

**CHILD  
PSYCHOLOGY**

# *INTRODUCTION*

- **Children are not small adults but developing individuals during childhood, the child undergoes a remarkable transformation from a helper dependent infant to independent, self-sufficient individual with his own views and outlooks, capable of embarking on a career and living separately from a family.**

An understanding of these tasks to specific age groups will equip the dentist with the knowledge of the particular needs, fears of children and adolescents. Therefore, knowledge of normal psychologic growth and development is essential to the practice of modern dentistry.

# *DEFINITION*

- CHILD PSYCHOLOGY
- It is the science or study of child's mind and how it functions. It is also the science that deals with mental power or interaction between the conscious and subconscious elements in a child.

# *IMPORTANCE OF CHILD PSYCHOLOGY*

- To understand child better.
- To know the problem of psychological origin.
- To deliver dental services in a meaningful and effective manner.
- To establish effective communication with the child and the parent.
- To teach the child and parents importance of primary and preventive care.
- To have a better treatment planning and interaction with other disciplines.

# *CLASSIFICATION*

- THEORIES OF CHILD PSYCHOLOGY
- Child psychology theories can be broadly classified into two groups:
- Psychodynamic theories
- Psychoanalytical theory by Sigmund Freud(1905)
- Psychosocial theory by Erik Erikson(1963)
- Cognitive theory by Jean Piaget(1952)

## Theories of learning and development of behavior

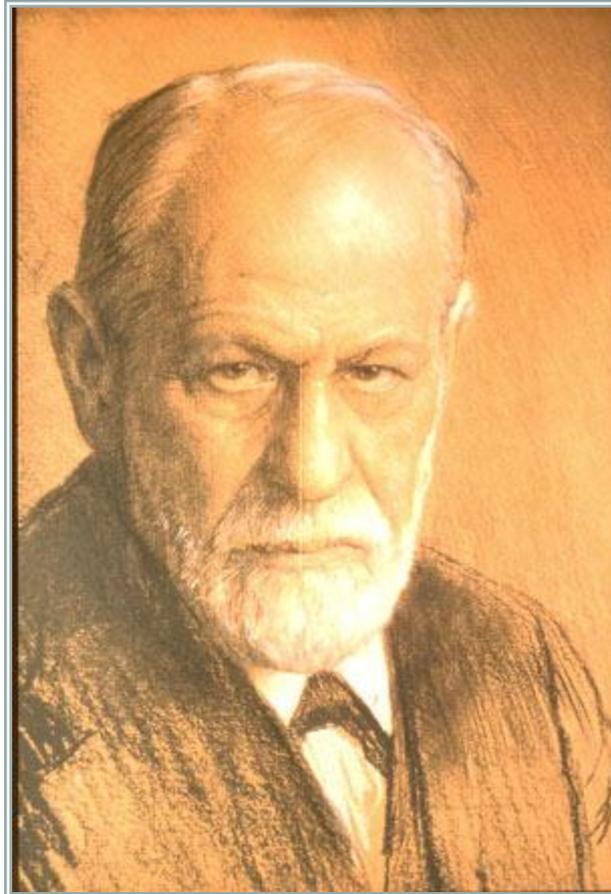
Hierarchy of needs by Maslow(1954)

Social learning theory by Bandura(1963)

Classical conditioning by Pavlov(1927)

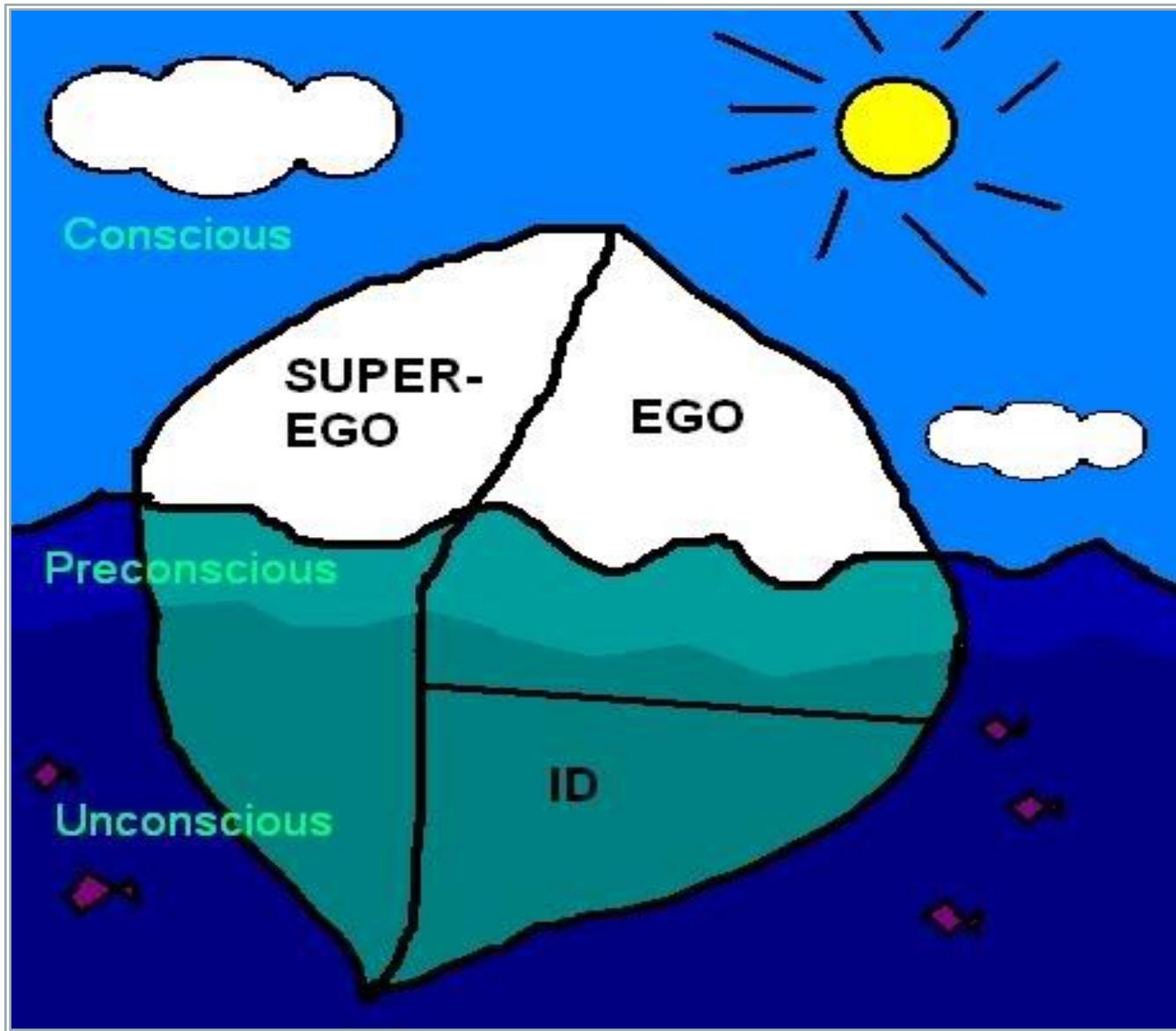
Operant conditioning by Skinner(1938)

# *PSYCHOANALYTICAL THEORY*



- Stage theories represent stages which are hierarchically organized, so that later stages incorporate remnants of earlier stages. No stage can be skipped and successive stages more complex and integrated than earlier phases. (Sigmund Freud was the founder of modern psychiatry).

# *TOPOGRAPHIC MODEL*



He put forth the psychoanalytical theory based on three structures to understand the intrapsychic processes and personality development. They are id, ego, superego (this forms the psychic triad).

**Id:** It represents unregulated instinctual drives and emergencies striving to meet bodily needs and desires and is governed by pleasure principle.

Here the person thinks only of body needs and desire but with little concern for other or social convention.

- **Ego:** Is the seat of consciousness, which exploits that environment to the maximum to achieve gratification in socially acceptable ways.
- It develops in the 2nd to 6th months of life and is governed by reality principle. It serves as a mediator between id and superego.

- **Ego acts by:**
- **Projection** : projecting one's own inadequacy on to someone else to feel more comfortable. Ex: A bad work will be blamed on the tools.
- **Denial** : Denying the existence of threatening situation so as to avoid tackling it. Ex: though the tooth pain is severe, pretending as if it is not painful in order to avoid dentist.
- This may be advantageous or even disadvantageous as it prevents to cope with the anxiety and crisis, individual may not realistically cope-up with life.

- **Identification** – Incorporating the qualities of some one else to vent frustration.
- **Regression** : It is the inappropriate response as a result of confrontation with an anxiety producing situation. Ex: thumb sucking in older children.
- **Repression**: It is the process of unconscious forgetting for repression of painful experiences to subconscious mind.

- **Rationalization** : It is the development of logical excuses to explain behaviors. Ex: Refusing to compete because of fear of failure but using some other excuse.
- **Sublimation** : It is the redirection of socially unacceptable drive into socially approved channels to allow the discharge of instinctive impulses in an acceptable form. Ex: Sadist becoming a butcher.

- **Displacement**- This is transfer of desires or impulse onto a substitute person or object e.g. if a student is scolded by the teacher, he may take it out on his juniors.
- **Reaction formation**- This is where the person displays behavior that is the exactly opposite of an impulse that he dare not express e.g. when you are not able to control your temper, you start laughing.

- **Superego:**
- It may be linked to a social conscience. It is that part of personality which is the internalized representation of the values and morals of society as taught to the child by the parents and others. It is derived from the familial, culture restrictions placed upon a growing child.
- It develops from the internalization of feeling of good and bad, love-hate, praising-forbidding, reward and punishment of both parents.

## *PSYCHOSEXUAL DEVELOPMENT*

He divided the whole personality into five stages and linked it to pleasurable erotic body zones.

## **Oral stages: 0-1.5 year**

**Occurs during the first year of life. The mouth serves as the primary zone of pleasure and the baby gains its most intense pleasure from sucking and mouthing when deprived of adequate mothering, the baby's behavior reveals its distress with exaggerated cry, tension and muscle rigidity. When mothering becomes adequate, these acute symptoms often disappear.**

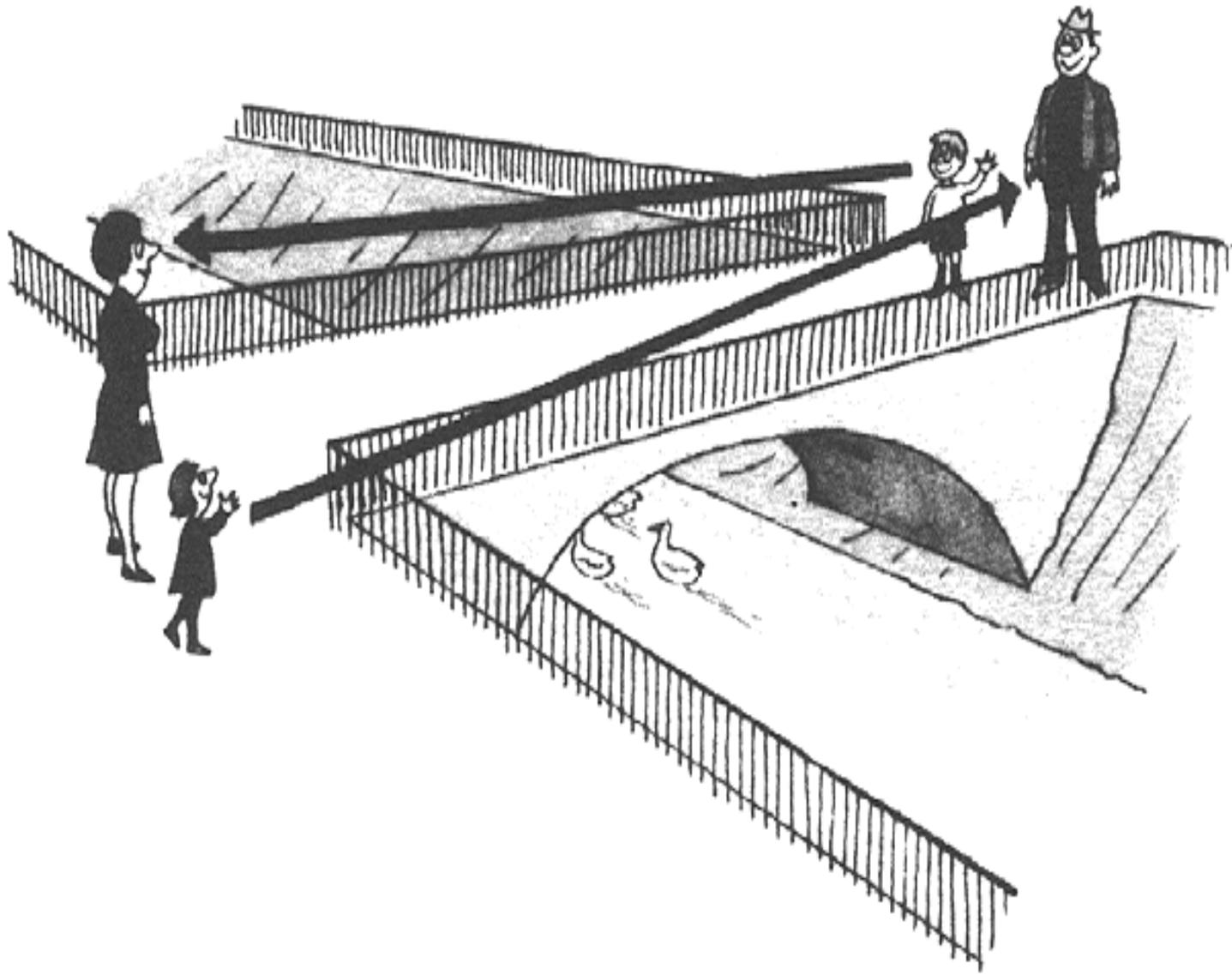
- **Anal stage (1.5-3 years)**

- The main feature of this stage is the Childs acquisition of voluntary bowel and bladder control. The baby derives pleasure from the process of elimination during the first six months. the increased control of these functions helps gaining cognitive and locomotor skills.

- **Phallic stage (4-5 years)**

- Childs libidinal energy is directed towards general activities. Children are now able to discover the genital differences between sexes.

- During this period, the male child develops the “oedipal complex “ and the girls develops the “Electra complex”



- **Latency stage: (6-12 years)**
- This period is so called because of its relative tranquility compared with the emotionally stormy periods of the phallic and genital periods. **The child focuses his attention on the same-sex parent, leading to increased identification and role modeling on his parent & peer group relations are predominately with the same sex**

- **Genital stage: (12 years onwards)**

- The endocrinological and physiological changes at puberty and sexual interest re-emerges and a good outcome of this stage is dependent on how well or otherwise how the individual has dealt with other stages earlier. Two stages the oral and the phallic, are particularly crucial. The poor resolution of the oral phase may preclude the foundation of close, trusting relationships with the opposite sex, whereas unresolved phallic conflicts may lead to confusion of overall sexual role and behavior.

# *PSYCHOSOCIAL THEORY*



- Erickson modified Freud's theory by superimposing psychosocial and psychosexual factors simultaneously contributing to the personality development of the child.

- **Trust Versus mistrust (0-1 years)**

- This phase occupies the first year and is mainly concerned with the establishment of secure and stable relationships between mother and child.

- If successful outcome is there, then the child feels that the world is predictable, safe and secure by contrast a basic sense of mistrust implies that the world is cruel, erratic and unable to enact the needs.

- Dental application:
- This stage identifies with development of separation anxiety in the child. So if necessary to provide dental treatment at this early age, it is preferable to do with the parent holding the child.

- **Autonomy Vs shame, doubt : (1-2yrs)**

**This phase is characterized by the child's increasing powers of mobility and locomotors skills, providing the basis for the development of some independence and autonomy. The new skills are very vulnerable & the child's self-confidence is easily undermined leading to the negative outcome of shame and doubt.**

- Dental application:
- Child is moving away from mother, but still will retreat to her in threatening situations. So, parent's presence is essential in dental clinic.

- **Initiative Vs guilt (2-6 years)**

- The child rapidly expands the skills part in language, so that exploration and activity is the order of the day.
- If the child's exuberance and enthusiasm are too restricted by parents or other, then despondency and defeatism predominate, leaving the child with a sense of guilt.

- Dental application:
- Child can be encouraged to view this visit as a new adventure & can be taught about various things in a dental set up.

- **Industry Vs inferiority (6-12 years)**
- **Schooling and peer relations predominate in this phase, so that successful child becomes literate, numerate and socially integrated. Failure to achieve this leads to a sense of inferiority and inadequacy with a low self-esteem.**

- Dental application:
- Cooperation at this stage depends on whether he/she understands what is needed to please the dentist/parent, whether the peer group is supportive or not & whether the desired behavior is reinforced by the dentist.

- **Identity Vs role confusion (12-18 years)**
- **Two tasks, sexual identity and career identity are the major forces of interest for the individual. Independence from the family and developing one's own value system become important during late adolescence.**

- Dental application:
- Behavior management of adolescents can be challenging. Any orthodontic treatment should be carried out if child wants it.

- **Intimacy Vs isolation – 19-40 years**
- **The successful young adults, for the first time, can experience true intimacy- the sort of intimacy that makes possible good marriage or a genuine and enduring friendship.**

- Dental application:
- At this stage external appearances are very important as it helps in attainment of intimate relation. these young adults seek orthodontic treatment to correct their dental appearance

- **Generativity Vs stagnation – 40-65 years:** in adulthood, the psychosocial crisis demand generativity, both in the sense of marriage and parenthood, and in the sense of productivity & creativity.

- **Ego integrity Vs despair – 65+**
- **If the other 7 psychosocial crisis have been successfully resolved, the mature adult develops peak of adjustment- integrity**

# *COGNITIVE THEORY*



- **A Swiss psychologist has elaborated the most comprehensive theory of cognitive development.**
- **In order to survive, the individual must have the capacity to adapt to the demands of the environment. Cognitive development is the result of interaction between the individual and the environment.**

- The process of adaptation is made up of three functional variants:
- **ASSIMILATION** concerns with observing, recognizing, taking up an object & relating it with earlier experiences.
- **ACCOMMODATION** accounts for changing concepts as a result of new assimilated information.
- **EQUILIBRATION** refers to changing basic assumption following adjustments so that the facts fit better.
- The sequence of development has been categorized into 4 stages:

## COGNITIVE DEVELOPMENT STAGES

<u>Stage</u>	<u>Age</u>	<u>Description</u>
Sensorimotor	0-2	Reflex base Coordinate reflexes
Preoperational	2-6 or 7	Self-oriented Egocentric
Concrete Operational	6 or 7- 11 or 12	More than 1 view point No abstract problems Consider some outcomes
Formal Operational	11 or 12 up	Think abstractly Reason theoretically Not all people reach this stage

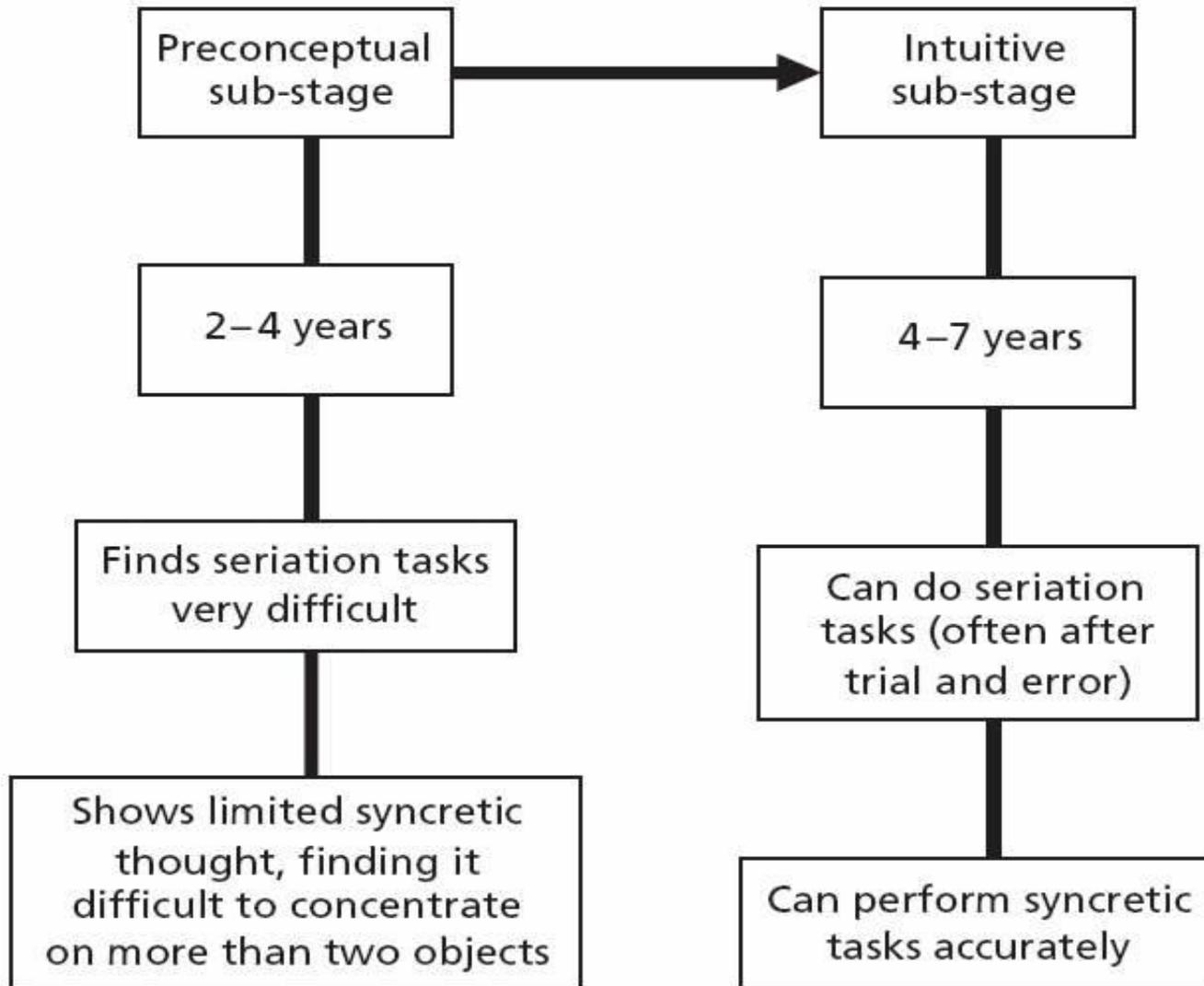
- The sensorimotor stage (0-2 yrs)
- In this stage, infants construct an understanding of the world by coordinating sensory experiences (such as seeing and hearing). At the beginning of this stage, newborns have little more than reflexive patterns with which to work. At the end of the stage, 2-year-olds have complex sensorimotor patterns and are beginning to operate with primitive symbols.

Child begins to interact with the environment & can be given toys while sitting on the dental chair.



- The preoperational stage(2-7 yrs)
- In this stage, children begin to represent the world with words, images, and drawings. Symbolic thought goes beyond simple connections of sensory information and physical action.

## The two pre-operational sub-stages



**Constructivism-** the child likes to explore things & make own observation.

**Cognitive equilibrium-** child is explained about the equipment & allowed to deal with it.

**Animism-** child correlates things with other objects to which they are more used to.



- The concrete operational stage (7-12 yrs)
- In this stage, children can perform operations, and logical reasoning replaces intuitive thought as long as reasoning can be applied.

**Concrete instruction** like this is a retainer, brush it like this.

**Abstract instruction** like wear the retainer every night & keep clean.

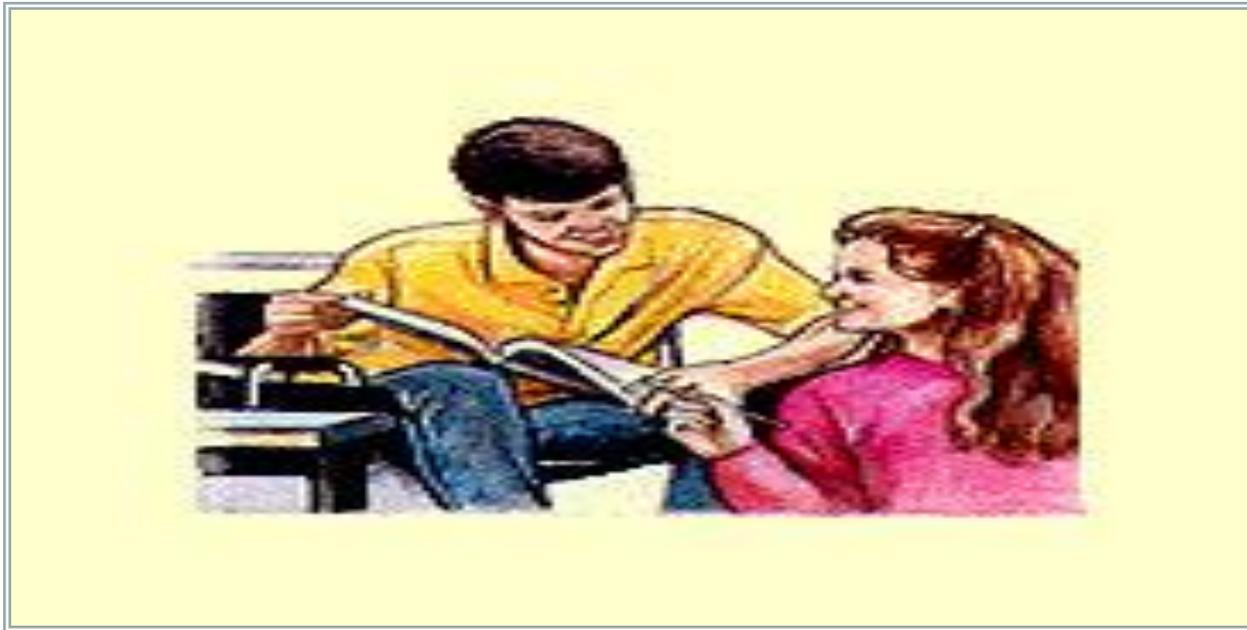
**Centering**- allowed to hold mirror to see what is being done.

**Ego-centrism**- the child gets involved in the treatment.



- The formal operational stage (11-17 yrs)
- In this stage, individuals move beyond concrete experiences and think in abstract and more logical terms. As part of thinking more abstractly, adolescents develop images of ideal circumstances. They might think about what an ideal parent is like and compare their parents to this ideal standard. They begin to entertain possibilities for the future and are fascinated with what they can be.

Peer influence & abstract thinking increases. This can play important role in orthodontic appliances & braces. Acceptance from peers can be used for motivation for dental treatment.



# *HIERARCHY OF NEEDS*

- According to this, the individuals priority of needs and motivation affect the personality development:

- Level I : Physiologic needs.

Needs essential for survival like hunger, thirst, fear.

- Level II : Security needs:

Need for shelter and employment.

- Level III : Social needs

Need to be loved and to have a sense or belonging.

- Level IV : Esteem

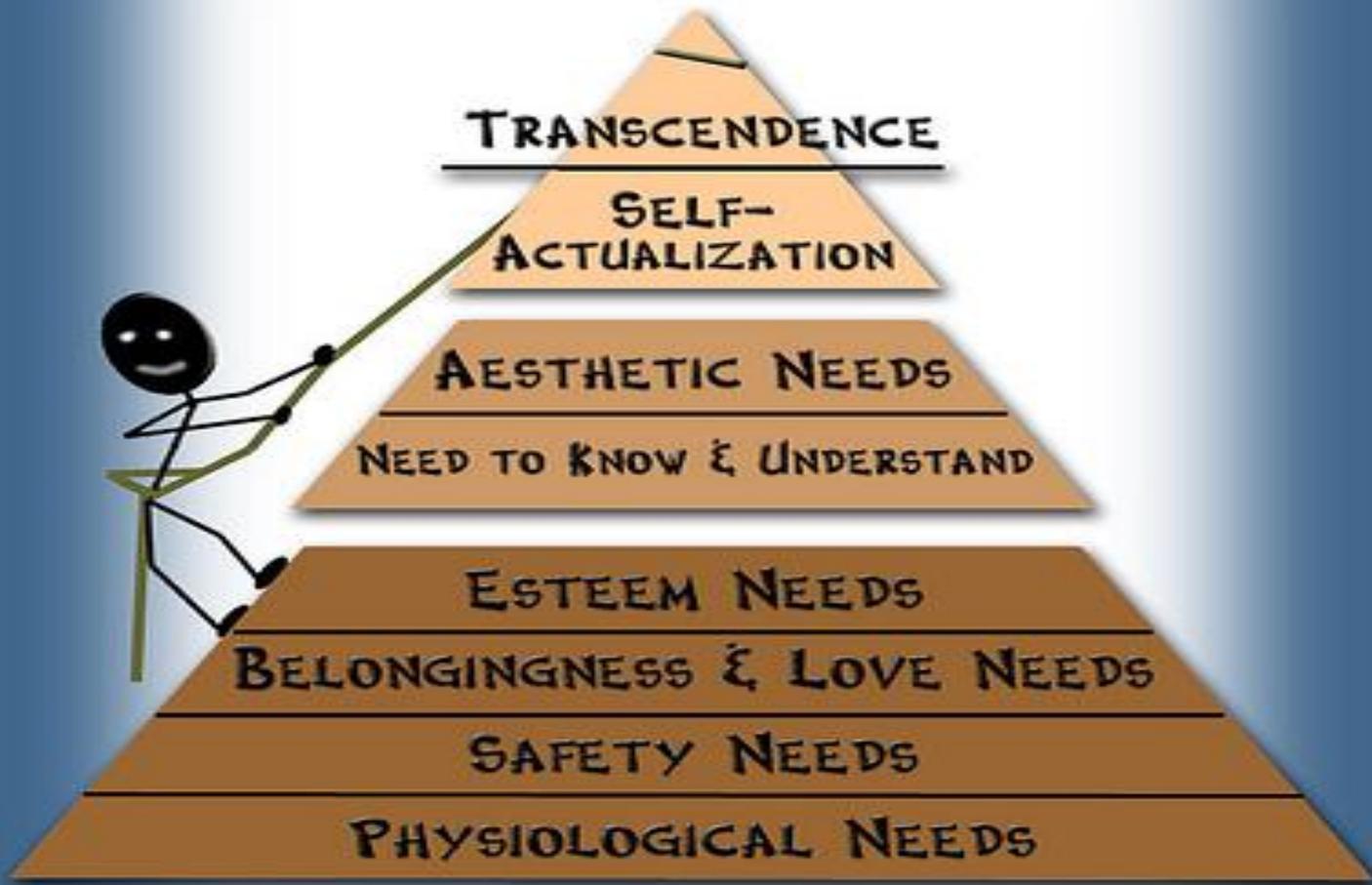
Need to acquire personal work, competency and skills.

- Level V : Self-actualization

Need to realize one self.

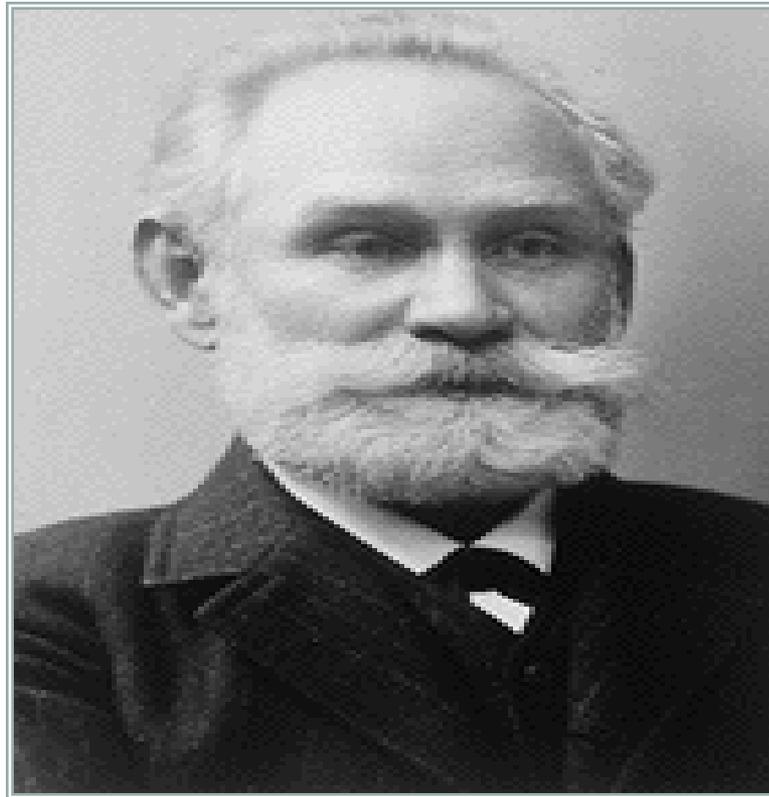
- Higher needs are not demonstrated until lower needs are fulfilled

# MASLOW'S HEIRARCHY OF NEEDS



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# *CLASSICAL CONDITIONING THEORY*



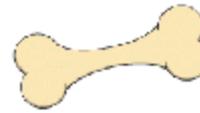
- Russian psychologist, Ivan petrovich Pavlov was the first to study conditioned reflexes experimentally on dogs.
- The principles involved in the process:
- **ACQUISITION**- learning a new response from the environment by conditioning.

- **GENERALISATION-** wherein the process of conditioning is evoked by a band of stimuli centered around a specific conditioned stimulus.
- **EXTINCTION-** of the conditioned behavior results if the association between the conditioned & the unconditioned response is not reinforced.
- **DISCRIMINATION-** is the opposite of generalization.

Before conditioning

**FOOD**  
**(UCS)**

**SALIVATION**  
**(UCR)**



**BELL**

**NO RESPONSE**



During conditioning

**BELL +**  
**FOOD**  
**(UCS)**

**SALIVATION**  
**(UCR)**



After conditioning

**BELL**  
**(CS)**

**SALIVATION**  
**(CR)**



# *SOCIAL LEARNING THEORY*



- Social learning theory is thought to be the most complete, clinically useful & theoretically a sophisticated form of behavior therapy.

- The learning of behavior is affected by 4 principal elements:

## ANTECEDENT DETERMINANTS

- The conditioning is affected if the person is aware of what is occurring.

## CONSEQUENT DETERMINANTS

- Person's perception & expectancy determine behavior.

- MODELLING

- Learning through observation eliminates the trial-error search.

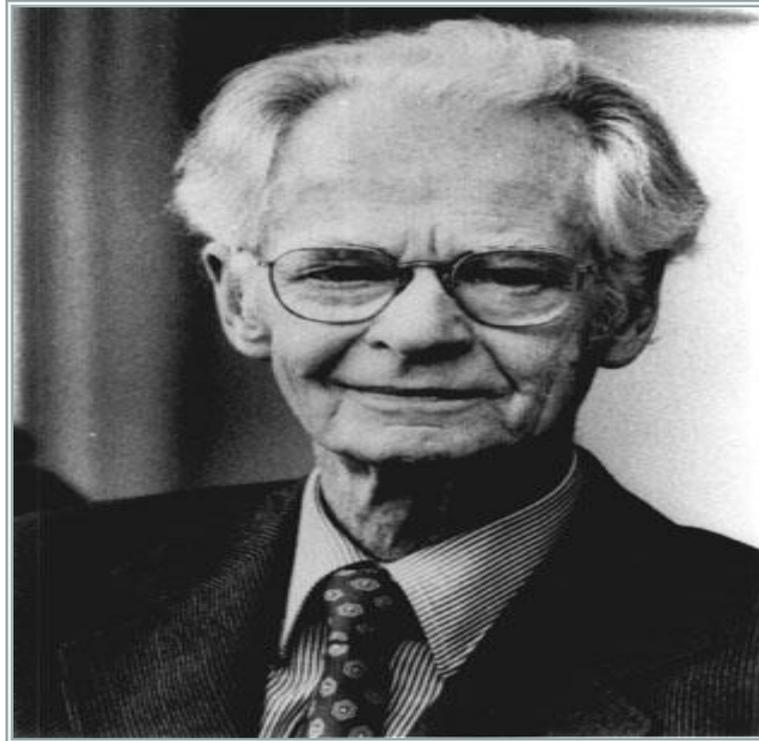
- SELF REGULATION

- This system involves a process of self regulation, judgments & evaluation of individual's responses to his own behavior.

## DENTAL APPLICATION

- Children are capable of acquiring almost any behavior that they observe closely & are not too complex for them to perform at the level of physical development. Observational learning is an important tool in management of dental treatment.

# *OPERANT CONDITIONING THEORY*



- The principle of this theory, arise from experimental work of skinner.
- He described 4 basic types of operant conditioning distinguished by the types of consequences.

- *Positive reinforcement:*
- If a pleasant consequence follows a response, the response is positively reinforced and the behavior that lead to this pleasant consequence becomes more likely in the future.

- **Negative reinforcement – contingency**
- It involves the withdrawal of an unpleasant stimulus after a response.
- Like positive reinforcement it increases the likelihood of a response in the future.

- **Omission (Time-out):**

- It involves the removal of a stimulus after a particular response.

- **Punishment:**

Occurs when an unpleasant stimulus is presented after a response. This also decreases the probability that behavior that promoted punishment will occur in the future.

# REFERENCES

- Textbook of Pediatric Dentistry- Nikhil Marwah.
- Textbook of pediatric dentistry- Shobha Tandon.