attachment

- Parents begin to prepare long before the baby is born, for example planning and excited about the development of the baby.
- Warmth and contact are important.
- Level of intellectual development, particularly the ability to discriminate familiar persons from strangers.
- In born programmed responses that enable them to promote interactions from which attachments are likely to develop. e.g. grasping; smiling and crying.

Factors That May Inhibit Attachment

- Unlovable babies — irritable and unresponsive. For example premature babies are less alert and avoid caregiver's attention; children born to drug addicts are more irritable, withdrawn, and unresponsive.
- Unreachable caretakers — if depressed, pregnancy was unplanned, or following preconceived notions of child— if they are emotionally insecure, For example feelings of being unloved, neglected or abused as children.
- Environmental factors — too many children to look after and no help, unhappy marriage — depression. Unhappily married parents are often stressed to the point that it is difficult for them to respond warmly and sensitively to their infants.

Effects of attachment on later development

- If securely attached the child will be more curious; interested in learning; cooperative; friendlier toward adult more liked by peers; better at problem solving; and more complex and creative in symbolic play during the infancy stage.

- A securely attached infant derives comfort from close companions and can use

them as safe bases for exploration.

- In nursery school, those who were securely attached become social leaders, they often initiate activities; they are more sensitive to the needs and feelings of other children; they are popular with peers and they are described as curious, self—directed; eager to learn; and less dependent on adults.

- Insecurely attached infants do not venture far from their attachment object though they derive very little comfort or security from them. They are usually hostile and aggressive and are likely to be rejected by peers.

- In nursery school, the insecurely attached are socially and emotionally withdrawn; are hesitant to engage other children in play activities; and are described by observers as less curious, less interested in learning and much less forceful in pursuing their goals

IMPORTANCE OF EMOTIONAL DEVELOPMENT

Ability to understand and interpret others' emotions and to express emotions is an important aspect of social cognition. It enhances social development in the following ways:

- Emotional expressions at infancy help infants and their close companions "to get to know each other". For example cries of distress — attention, smile — social, fear and sadness — insecure, anger — stop what you are doing, joy - prolong whatever interaction is going on. So infant emotions promote social contact and help caregivers to adjust their behavior to the infant's needs and goals.
- Ability to interpret others' emotions enables one to enjoy good relations with peers thus becomes better in social competence.
- The information contained in caregivers' emotional displays contributes to the child's understanding of the world in which he lives.

MORAL DEVELOPMENT

Moral values are social values. They deal with individual behavior in relation to fellow human beings. Moral development can be defined as a process through which an individual acquires the ability to distinguish between right and wrong. In this lesson we will discuss Piaget & Kohlberg's theory of moral development.

PIAGET'S THEORY OF MORAL DEVELOPMENT

Piaget was the first to attempt a systematic Study of children's moral reasoning. Working with children between 3 and 13 years, Piaget investigated moral thinking of children in three areas:

- The formulation of rules

- The relation of intention to the attribution of culpability

- Justice

Piaget observed children at play; participated in the game of marbles with them; interviewed them about the rules of games, the nature of Justices; and the morality of characters in stories. The two of the stories are presented below.

Story A

A little boy who is called John is in his room. He is called to dinner. He goes to the dinning room, but behind the door there was a chair and on the chair there was a tray with 15 cups on it. John didn't know what was behind the door. The door knocked the tray and all the fifteen cups got broken.

Story B

Once was a little boy whose name was Henry. One day when his mother was out, he tried to get some jam out of the cupboard. He climbed on a chair and stretched out his arm. While trying to get it, he knocked over a cup. The cup fell down and broke.

Who was naughtier and why? Well Intentioned John who caused much damage or ill-intentioned Henry who does damage? On the basis of children's responses, Piaget identified three broad stages of moral development:

1. Pre-moral (birth – 5 years)

Piaget noted that during the preschool years, children show little understanding of social rules. They invent their own rules; change rules at will and will conduct the game according to their own private desires and fantasies.

2. Stage of heteronomous morality or moral realism (5-10 years)

From around five years, children believe rules from authorities are fixed, sacred and absolute. They cannot be changed. They believe Justice is subordinate to adult authority. For example it is never right to tell a lie because the parents say so.

They also believe in immanent Justice, a kind of inherent retribution that is breaking of rules will surely result in punishment. They Judge actions by looking at the consequences rather than the intentions, For example in the above stories, they will say John is naughtier because he broke more cups.

3. Stage of Autonomous Morality or Moral relativism. (10 - 13 years)

They see morality as more relative to the situation. In judging whether a particular action is right or wrong, they consider intention as well as consequences. They realize that agreement or consensus can change rules. They realize that disobedience; lying and violation of rules are sometimes justified. They also realize that not all wrongdoing will be punished. Piaget believed that, change from moral realism to autonomous morality is due to greater cognitive abilities and socialization with peers.

KOHLBERGS THEORY OF MORAL DEVELOPMENT

Kohlberg expanded piglet's work. Working with the pre-adolescents, and adults Kohlberg presented them with moral dilemmas embodying a conflict between several contending claims for justice. He presented them with moral dilemmas to elicit

their reasoning. One of the famous dilemmas was the Heinz dilemma produced below.

In Europe a woman was near death from a special kind of cancer. There was one drug that the doctors thought that it might save her. It was a form of radium that a druggist from the same town had recently discovered. The drug was expensive to make but the druggist was charging ten times what the drug cost him to make. He paid $2000.00 for the radium and charged $2000.00 for a small dose of the drug. The sick woman's husband, Heinz went to everyone that he knew to borrow money, but he could only get together $1000.00 which is half what it cost. He told the druggist that his wife was dying and asked to sell it cheaper or let him pay later. But the druggist said "No I discovered the drug and am going to make money from it. So Heinz got desperate and broke into the man's store to steal the drug for his wife. Should the husband have done that? Why? From their responses Kohlberg identified three levels and six stages of moral development.

I) Pre-conventional Level: Emphasis is on avoiding punishment and getting rewards. There are two stages in this level.

Stage 1: Punishment-obedience orientation

`Good' behavior is defined by a desire "to avoid punishment" imposed by some external authority. For example will say that Heinz should not steal the drug because he might be sent to jail if caught.

Stage 2: **Instrumental-relativistic orientation**

The right thing is that which satisfies one's own needs. The right is that which will make one get rewards. There are elements of fairness and reciprocity but for physical pragmatic reasons. Moral action involves making deals for fair exchange (Market place morality). For example he should not steal the drug because his wife may die when he is in jail, and it won't do him any good.

II) Conventional level: Emphasize on social rules. Stages three and two are in this level.

Stage 3: Interpersonal concordance of good boy/girl orientation

Good behavior is that which pleases others and is approved by them. There is much conformity to stereotypical images of what is majority or "natural behavior". A person lives up to what is expected of people in your role as son, brother, etc. for example, Heinz should steal the drug because if the wife dies people may think that he is an inhuman husband.

Stage 4: Authority and social order maintaining orientation.

Right behavior consists of doing one's duty, showing respect for authority and maintaining the given social order for its own sake. Believe in absolute worth of fixed rules. For example, Heinz should steal the drug because he made a marriage vow that he will take care of her, or he should not steal the drug because he will be breaking the law that it was made for everyone's good.

III) Post- Conventional level: Emphasis is on moral principles. Stage five and six are in this level.

Stage 5: Social contract legalistic orientation

Right action is defined in terms of general individual rights and standards, which have been critically examined and agreed upon by the whole society. Recognizes that laws are formed by mutual agreement and can be changed through the democratic process. Also realizes that individual rights can sometimes supersede these laws if the laws become destructive. For example, Heinz should steal the drug. The fact that her life is in danger transcends every other standard you might use to judge his action. Life is more important than property.

Stage 6: The universal ethical principle orientation

This is the highest in Kohlberg's stages of moral reasoning. Individuals make their judgment on the basis of universal ethical principles. These principles are logically consistent and are based on the highest ethical values of justice, reciprocity, equality and respect for human life and rights. Moral action is prescribed by inner conscience and may or may not be in accord with public opinion or societal laws. So a person

does the right things to avoid self-condemnation: "I couldn't leave with myself if I did that.

FACTORS INFLUENCING MORAL DEVELOPMENT

1. Increased social experience with peers.: This reduces unilateral respect for adult authority and increases respect for peers and their points of view. They also learn to take roles and assume another's perspective. They can be influenced to do good or bad.

2. The family: through direct instruction, imitation, story-telling, proverbs, rewards and punishment.

3. Religious organization: teaches moral / religious values

4. Mass media: may learn bad or good behavior through observation and imitation.

5. Culture/community: has their own laws, customs and social norms

6. Encouraging Independence of adult constraint: by discussing moral issues in a rational way and by emphasizing consequences of their actions and others.

SENSATION AND PERCEPTION

Introduction

We all know that our sensory organs (eyes, ears, the tongue, the surface of the skin and the nose) detect stimuli from the environment and interpret the relevant messages to which we react. However, not many people know that the process of perceiving is a very complex activity encompassing many other stages. In this section, I will introduce the processes of sensation and perception, highlighting the way the above sensory receptors detect stimuli, and encode them into neural information that is then transmitted to the brain for interpretation. Furthermore, I will also take you through some basic principles governing the way we sense the world we live in. After looking at factors influencing the way we perceive, I will end this section by covering the mysterious field of Extrasensory Perception (ESP).

Definition

Sensation is the process through which signals from the environment are detected by the sensory receptors in the *eyes,* ears, tongue, skin and nose, are encoded into nervous impulses and then passed on to the brain. It is the process of sensing our environment through touch, taste, sight, sound, and smell. This information is sent to our brains in raw form where perception comes into play. On the other hand, **perception** is the whole process of organizing and interpreting sensory information in addition to the way we respond. It is therefore the way we interpret the sensations and hence make sense of everything around us. In a nutshell, sensation is a part of the perceptual process i.e. our ability to perceive enables us to obtain the information we need to survive.

a) Absolute thresholds

The absolute threshold is the point where something becomes noticeable to our senses. It is the softest sound we can hear or the slightest touch we can feel. Anything less than this goes unnoticed. The absolute threshold is therefore the point at which a stimuli goes from undetectable to detectable to our senses. All our sense organs have an individualized absolute threshold. Example, sometimes thieves are able to break into a house, communicate with each other and carry things away

without waking up the occupants of a house, this is because the communication within the house has not reached the minimum stimulation of the occupants' hearing sense required to perceive sounds.

b) Difference Threshold

The difference threshold is the amount of change needed for us to recognize that a change has occurred. This change is referred to as the Just Noticeable Difference. In fact, it is the minimum difference that can be detected with respect to our sensory system. Once a stimulus becomes detectable to us, how do we recognize if this stimulus changes? For instance, when we notice the sound of the radio in the other room, how do we notice when it becomes louder. It is conceivable that someone could be turning it up so slightly that the difference is undetectable. Furthermore, imagine holding a five pound weight and one pound was added. Most of us would notice this difference. But what if we were holding a fifty pound weight? Would we notice if another pound were added? The reason many of us would not is because the change required to detect a difference has to represent a percentage. In the first scenario, one pound would increase the weight by 20%, in the second, that same weight would add only an additional 2%.

c) Signal Detection Theory

Have you ever been in a crowded room with lots of people talking? Situations like that can make it difficult to focus on any particular stimulus, like the conversation we are having with a friend. We are often faced with the daunting task of focusing our attention on certain things while at the same time attempting to ignore the flood of information entering our senses. When we do this, we are making a determination as to what is important to sense and what is background noise. This concept is referred to as signal detection because we attempt to detect what we want to focus on and ignore or minimize everything else.

d) Sensory adaptation

This is the process of becoming less sensitive to unchanging stimulus .i.e. the diminishing sensitivity to unchanging stimuli. Examples to illustrate sensory

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adaptation are many. Have you ever entered a room that was freshly painted and therefore had the characteristic powerful odor of paint? I am sure that within minutes, you had forgotten about the unpleasant paint odor. In addition, you may adapt to the perfume or the ticking of the clock, but after a while you stop recognizing it.

Perception

As mentioned earlier, perception refers to interpretation of what we take in through our senses. The way we perceive our environment is what makes us different from other animals and different from each other i.e. how we make sense of what we see, hear, taste, touch, and smell is what makes us different.

Perceptual organization

To understand better the concept of perception, it better to have a reminder on the gestalt psychology. The German word "Gestalt" roughly translates to "whole" or "form," and the Gestalt psychologist's sincerely believed that the whole is greater than the sum of its parts. In order to interpret what we receive through our senses, they theorized that that we go through some structures to categorize various stimuli, resulting in meaningful perceptions. These structures are: **Figure and ground perception** and **perceptual grouping/organization**.

Figure and Ground Perception

In order to recognize an object, we need to first perceive this object as being separate from its surroundings. Consider this example, when we write some words on a piece of paper, the words are perceived as being distinct from the paper. The words assume the characteristics of a figure, while the paper becomes a mere background. This is referred to as a **Figure and Ground Perception**.

Perceptual Grouping

After having discriminated figure from ground, we then organize the figure into a meaningful form. This requires bringing some order in terms of grouping stimuli together. This ordering is governed by the following principles:

Proximity: This is the tendency to perceive stimuli that are near to each other as if they belong together.

Example:

```
X O X O X O X O X O

O X O X O X O X O X

X O X O X O X O X O

O X O X O X O X O X
```

In the above example we perceive rows, because the principle of proximity creates the impression that the Xs and Os are related due to their nearness to each other.

Similarity: This the perceptual tendency to group together similar stimuli.

Example

```
X X X X X X X

O O O O O O O

X X X X X X X

O O O O O O O
```

In this example, similar shapes are grouped together in the perceptual process.

Continuity: We tend to perceive smooth continuous patterns rather than discontinuous ones.

Example:

```
OXOOOOXXOOOOXXOOOOXXOOOOXXOOOO

OOXOOXOOXOOXOOXOOXOOXOOXOOXOOX

OOOXXOOOOXXOOOOXXOOOOXXOOOOXX0
```

In the above example, we perceived a continuous wave pattern made up of Xs due to the influence of the principle of continuity.

Closure: The perceptual tendency to fill in gaps thus enabling one to perceive disconnected parts as being complete.

Perceptual constancies

We have seen that the process of perception requires proper organization of various stimuli. Now let's see how we recognize objects without being deceived by their shape, size, brightness, or colour. This is the subject usually referred to as **perceptual constancy**. Here the focus will be put on the four main perceptual constancies.

Shape constancy: This is the tendency to perceive familiar objects as having a constant shape in spite of the viewing angle.

Example: A rectangular door casts the image of a trapezoidal image on the retina when the door is open.

Size constancy: This is the tendency to perceive an object as having a constant size in spite of the object being far away from us.

Example: We perceive a car as big enough to carry people, even when we see it from afar. ,

Brightness Constancy: This is the tendency to perceive objects as having consistent brightness even when their illumination varies.

Example: White paper reflects 90 percent of the light falling on it, while black paper reflects only l0 percent in well-illuminated conditions. In bright sunlight conditions the black paper may reflect 100 times more light than does the white paper indoors (MeBurney & Collings, 1984), yet it still looks consistently black.

Colour Constancy: This refers to the tendency to perceive familiar objects as having consistent colour even when the illumination changes.

Example: A yellow dress looks yellow when observed during the day or evening, when the amount of light diminishes.

Perceptual adaptation

Anybody who wears prescription glasses will tell you that they felt slightly disoriented and dizzy when they first wore the spectacles. However, these feelings

disappeared after a day or two. What really happened was **perceptual** adaptation. This is the ability to adjust to an artificially displaced or even inverted visual field. Another example is that of a person watching television while lying on the side of the bed. The person soon gets used to this distorted visual position.

Factors influencing perception

You may wonder why two people occasionally appear to view the same object, situation or idea from different perspectives. The reason for this is that we are all subject to individual differences in the way we perceive. Perceptual differences are influenced by a number of factors: some of them are as follows:

a) Characteristics of the stimulus object

A stimulus object is anything that draws the attention of our sense organs. Objects that are vivid in terms of possessing a sharp distinction between the figure and background are easiest to perceive, Colourful objects as well as those with patterns are powerful stimulus objects. Conversely, objects that are dull-coloured, vague and lacking in contour are easily ignored. In class, teachers are encouraged to apply vividness, colour and pattern to educational stimuli in order to enhance learning.

b) Culture

This is a very crucial factor because we are all subject to both cultural and ethnic forces. It has been proposed that Africans perceive round objects better than those with straight lines, while Caucasians prefer the opposite of this

c) Context Characteristics

The term 'context characteristics' refers to the setting in which perception occurs. This implies that a person may be exposed to a stimulus and the way he perceives this stimulus will depend on the circumstances under which it is presented.

d) Selective attention and individual values.

This is the tendency to focus on a specific stimulus and to ignore all the other competing stimuli. Usually, the stimulus that captures our attention most is the

one that is most vivid, colourful or loud. In addition, stimuli containing patterns or emotional potential will enhance selective attention. One example we can consider is that of a picnicker and a naturalist in a park. The naturalist will be able to perceive the sounds of birds and animals in the bush as opposed to the picnicker who will generally concentrate on conversation sounds. These two individuals will be in the same environment but will perceive different stimuli due to their special interests, needs and values.

e) Characteristics of the Perceiver.

As I mentioned earlier, all of us have individual differences which influence the way we appreciate various stimuli. For example, an individual's state of intelligence will influence his response to a stimulus. One illustration of this is the effect of an examination stimulus. Bright students view examinations as a challenge to prove their proficiency in answering questions, while the dull students look at examinations as a major threat.

Our state of mind can also influence the way we perceive. For example, a person who is very sick in hospital may not appreciate watching his favourite television programme. A person who is intoxicated with alcohol will be prone to risky sexual behaviour because of the drink's potential to reduce inhibitions. In this case, risky sexual behaviour is transformed into an acceptable temptation.

As we said earlier, sensation is a part of the perceptual process. However it's very important to ask ourselves the following question: Is there Perception without Sensation? This question leads us to what psychologists call 'Extrasensory perception'.

Extrasensory Perception (ESP)

You must have heard about people who are able to communicate using the thought modality alone, or those who are capable of influencing other people and objects physically from a distance. The explanations for these potentialities are not readily forthcoming due to the fact that these experiences lack room for scientific verification. The field of ESP is nowadays left to experts popularly known as

parapsychologists, who study the paranormal. The term 'paranormal' refers to phenomena beyond the normal, as you can deduce from my examples above.

All in all, parapsychologists are in consensus that some individuals possess the ability to perceive without sensory input. This means that they are able to engage in sensation without the intervention of the five senses.

Parapsychologists have classified various phenomena as follows:

a) Telepathy: Mind to mind communication, whore one person sends thoughts to another, who may or may not possess the ability to respond. Telepathy also includes the ability to perceive another's thoughts.

b) Clairvoyance: Perceiving remote events, such as sensing that a relative is sick in hospital.

c) Precognition: Perceiving future events, such as forecasting the death of a political leader.

Associated with ESP is **Psycho kinesis**, which refers to the ability to perform a mental operation to influence a material body or energy system. A person with this gift can move objects using thoughts.

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