

Forgetting

According to Munn (1967) “forgetting is the loss, temporary or permanent of the ability to recall or recognize something learnt earlier”.

According to Drever (1952) “forgetting means failure at any time to recall an experience when attempting to do or to perform an action previously learnt.

Causes of Forgetting There are two kinds of forgetting

1) Normal forgetting 2) abnormal forgetting

- **Entropy through disease:** older experience the weaker its memory
- **Interference:** forgetting by interference is a case of retention amnesia, here stability and existence of memory traces are disturbed. Ex. Crowded learning, unspaced learning.

- If the learning is **not meaningful** forgetting the course as it does not give scope for the development of relationship.
- **Inadequate Impressions** at the time of learning leads to forgetting.
- **Lack Of Interest** in the learning material leads to forgetting.
- Mental or physical ill health sets in physical and **mental fatigue** and affects learning.
- **Motivated forgetting** unpleasant events are to be forgotten soon to participate in the present

Methods to improve memory- Mnemonics

A mnemonic device is a learning technique that uses different strategies to encode and retrieve new information. It is based on the idea that your mind can recall relatable details.

1. Key word
2. Chunking
3. Musical Mnemonics
4. Acronyms and Acrostics
5. Rehearsal- maintenance & Elaborative
6. Method of Loci
7. Peg method
8. Mnemonic linking- story or sequence

Learning

Learning is the process of acquiring new understanding, knowledge, behaviours, skills, values, attitudes, and preferences.

Human learning starts at birth, and continues until death.

Learning is “a process that leads to change, which occurs as a result of experience and increases the potential for improved performance and future learning”

The nature and processes involved in learning are studied in many established fields. (including educational psychology, neuropsychology, experimental psychology, cognitive sciences, and pedagogy).

NATURE & CHARACTERISTICS OF LEARNING

1. Learning is a continuous modification of behaviour throughout life
2. Learning is pervasive. It reaches into all aspects of human life.
3. Learning involves the whole person, socially, emotionally & intellectually.
4. Learning is often a change in the organisation of behaviour.
5. Learning is developmental. Time is one of its dimensions.

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6. Learning is **responsive to incentives**. In most cases positive incentives such as rewards are most effective than negative incentives such as punishments.
 7. Learning is always concerned with **goals**. These goals can be expressed in terms of observable behaviour.
 8. **Interest & learning** are positively related. The individual learns better if there is a liking.
 9. Learning depends on **maturation and motivation**.

Types

(a) **Motor learning:** - when learning involves primarily the use of muscles it is called as motor learning. e.g.: learning to walk, to operate a typewriter

(b) **Discrimination learning:** - Learning which involves the act of discrimination is called discrimination learning. e.g. infant discriminates between mother and aunt, water and milk.

(c) **Verbal learning:** - when learning involves the use of words it is called as verbal learning.

(d) **Concept learning:** - when learning involves the formation of concept it is called as concept learning.

(e) **Sensory learning:** - when learning is concerned with perception and sense it is sensory learning.

Factors affecting learning

(a) **A motive or a drive:** Motive is the dynamic force that energizes behaviour and compels an individual to act. We do any activity because of our motives or our needs. When our need is strong, enough we are compelled to strive for its satisfaction

(b) **Goal:** Every individual has to set a definite goal for achievement. We should always have a definite goal for achieving anything. If a definite goal is set then learning becomes purposeful and interesting..

(c) **Obstacle /block /barrier:** The obstacle or block or the barrier is equally important in the process of learning. The obstacle or the barriers keep us away from attaining the goal.

Theories

A learning theory is an attempt to describe how people and animals learn, thereby helping us understand the inherently complex process of learning.

THREE FRAMEWORKS:

- Behavioural theories- Pavlov, Skinner, Thorndike
- Cognitive theories - Piaget
- Social learning theories-Bandura

Pavlov's Classical Conditioning (1849-1936)

Pavlov, a Russian psychologist conducted an experiment. He placed a dog in a soundproof room, which had a small window that permitted observation from outside.

When he presented meat powder to the dog, there was automatic secretion of saliva from the mouth of the dog just at the mere sight of the meat.

Later every time, the meat was presented a bell was rung to condition the response of salivation. So ringing of the bell and sight of meat got inter-connected. Next time only the bell was rung but no meat presented.

This time, although the natural stimulus (meat) (Conditioned Stimulus) was absent, the Unconditioned stimulus (bell) was alone responsible for the natural response, i.e., the secretion of saliva- Conditioned response.

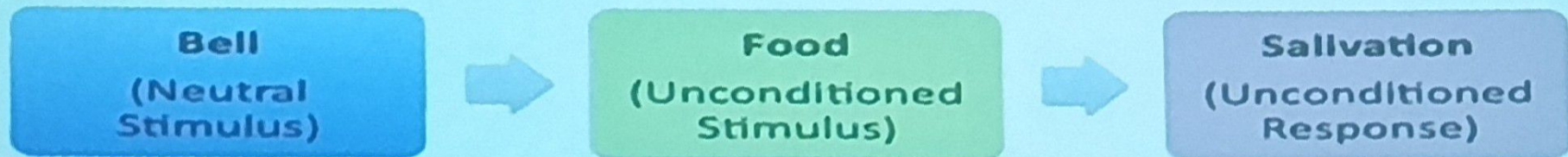
Principles of Classical Conditioning

Pavlov's Dogs

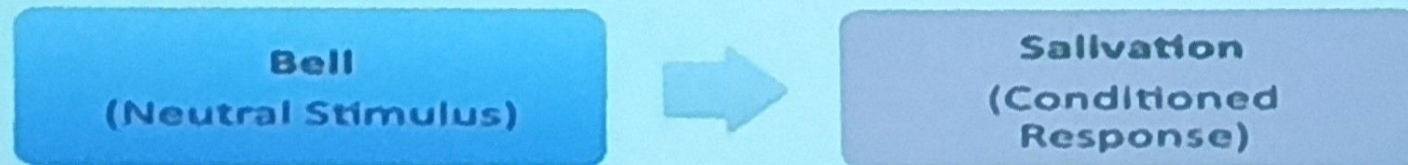
Before Conditioning



During Conditioning



After Conditioning



Other concepts of learning in CC

- **Stimulus generalization:** this is when individuals respond in this same way to respond.
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- **Stimulus discrimination:** organisms can learn to discriminate between various stimuli.

Extinction: a conditioned response will disappear over time when the conditioned stimulus is no longer presented.

- **Spontaneous recovery:** sometimes the extinct response- re-appearance while previously conditioned stimulus is provided
- **Higher order conditioning:** also known as second-order conditioning, is when a neutral stimulus becomes linked to a conditioned stimulus.

Skinner's Operant conditioning

Behaviorist B.F. Skinner coined the term **operant conditioning**, which is why it is also referred as ~~Skinnerian conditioning~~.

As a behaviorist, Skinner believed that internal thoughts and motivations could not be used to explain behavior. Instead, he suggested, we should look only at the **external, observable** causes of human behavior.

Skinner used the term **operant** to refer to any "active behavior that operates upon the environment to generate consequences" (1953).

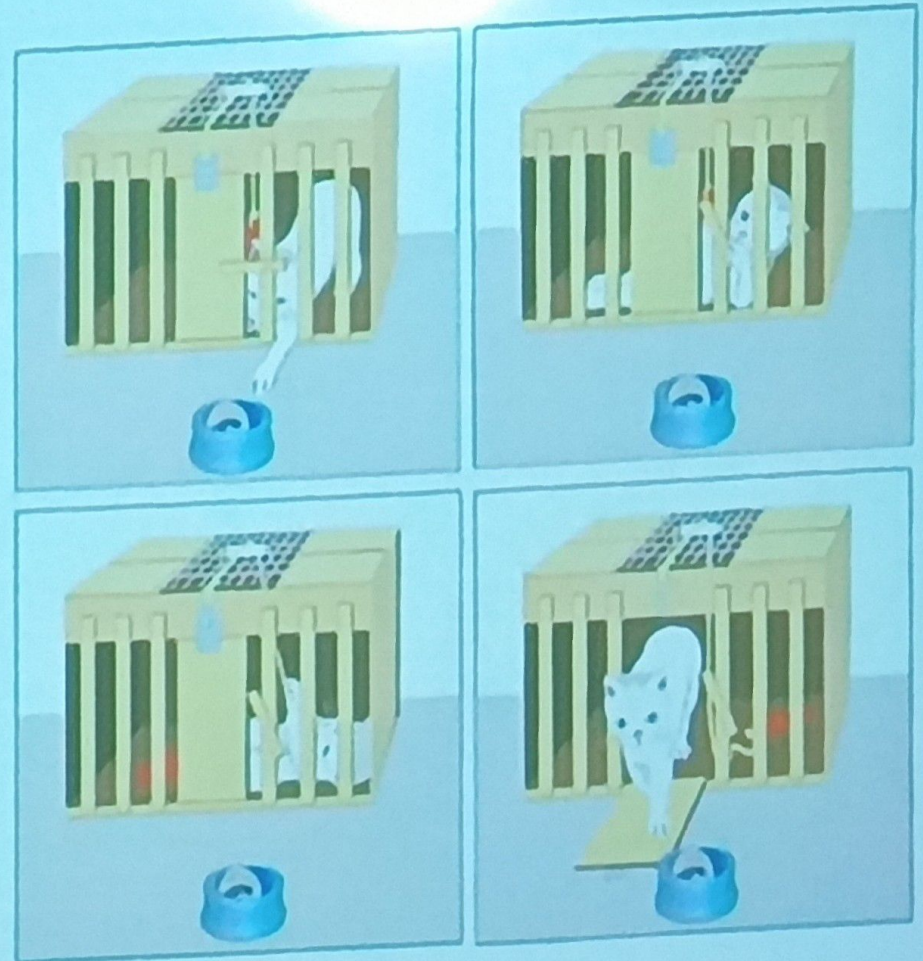
In other words, Skinner's theory explained how we acquire the range of learned behaviors we exhibit each and every day.

His work was based on **Thorndike's law of effect**. Also called **TRIAL & ERROR LEARNING**.

Skinner introduced a new term into the Law of Effect - **Reinforcement**. Behaviour that is reinforced tends to be repeated (i.e. strengthened);

behaviour that is not reinforced tends to die out-or be **extinguished** (i.e. weakened).

Skinner studied operant conditioning by conducting experiments using animals, which he placed in a "**Skinner Box**" which was similar to Thorndike's puzzle box.



- A **reward** is something, which has value to the person giving reward, but may not necessarily be of value to the person receiving the reward.
 - A **reinforcer** is something, which benefits the person receiving it, and so results in an increase of a certain type of behaviour.
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REINFORCEMENT

Reinforcers are any event that strengthens or increases the behavior it follows. There are two kinds of reinforcers.

1. **Positive reinforcers** are **favorable events or outcomes** that are presented after the behavior. In situations that reflect positive reinforcement, a response or behavior is strengthened by the addition of something, such as praise or a direct reward.
2. **Negative reinforcers** involve the **removal of an event or outcome** after the display of a behavior. In these situations, a response is strengthened by the removal of something considered unpleasant.

Punishment is the presentation of an adverse event or outcome that causes a decrease in the behavior it follows.

Punishment weakens behaviour. There are two kinds of punishment:

1. **Positive punishment**, sometimes referred to as punishment by application, involves the presentation of an unfavorable event or outcome in order to weaken the response it follows.

2. **Negative punishment**, also known as punishment by removal, occurs when an favorable event or outcome is removed after a behavior occurs. In both of these cases of punishment, the behavior decreases

Laws of Learning

1. Law of Readiness

This law refers to the fact that learning takes place only when the learner is prepared to learn. No amount of efforts can make the child learn if the child is not ready to learn. In other words, if the child is ready to learn, he/she learns more quickly, effectively and with greater satisfaction than if he/she is not ready to learn.

2. Law of Exercise

The dictum 'Practice makes a man perfect' goes very well with this law. This law is further split into two parts — **Law of use** and **Law of disuse**. The law of use means that a connection between a stimulus and response is strengthened by its occurrence, its exercise or its use. In other words, the use of any response strengthens it.

3. Law of Effect

This is most important of Thorndike's laws, which state that when a connection between stimulus and response is accompanied by **satisfying state**, its strength is increased. On the other hand, when a connection is accompanied by an annoying state of affairs, its strength is reduced or weakened

Shaping

Involves rewarding an organism for each small step towards a desired behavior. For example, to teach a child to walk, reinforcing for every previous efforts to crawl, stand, balance and then finally walk.

Chaining

Involves breaking a task down into small steps and then teach each step within the sequence by itself. By implementing different chaining methods like **task analysis**, **forward chaining**, **backward chaining**, or **total task chaining**, educators can provide learners with a clear roadmap to success, promote independence, and facilitate skill acquisition. For example brush their teeth, you would reinforce them for each small step with mastery sequentially, such as opening the toothpaste and squeezing it onto the brush.

Social Learning theory

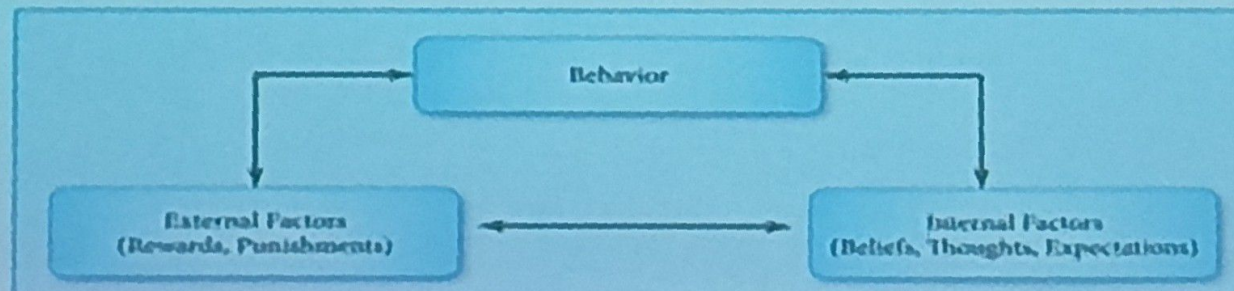
Albert Bandura -- People learn by observing other people's actions.

Active agent in life - beliefs, self-perceptions, and expectations

Social Cognitive Theory includes person/cognition, behavior and environment as a reciprocal interaction

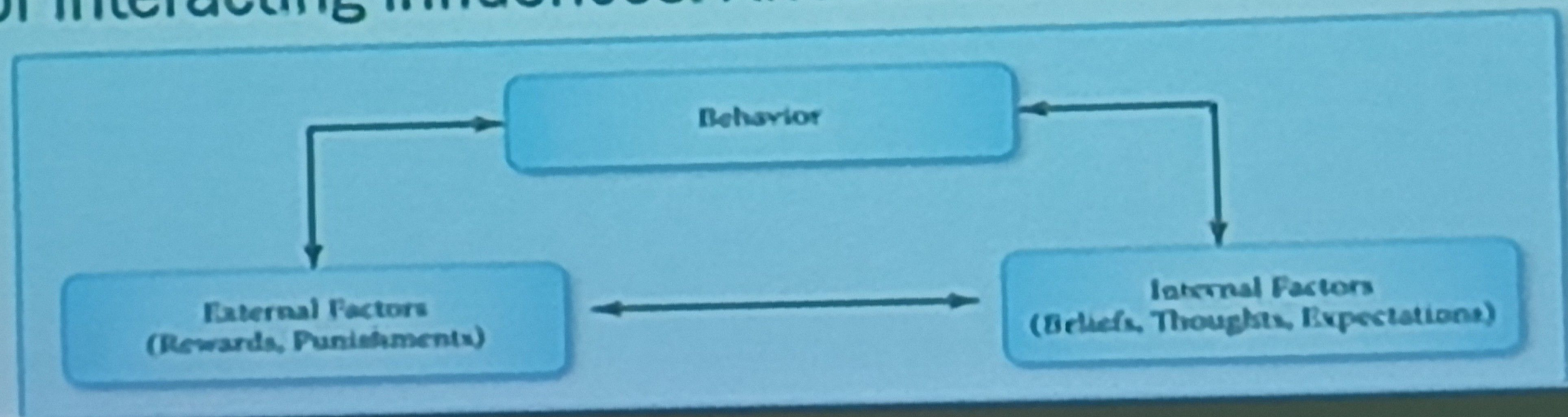
Observational learning: People learn by observing other people's actions

Reciprocal determinism: External and internal determinants of behavior are part of a system of interacting influences. Affect both behavior and various parts of the system



al learning: People learn by observing other people's actions

determinism: External and internal determinants of behavior
of interacting influences. Affect both behavior and various



Elements of observational learning

Attention

various factors increase or decrease the amount of attention paid. Includes distinctiveness, affective valence, prevalence, complexity, functional value. One's characteristics (e.g. sensory capacities, arousal level, perceptual set, past reinforcement) affect attention.

Retention

remembering what you paid attention to. Includes symbolic coding, mental images, cognitive organization, symbolic rehearsal, motor rehearsal

Reproduction

reproducing the image. Including physical capabilities, and self-observation of reproduction.

Motivation

having a good reason to imitate.

- Reinforcement Motivation

- Extrinsic Motivation: Comes from outside sources

- Intrinsic Motivation: Comes from within, internal, self motivation

- Vicarious Motivation: Learning from others

Bobo Doll Experiment

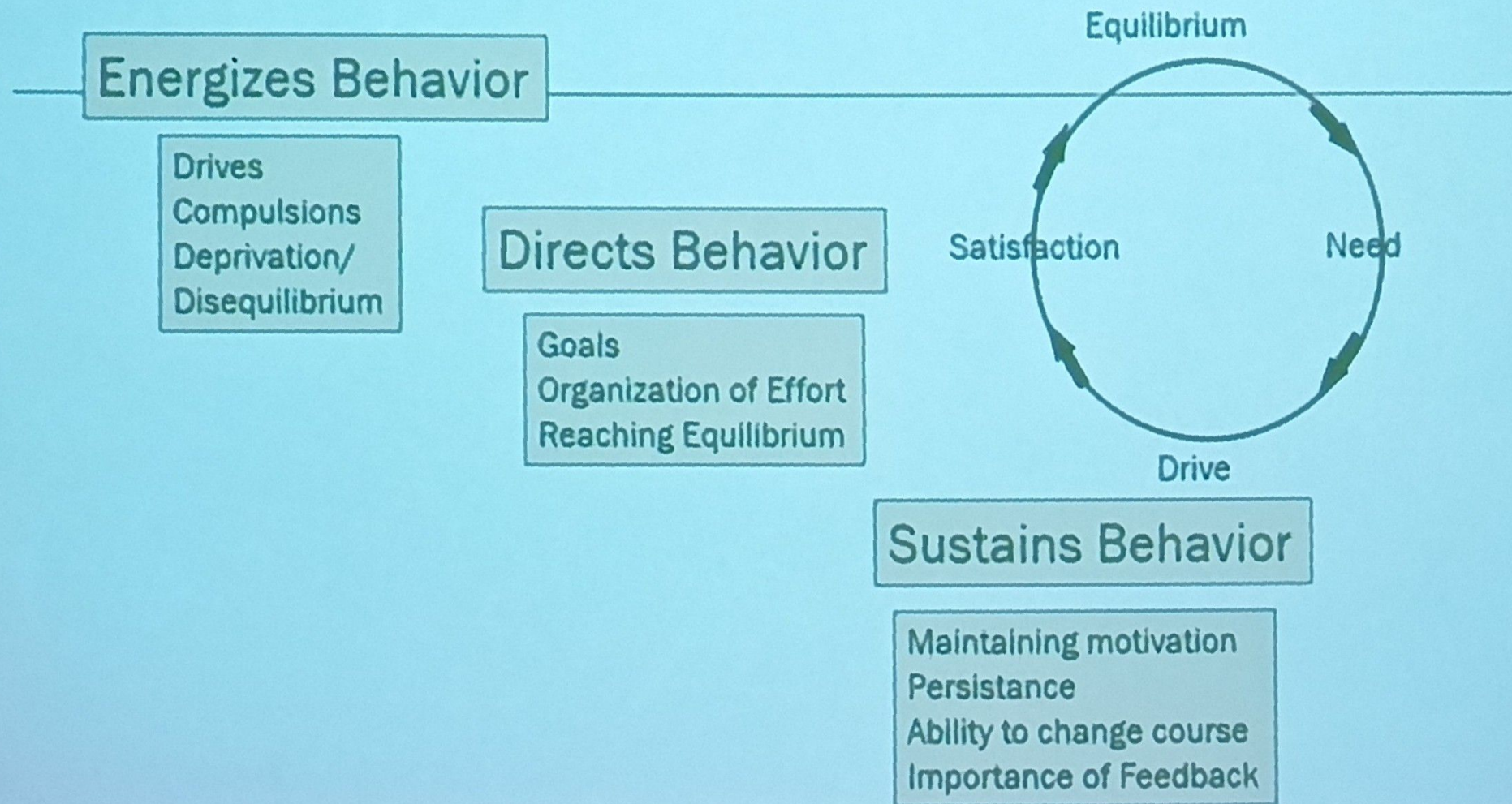
The Bobo Doll Study“Bobo doll” studies showed observational learning and the impact it can have on violent behavior in children. Albert Bandura’s Bobo doll study in 1961 was a classic study that demonstrates the social learning theory.

The study showed that after viewing adults strike and kick a Bobo doll, children would imitate the behavior in another environment. This was important, as it suggests that the violence could be imitated by viewers.

Results showed 88% of the children imitated aggressive behavior following the viewing of the tape of adults acting aggressively toward the doll.

8 months later 40% of the same children reproduced the violent behavior observed in the Bobo doll experiment.

Motivation (drives, needs)



DEFINITION

Motivation means a process of stimulating people to action to accomplish desired goals.

-W.G. Scott

Something that moves the person to action and continues him in the course of action already initiated.

-Robert Dubin

Motivation is the process of attempting to influence others to do your will through of gain or reward.

Edwin B. Flippo

NATURE & CHARACTERISTICS

Motivation is a psychological concept-

It has something to do with the psychology of the individual

Motivation is always total and not a piece meal-

It means that the person cannot be motivated in installments.

Motivation may be material or internal

It means motivated through physical rewards or psychological satisfaction.

Motivation may be positive as well as negative-

Motivation should always be positive and even it may be negative at times

Motivation is a continuous process-

It is an unending process and its not a time-bound process.

Types

Primary motives: These are physiological or basic needs as they are essential for survival. Eg Hunger, thirst, pain etc

Stimulus motives: Inborn but are not necessary for survival e.g Curiosity, exploration, manipulation, physical contact etc.

Secondary motives: Learned, acquired and social. It includes achievement, affiliation, aggression, power etc

Intrinsic V/s extrinsic Motivation

- **Intrinsic motivation**
 - Goals are internal feelings of effectiveness, competence and self determination
 - Works hard for fun of it , creatively and for satisfaction. Eg: Self actualization motivation,.
- **Extrinsic motivation**
 - Directed towards goals external to the person, such as money or grades in school.
 - Excessive reliance on it stifle intrinsic motivation and impair performance.

Biological V/s Psychosocial Motivation

Biological Motivation

These are fundamental for our survival. They are basically unlearned in nature.

The arousal state is initiated (Departure from homeostasis) by hormones - _____

Insulin, Glucagon, Testosterone, Estrogen.

Sensory stimuli (Incentives) - smell of food, image of opposite sex, pain.

Psycho-social Motivation

- They are learned in Social groups (Social learning) Eg: Family, Peers, Teachers. Hence their strength differ greatly from individual to another.
- They persist, never fully satisfied over the years - determine much of what a person does .
- Knowledge of social motive dominant in a society may help us understand its history and predicts its future
- They are innate part of the human species heritage, seem to exist to one degree or another in everyone.
- They are most powerful and most persistent of all.

Theories Of Motivation

Drive theory (Push Theory)

Drive theories say that behavior is pushed towards goals by arousal internal states (Drive) within the person or ~~animal- homeostasis disturbances~~ imbalance—drive reduction—balance.

Instinctive theory

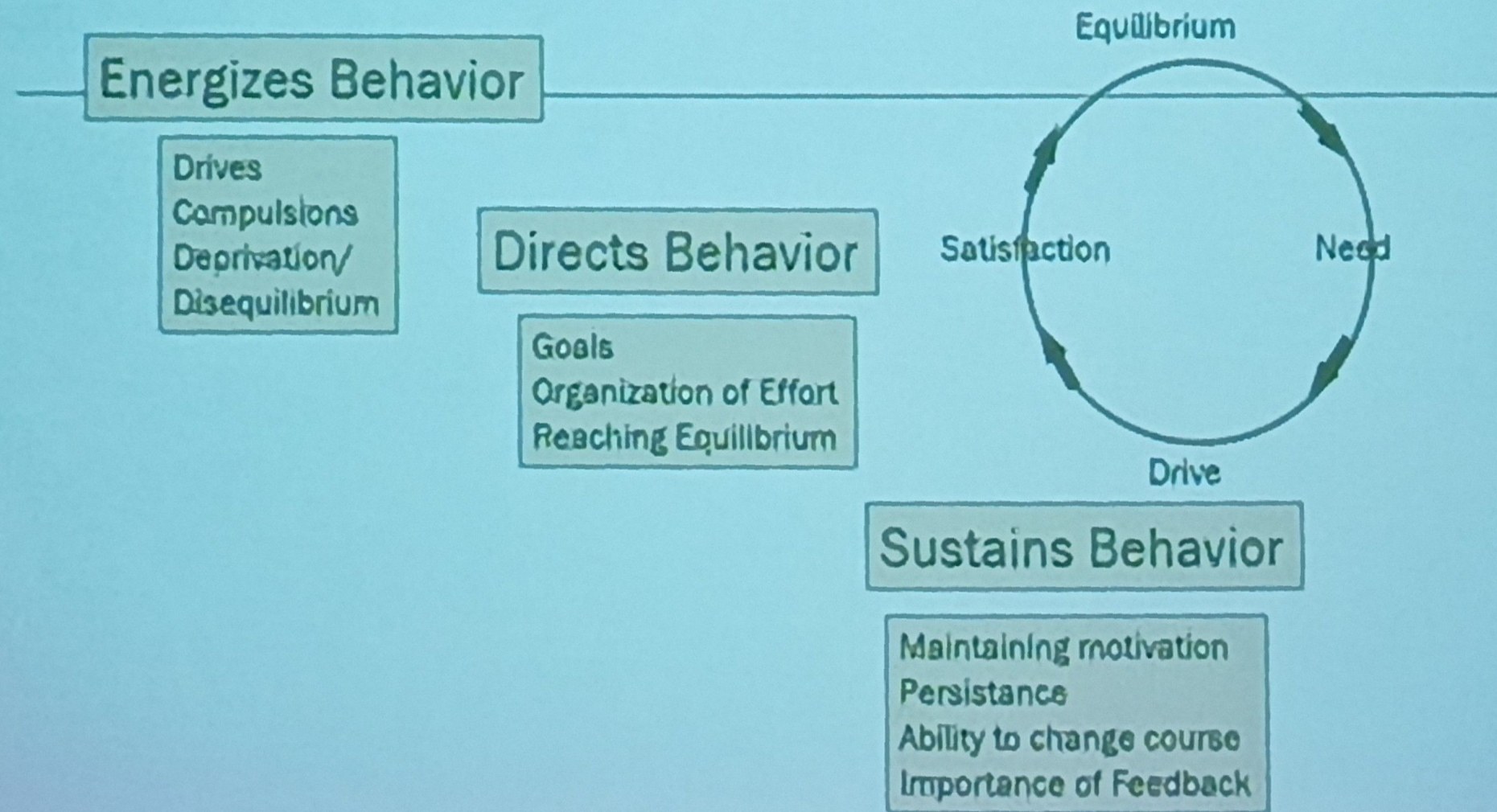
Sources of driving state can be;

Inborn / instinctive – proposed by Freud eg: Biological Motivation or Learned – hence they differ from one individual to another. Eg: Addictions.

EROS & THANATOS- Life instinct and death instincts

Social Motivation (achievement, power, aggression)

Motivation (drives, needs)



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EMOTIONS

The word 'emotion' is derived from the Latin word *Emovere* which means to be 'stirred up,' or 'to stimulate'.

Emotions literally jerk a person.

Due to closeness of emotion with feeling, the quantity of emotion increases with the increase in feeling and the body gets evoked or stimulated. This stimulated condition is known as '**emotion**'.

Components

Subjective feeling

Physiological response

Behavioural response

Theories of Emotions

1. **James- Lange theory** -states that "Our experience of emotion is our awareness of our physiological responses to emotion-arousing stimuli" The perception of bodily changes as they occur is the emotion.
2. **Cannon- Bard theory**-It States that an emotion arousing stimulus simultaneously triggers:
a) Physiological responses b) the subjective experience of emotion. people feel emotions first and then act upon them.
3. **Schachter Singer theory** -This theory emphasized that we identify the emotion we are experiencing by observing our environment and comparing ourselves with others. In other words given a state of arousal ,we experience the emotion that seems appropriate to the situation in which we find ourselves.

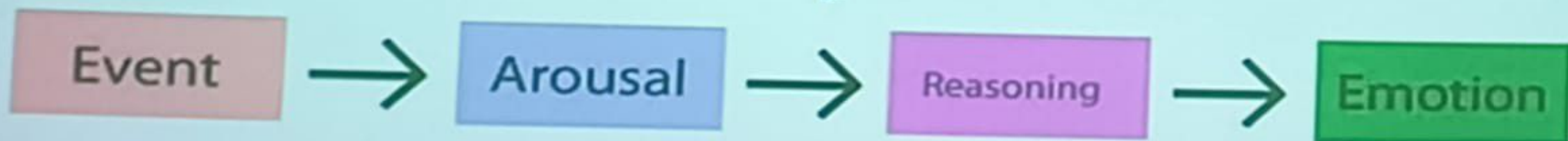
James-Lange Theory



Cannon-Bard Theory



Schachter-Singer Theory



Characteristics of emotions

Accompanied by aroused state in the organism.

Usually accompanied by physiological changes.

A lot of energy is released in an emotional state.

Emotions can be either positive or Negative

Moods are low intensity emotional states that can last for many hours, or even days.

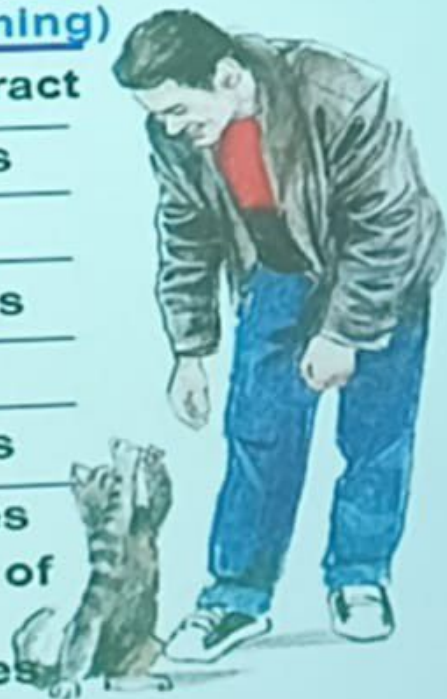
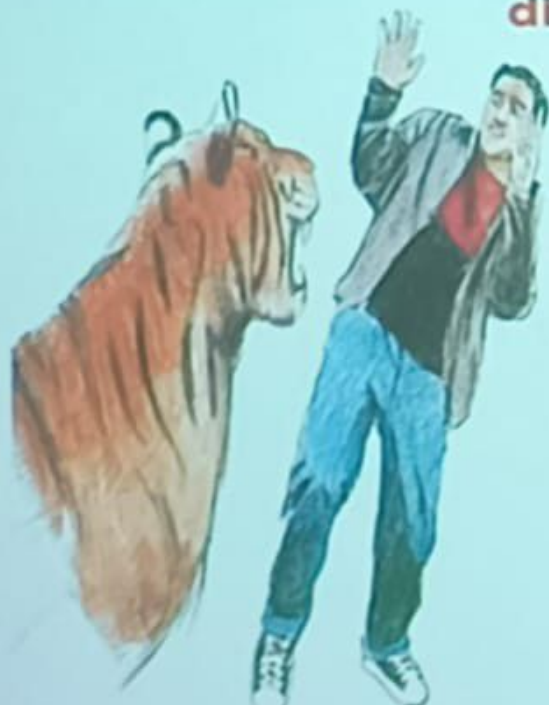
Emotion and Physiology

Autonomic nervous system controls physiological arousal

Sympathetic division (arousing)

Parasympathetic division (calming)

Pupils dilate	EYES	Pupils contract
Decreases	SALIVATION	Increases
Perspires	SKIN	Dries
Increases	RESPIRATION	Decreases
Accelerates	HEART	Slows
Inhibits	DIGESTION	Activates
Secrete stress hormones	ADRENAL GLANDS	Decreases secretion of stress hormones



HIERARCHY OF NEEDS

the 5 basic human needs



Original theory brought to life by Abraham Maslow expressed in the book titled *Motivation & Personality*.

Types of Basic Emotions



1. Happiness



2. Sadness



3. Fear



4. Disgust



5. Anger



6. Surprise

DEFINITIONS

Each emotion is a feeling, and each is at the same time, a motor set.

- Woodworth.

Emotion is an acute disturbance of the individual as a whole, psychological in origin, involving behavior, conscious experience and visceral functioning.

- P.T. Young (1961)

The term emotion denotes a state of being moved, stirred up or aroused in some way.

- Jersild (1960)

Human emotion involves.... "physiological arousal, expressive behavior & conscious experience.

- David G. Meyers

Personality

Personality is broadly described as the characteristic patterns of thoughts, feelings, and behaviors that make a person unique.

Personality psychologists are interested in the unique characteristics of individuals and similarities among groups of people.

Characteristics of Personality

Personality is organized and consistent. We tend to express certain aspects of our personality in different situations, and our responses are generally stable.

Although personality is generally stable, it can be influenced by the environment. For example, while your personality might make you shy in social situations, an emergency might lead you to take on a more outspoken and take-charge approach.

Personality causes behaviors to happen. You react to the people and objects in your environment based on your personality. From your personal preferences to your career choice, every aspect of your life is affected by your personality.

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Approaches to study personality

Psychoanalytic approach- Freud

Conscious- Unconscious

Structure of personality- id, ego, super ego

Psycho-sexual stages of development

Ego defense mechanisms- repression, rationalization, sublimation, projection, displacement

Highly critiqued for excessive focus on unconscious.

Carl Jung's Theory of Personality

Core Concepts:

Ego

Conscious mind the Center of consciousness

Characterized by one dominant attitude (introversion/extraversion) -

Characterized by functions: Thinking , Feeling, Sensing , Intuiting

Personal Unconscious

Similar to Freud's conception of preconscious and unconscious -Contains memories that can be recalled as well as those that have been repressed

Collective Unconsciousness

Psychological residue of man's ancestral past

Reservoir of mankind's experiences as species

Accumulated memories of mankind's experiences seen in themes and symbols in cultures

Parallels in myths, fairy tales, literature, art, etc. -Dreams -Déjà vu experiences -Near death experiences

Archetypes:

Inherited predisposition to experience things in certain ways more like an emotion Jung described them as "thought-forms" Organizing principle (similar to Freud's conception of instincts) for our behavior Collected deposits of mankind's repeated experiences' with events such as birth, death, mother, father, evil, etc.

Main archetypes **Persona:** public personality (mask) worn to win society's approval Our instinctual knowledge that we have to act certain way in society Way we present ourselves The **good impression** we hope to make starts as archetype, but becomes farther removed from collective unconscious Starts as comprised of attitudes taken from social class, occupation, ethnic heritage, religion, etc.

Shadow - Lower, animal side of our behavior - Represents **socially unacceptable** behaviors - Derives from pre-human, animal past—when we were not self-conscious - Dark side evil we are capable of, Shadow is amoral

Anima/Animus - Anima - **female archetype** in males Animus - **male archetype** in females - Spirit of opposite sex in us - Trace of mankind's experience of living with opposite sex - Societal stereotypes and expectations cause us to develop only half of our potential

Humanistic theories -Abraham Maslow

Assumptions: Human nature is basically good, not evil. Normal human development involves the actualization of this inherent goodness, has no mental illness

A 'fully functional person' is satisfied in basic needs, fully exploited talents, motivated by values

Characteristics of Self-actualizing persons : Superior perception of reality

Increased acceptance of self, of others, and of nature, Increased freedom

Increased detachment and desire for privacy,

Greater freshness of appreciation and richness of emotional reaction.

Increased autonomy and resistance to conformity

Higher frequency of peak experiences,

Improved interpersonal experiences,

More democratic character structure,

High levels of creativity.

Trait Theories of personality

Trait: a characteristic pattern of behavior, or a disposition to feel and act, as assessed by self-report inventories and peer reports.

Trait theories - endeavor to describe the characteristics that make up human personality. They don't try to explain behavior, only describe it.

Types: **Surface traits:** aspects of personality that can easily be seen by other people in the outward actions of a person. **Source traits:** the more basic traits that underlie the surface traits, forming the core of personality. Example: **Introversion** - dimension of personality in which people tend to withdraw from excessive stimulation.

Gordon Allport's Trait Theory

Raymond Cattell's Sixteen Personality Factors

Eysenck's Three Dimensions of Personality

The Five-Factor Theory of Personality

Gordon Allport's Trait Theory

In 1936, psychologist Gordon Allport found that one English-language dictionary alone contained more than 4,000 words describing different personality traits.

Cardinal Traits: Traits that dominate an individual's whole life, often to the point that the person becomes known specifically for these traits. People with such personalities often become so known for these traits that their names are often synonymous with these qualities. Ex: **short tempered, calm and composed** etc.

Central Traits: The general characteristics that form the basic foundations of personality. These central traits, while not as dominating as cardinal traits, are the major characteristics you might use to describe another person. Terms such as **intelligent, honest, shy and anxious** are considered central traits.

Secondary Traits: Traits that are sometimes related to attitudes or preferences and often appear only in **certain situations or under specific circumstances.** Some examples would be getting anxious when speaking to a group or impatient while waiting in line.

Raymond Cattell's Sixteen Personality Factor

Trait theorist Raymond Cattell reduced the number of main personality traits from Allport's initial list of over 4,000 down to 171, mostly by eliminating uncommon traits and combining common characteristics.

Next, Cattell rated a large sample of individuals for these 171 different traits.

Then, using a statistical technique known as factor analysis, he identified closely related terms and eventually reduced his list to just 16 key personality traits.

These 16 traits are the source of all human personality. The widely used personality assessments known as the Sixteen Personality Factor Questionnaire was based on these traits

Eysenck's Three Dimensions of Personality

British psychologist Hans Eysenck developed a model of personality based upon just three universal traits:

Introversion/Extraversion: Introversion involves directing attention on inner experiences, while extraversion relates to focusing attention outward on other people and the environment. So, a person high in introversion might be quiet and reserved, while an individual high in extraversion might be sociable and outgoing.

Neuroticism/Emotional Stability: This dimension of Eysenck's trait theory is related to moodiness versus even-temperedness. Neuroticism refers to an individual's tendency to become upset or emotional, while stability refers to the tendency to remain emotionally constant.

Psychoticism: Later, after studying individuals suffering from mental illness, Eysenck added a personality dimension he called psychoticism to his trait theory. Individuals who are high on this trait tend to have difficulty dealing with reality and may be antisocial, hostile, non-empathetic and manipulative.

The Big Five-Factor Theory of Personality

Both Cattell's and Eysenck's theory have been the subject of considerable research, which has led some theorists to believe that Cattell focused on too many traits, while Eysenck focused on too few.

"Big Five" theory emerged. This five-factor model of personality represents five core traits that interact to form human personality. While researchers often disagree about the exact labels for each dimension, the following are described most commonly:

Extraversion-ranges from sociable, talkative, fun-loving at one end to sober, reserved, cautious at the other.

Agreeableness-ranges from good-natured, cooperative, trusting to irritable, suspicious & uncooperative

Conscientiousness-ranges from well-organized, careful, responsible to disorganized, careless, unscrupulous

Neuroticism-from poised, calm, composed to nervous, anxious, excitable

Openness-from imaginative, sensitive, intellectual to down-to-earth, insensitive, crude