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PE-1 Psychology of Learner

Objectives: To enable the prospective teachers:

- to develop insight about Educational Psychology and the stages of human growth anddevelopment.
- to understand different theories of Development and its implication in a real classroomscenario.
- to understand and imply theories of Intelligence, Personality and Creativity.
- to understand concepts of Mental Health and Adjustment.

Unit 1:Educational Psychology & Growth and Development

Psychology: Concept,

Educational Psychology: Concept, Scope and Significance

Growth, Development & Maturity: Concept, Principles and Factors affecting Growth and

Development

Stages of Human Development: Characteristics and Educational Implications heterosexual minister

Unit 2: Theories of development (Concept, Stages and Characteristics)

- Piaget's Cognitive Development Theory
- Vygotsky's Theory of Cognitive Development
- Kohlberg's Moral Development Theory
- Bruner's Theory of Discovery Learning

Unit 3: Intelligence, Personality and Creativity

- ✓ Individual Difference: Concept, areas of Individual Differences, Educational Implications
- ▼ Intelligence: Concept and theories (Guilford's SOI) Measurement of
- Intelligence and its educational implications



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- Personality: Concept, Affecting Factors
- ▼ Types of Personality (Introvert, Extrovert, Ambivert).

Unit 4: Mental Health and Adjustment

- 4.1Mental Health: Concept, Factors affecting Mental Health, Concept of Mental Hygiene
- 4.2Adjustment: Concept, Characteristics and Maladjustment
- 4.3Defense Mechanisms: Types and Implications
- 4.4.Study of various defense mechanisms:Identification,Compensation,Rationalization,Daydreaming and Sublimation

Unit 1: Educational Psychology & Growth and Development

- 1.1 Psychology concept:
- A scientific understanding of the past can be gained; man can look at the past and contemplate the present. - As a result, his understanding of himself has blossomed and therefore increased control.
- Understanding of processes, behaviors, thoughts-feelings, motivationscontacts,
 - The study is psychology, you're science, as research advances understanding and new perspectives it's the scientific study of understanding human behavior. Life is the goal of the study of psychology
- Understanding of processes, behaviors, thoughts-feelings, motivationscontacts,
 - The study is psychology, you're science, as research advances understanding and new perspectives it's the scientific study of understanding human behavior3 The study of psychology today is full of different ideologies and perspectives.

Three issues arise:



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- a. Psychology is a science.
- b. Psychology is the science of behavior.
- c. Psychology studies the behavior of not only humans but also nonhuman animals. Every person has shown great variation in creation. To see differences between individuals.
- The simple meaning is the science of the mind, in English it is called "Pythology", which comes from the Greek words Psych,
- Soul, Mind and Self Soul means soul, Mind means mind, self means yourself, logos
- A study of the mind. Recognizing that there is no concrete substance or mind, soul, and consciousness, Joe thought it desirable to stick to the behavioral aspect, as the study of manifest behavior began as what manifests in various behaviors.
- A great thinker teacher, Pestology became a champion of the study of psychology.
- Pastology is credited with connecting with science. Mauwijnana has been given many meanings, the most widely recognized and supported by Mauwijnana
- Psychology describes and explains the learning experience of an individual from birth to old age.
- 'Education is a life long process.' John Deaisy Education= to train - hidden Educere = to lead out Educare= to bring out

E+ duco = bring out develop from within

▼ Definitions of Psychology:



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- 'Psychology is the science that studies the behavior of humans and non-human animals in relation to their environment.' - J. B.
 Watson
- 'To bring out all that is best in the body, mind, soul of man is called education.'

- Gandhiji

 'The process of universal development of human talent is called education.'

-Gunvant shah

 'Learning psychology studies human behavior in learning situations.'-Skinner

Thus, to bring out all that is best in the body, mind, and soul of man is called education The process of universal development of male talent is called education. Learning psychology studies human behavior in stressful situations. Learning is a cradle-to-grave process. Learning is related to human life. It's not just for the baby. A process from birth to death.

1.2 Educational Psychology:

Meaning:

Education psychology is the application of psychological theories and principles into education and its environment. In educational psychology, we study the behavior of the individuals in the teaching-learning process on one hand and the help of psychological findings is taken to module and shape thebehavior in the desired manner or the other. When this is done, the rate of learning increase which is the ultimate aim of educational psychology.

Thus, we see that educational psychology is an applied discipline by the study of which humanbehavior can be understood, predicted and



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directed to achieve the educational goals of life.

"Psychology is the science of behavior and experience" – Skinner

"Psychology is the study of human behavior and human relationship" – Crow and Crow

"Psychology is concerned with observable human behavior" – Garrison and others

- § Definition of Educational Psychology: Educational psychology has been defined by various scholars and psychologists in different ways afew definitions are as follows:
- "First psychology lost its soul, then it lost its mind, then it lost its consciousness, and still it hasbehavior of sort" Woodworth
- "Psychology is the positive science of the behavior of living thing" Mc.
 Dougall
- "Psychology is the study of human behavior and human relationship" –
 Crow and Crow
- "Psychology is the study of human nature" C. G. Boring
- "Psychology is such a pure science which studies the behavior of men and animals, so far that behavior is regarded as an expression of their inner life of thought and feelings which are called mental life" – James Drever
- "Psychology is the scientific study of the activities of individual in relation to the environment"
 - Woodworth
- "Educational psychology is the scientific study of life stages in the development of an individual from the time he is born until he becomes and an adult" Judd
- "Educational psychology utilizes those findings that deal with the experiences and behavior ofhuman being in educational situation" Skinner
- "Educational psychology describes and explains the learning experiences
 of an individual from birthto old age" Crow and crow
- "Educational psychology is the systematic of educational growth and development of a child" -Stephen

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- Other definitions of educational psychology are as follows:
- 1. Anderson: Educational psychology is a subject to be studied, an area or field of knowledge, a set of application of laws and principles from a wide field of knowledge to a social process, a set of tools and techniques, and field of research. While General psychology is a pure science, Educational psychology has its applications in the field of education with the aim of socializing man and modifying his behavior.
- 2. David P. Ausubel: Educational psychology is the special branch of psychology concerned with the nature, conditions, and evaluation of school learning and retention.
- 3. Encyclopedia of Educational Research: Educational psychology is the study of the learner and of the learning-teaching process in its various branches directed towards helping the child some to terms with society with a maximum of security and satisfaction.
- 4. Walter B. Kolesnick: Educational psychology is the study of the facts and principles of psychology, which help to explain and improve the process of education.
- 5. B. F. Skinner:
 - (i) Educational psychology covers the entire range of behavior and personality as related toeducation.
 - (ii) Educational psychology is the special branch of psychology which deals with teaching-learningeducation.
- 6. W.C. Trow: Educational psychology deals with the psychological aspects of educational situations.
- § Tasks of Educational Psychology W.A.Kelly (1941) has listed the following tasks of educational psychology: To give a complete knowledge of the nature of the child.
- To give understanding of the nature, aims and objectives of education.
- To give understanding of the scientific methods and procedures, which have been used in arriving at the facts and principles of educational psychology.
- To present the principles and techniques of learning and teaching.
- To give training in methods of measuring abilities and achievement in school subjects.



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- To give a knowledge of the growth and development of children.
- To assist in the better adjustment of children and to help them to prevent maladjustment.
- To study the educational significance and the control of emotions.
- To give an understanding of the principles and techniques of correct training.
- To provide tools to teachers to measure obiletices interest and attitude to adapt better in the classroom.
- To socialize man and modify the behavior of children through the experiment and researchesconducted in the clinic and the class rooms.
- To provide new learning experience to the teachers.
- To provide more satisfaction and security to learners in the classroom.
- To improve teaching –learning process through feedback mechanism.
- Nature and Characteristics of Educational Psychology As an applied science, educational psychology deals with human behavior in setting education for the purpose of increasing the rate of learning. It is a science in the sense that it studies behavior in an objective manner and the predictions made by it are reliable. It is also an art because behavior is modified and molded in the direction of pre-determined standards. Science and arts (nature) of educational psychology are discusses as follows:
 - 1. It studies human behavior by applying scientific principles and theories and thus results obtained are objective and reliable.
 - 2. It studies human behavior in teaching –learning environment and the purpose is always to increase the rate of learning. This makes educational psychology an art.
 - 3. Why an individual behaves in particular manner and under what conditions behavior will be desirable. The study of these aspects makes educational psychology a positive science.
 - 4. It helps in developing new teaching strategies and techniques. This makes educational psychology an applied science.
 - 5. The principles of educational psychology and its theories are universal. It can be applied to any place and it any time under similar situations.



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This nature of the subject makes it a pure science.

- 6. When we study casual factors of particular behavior, educational psychology becomes a science again.
- 7. The principles of educational psychology and its theories are universal. It can be applied to any place and at any time under similar situations. This nature of the subject makes it a pure science.
- 8. When we study casual factors of a particular behavior, educational psychology becomes ascience again.
- 9. A number of learning theories have been developed in educational psychology on the basis of experimentation on animals. Then these results are applied to human beings. This approach is again scientific.
- 10. All the findings of educational psychology are based on certain limitations. This makes its scopevery wide.

§ Scope of educational psychology

Educational psychology is applied to the teaching-learning process of an individual from birth to death. This makes the scope of the subject very wide because education is a life long process full of many complexities and contradictions. All the time researchers are trying to reduce and eliminate these complexities, which increase its scope more than ever.

- (1) Study of development stages: it is essential for the teacher to study the process of growth and development of an individual and to know how an individual grows and develops.
- (2) Study of individual differences: Educational psychology helps to understand individual differences. No two persons or individuals are alike. They differ in various dimensions of their personalities, abilities, and capabilities. so the study of individuals differences is the scope of educational psychology.
- (3) Study of behavior: it is through the study of Educational psychology that the behavior of the childin different learning situations can be identified. The



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emotional, social, physical, and mental behavior of the child in different situation of learning can be studied with the help of Educational psychology.

- (4) Guidance and counseling: another area of Educational psychology which is emerging is the area of educational guidance and counseling. In order to become a good guidance worker and counselor, the knowledge of educational psychology is very essential for the teacher.
- (5) Study of personality: Educational psychology helps to understand the different dimensions of the process of the development of personality of an individual and defects in the personality can also be studied.
- (6) Measurement and evaluation: An important area of educational psychology is the area of measurement and evaluation. Educational psychology provides new and effective techniques to measure and evaluate interest, attitudes, personality etc of students. Total process of learning therefore, has to be studied with references to the principles of education and psychology.
- (7) Condition of learning: Educational psychology makes a major contribution to study the conditionof learning. The condition of learning can not be ignored in this scientific age. Total process of learning therefore has to be studied with references to the principles of education and psychology.
- (8) Group dynamics and group behavior: the study of group dynamics and group behavior also comesunder the scope of educational psychology because a studentslives in the group, learns in the groups and plays in the group .a child not only affects but also affected by the group behavior. The area of guidance and counseling finds its place in the contents of educational psychology.
- (9) Adjustment: The process of adjustment of the students is a wide area and the subject of educational psychology can not ignore this fact. The problem of maladjustment whether inside or outside the school, social, or emotional, can be solved with the help of knowledge of educational psychology.



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- (10) Evaluation of teacher: educational psychology has also been found useful in the evaluation of teachers. It gives information about the different techniques and methods of evaluations, which may be helpful in evaluations of the teachers.
- (11) Research: educational psychology and Research are related fields. The researcher in both the fields ultimately affects education in order to conduct researches in education and training, the principles of educational psychology are applied.

§ Indian Thinkers

- -Swami Vivekanand: He gave his view in the following words: You cannot teach a child to grow; you can only help him to do so. A child teaches himself. The external teacher only offers the suggestions which process the internal teacher to work to understand things. At one of his lectures he stated that _Like fire in a piece of flint, knowledge exists in the mindsuggestion is the friction which brings it out.
- -Sri Aurobindo: He was one of the opinions that education to be complete must have 5 principal aspects relating to 5 principal activities of the human being: the physical, the vital, the mental, the psychic, and the spiritual. He further says -The discovery that education must be a bringing out of the child's own intellectual and moral capacities to their highest on the psychology of the child. Nature is a step forward towards a more healthy system."
- -Rabindranath Tagore: The staunch supporter of naturalism wrote, We should know that the great task of our educational efforts in our institution is to provide for the education of the mind and all thesenses through various activities. -He was of the view that if a child is close to nature (internal or external) he is more likely to become the superman.
- -Gandhiji: The great Indian leader and philosopher were of the view that basic education given to a child is very much close to his psychology. HE wrote, _I hold that true education of the intellect can only come through a proper expertise and training of the bodily organs, for example, hand, feet, nose, eyes, etc. .In



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other words, an intelligent use of the organs in a child provides the best and quickest way of development of his intellect. However unless the development of the mind goeshand in hand with a corresponding awakening of the soul, the former alone would prove to be a poorlop sided affair.

He further stressed at one place, -In my scheme of things, the hand will handle the tools before it draws or trace the writing. The eyes will read the pictures of letters and words as they will knowother things in life, the ears will catch the names and the meaning of things and sentences. The wholetraining will be natural, responsive, and therefore the quickest and cheapest in the land.

▼ Significance of Educational Psychology

You don't just have to be a teacher; you have to be an effective teacher. A question that naturally arises in your mind is how can the principles of educational psychology help me become an effective teacher? The answer depends on your ability to learn and apply the skills, knowledge, and principles derived from educational psychology research.

A teacher's intelligence and personality are less useful than the skills he uses in the classroom to be successful as a teacher (Brophy & Goode, 1986; Evertson & Smiley, 1987). A Teacher Educational Psychology course enables teachers to perform the following tasks.

Developing thinking skills: The purpose of social media is to develop various thinking skills such as critical, decision-making, creative thinking in students. To develop such skills the teacher needs to have knowledge of meaningful learning, information processing, language development etc. (Meaningful learning occurs when the student can connect prior knowledge with new knowledge) The learner must organize his new knowledge in such a way that he can use it consistently in learning new material. All this becomes possible only when the teacher organizes his teaching-plan using the research findings in educational psychology.



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Formation and motivation of self- concept: In addition to developing the thinking skills of the student, the teacher is to inculcate in the student an attitude of cooperation rather than competition; Establish rapport with the student, treat them freely and easily, so that the teacher feels warm and enthusiastic. He has to organize such activities throughout the years so that a true self-concept develops in the student. A student's positive self-concept increases his or her ability to achieve high in class. A teacher can use knowledge of educational psychology to enhance student learning, meet individual needs of students, develop interest in learning, and learn about their own behaviors.

Managing the classroom environment: An effective teacher's classroom is happy, orderly and productive. A teacher should be very sensitive about what is going on in his classroom. Disciplinary issues can be avoided only if he can manage the activities of different students simultaneously. Bandwara (1977) states that the teacher himself can be a role model for the students, observing that the students can learn to work joyfully and cooperatively.

Pedagogy: The teacher should tell the student exactly what he/she is going to do in the class before teaching. If the teacher succeeds in this then the student is ready to learn in the class and concentrates well in the study. At the same time, the teacher has to think about where to start teaching for each student. Brophy and Goode (1986) state that a teacher with knowledge of educational psychology prepares his teaching according to the level of the students, adjusts individualized instruction where necessary and moves at an appropriate pace. It offers something for every student. Learning appeals to every student, as the content presented is suited to everyone's ability.

Evaluation of teaching: A teacher's teaching is considered good when it is carefully evaluated and modified accordingly. Educational psychology offers measures, tools and skills to assess how well a student learns. By using these tools and skills, information about the quality of student learning helps teachers improve their teaching-learning process. The feedback received through carefully conducted assessment helps the student to improve his/her learning a lot.



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Needs of exceptional children: Every child has a different pattern of physical, mental, emotional, social, linguistic, moral etc. developmental characteristics as well as personality and adaptations. According to this variation, the needs of each student are different. Failure to meet these needs leads to disciplinary issues and enforcement issues. Educational Psychology - A teacher who knows his form tries to understand developmental stage of each child and adjusts his treatment accordingly.

1.3 Concept of growth:

The fusion of reproductive cells causes continuous changes in the embryo from the time of fertilization. These changes are of two types: one is known as growth and the other is known as development. Both these changes are fundamentally different. We will discuss each separately.

The union of the female reproductive cell with the male reproductive cell in the uterus results in the formation of the ovum. A new life begins with this process of fertilization. A continuous process of bifurcation produces multiple cells from the fruit. The number of these cells increases precisely. As a result, the specific shape of the human body is fixed. After that, each organ also increases in size, shape, weight, length etc. Thus the change in size, shape etc. of the embryo due to 'cellular' multiplication is called growth.

The growth characteristics are as follows:

- 1. A growth occurs in a part or organ of the body. There is a gross change.
- 2. Growth is the result of cell multiplication.
- 3. 18 or 20 years in girls and boys. It stops at 21 or 22 years.
- 4. It can be seen externally in the body. There is a change.
- 5. It can be measured by physical measurement method
- 6. It is a numerical change.

Definition of Growth:

1.Growth and development are usually used as synonyms. However, according to this psychological definition, muscles, bones, heart, weight, body size and shape increase with age.



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2. Growth means increase. A person's body size, weight from pregnancy to adulthood.

∨ Concept of development

Development is a series of changes that occur as a result of maturation and experience. Growth is not just a few inches in height or an improvement in strength. It has many structures and there is a complex process that coordinates functions. After the beginning of the fetal stage, there are many changes that cannot be observed externally in the form of length, weight or height, Such as, after birth infant moves hands and legs is reflex action but after action with the environment, it is the purposeful vehicle of this dongle, the ability to grasp things, to speak words, to solve problems by thinking in a certain way, to make decisions about how to grow. Thus the changes in the functional capacity of the various organs of the child are known as development.

Features of development are as follows:

- 1. Development is a change in size, shape or structure that improves or alters the function of the body or its organs.
- 2. It is the integration of functions of various organs as a result of growth and differentiation. Thus, development is based on growth.
- 3. It is a series of evolutionary changes occurring in a systematic and coherent manner. Each change is dependent on its predecessor changes and itself influences subsequent changes.
- 4. It is an internal process.
- 5. It is a change caused by a change in the chemical structure of the body.
- 6. It is a continuous process throughout a person's life.
- 7. It is a qualitative change.
- 8. It becomes necessary to use psychological instruments for its measurement.
- 9. It follows a specific schedule.



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- 10. A child's slurred speech disappears; spontaneous crying becomes less, impulse control replaces tantrums, frank behavior is replaced by calculated behavior, etc. are examples of development.
 - ▼ Principles of development:
 - 1. The pre-pillars are more important:

How successfully a person adapts to life as he grows older is determined by the variables, habits and behavior patterns developed in his early years. "Many child psychologists have said that the preschool years, from about two to five, are among the most important, if not the most important, of all the stages of development, and a functional analysis of that stage strongly points to the same conclusion. It is unquestionably the period during which the foundation is laid for the complex behavior structures that are built in a child's lifetime." - BiJou (1978)

According to Erikson (1947), a person develops attitudes of trust or distrust in infancy, and this depends on how parents satisfy his needs for food, attention, and love. A person maintains these attitudes, continues throughout life, and plays an important role in his or her perception of people and situations. Three conditions can bring about a change in this pattern: (1) Help and guidance to bring about this change. (2) When a particular person is treated in a new and different way and (3) when the person himself has a strong motivation for that change.

Knowledge of these pre-developmental cornerstones can help parents and teachers accurately predict a child's future development. For example, a quiet, introverted child is unlikely to develop into an extroverted child. A child who is not interested in school or school activities may not develop into a gifted student.

2. Maturation and learning play an important role in development: Maturation is the act of expressing the basic qualities of an individual. Certain functions common to human beings such as sitting, kneeling, standing, etc. can be developed as a result of maturation. The contribution of education in the form of training is negligible. Maturation provides the raw material for learning and



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determines the more general pattern and range of behavior.

- 1. Humans are capable of learning, so variation is possible. Personality, attitude, aptitude and behavior are the result not only of maturity, but of maturation and learning.
- 2. Maturity determines the extent of development, beyond which no further development can occur. This limit cannot be crossed even with a very good studymethod and strong motivation.
- 3. There is a definite schedule for studies. A child cannot learn until he is ready to learn what he has to learn. Readiness for learning determines the moment when learning can and should happen. Harris (1960) notes that, indeed, it is possible that a person who comes late to training never realizes his maximum potential.
 - 3. Development follows a definite and predictable pattern:

A person has a definite pattern of development in the areas of physical, mental, language,

Intelligence etc. For example, physical and neurological development follows two laws:

- 1. Growth throughout the body extends from head to toe.
- 2. Growth throughout the body develops outward from the central axis to the extremities.

If environmental conditions do not impede, the developmental pattern remains the same for all individuals is For example, every infant crawls, crawls, and then walks upright. Interest in a person of the opposite sex arises when the changes related to sexual maturity are completed.

4. Each individual is different from another:

Dobbs (1973) states that each individual is biologically and genetically similar to another individual, and this difference diminishes as the individual moves from one state to another.

Newgarten (1969) notes that, "A are not only much more complex children but they are more different from one another, and increasingly different as they move from youth to extreme old age because of this variation among individuals, no individual can be expected to respond identically to a single environmental



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stimulus. A temperamental child will respond differently than an aggressive temperamental child.

No two individuals are identical in heredity and environment, so even with complete information about their abilities, and knowledge of how the average person would behave in that situation, it is impossible to predict with certainty how an individual will respond to a given situation, nor can two individuals of the same age have Neither the same achievement nor the same intellectual development can be expected. These individual differences also play an important role in determining personality traits. These individual differences make people intelligent, as well as social progress.

- 5. Each stage of development has specific behavior-patterns:
 Specific behavior-patterns of development can be noted during periods of equilibrium and periods of disequilibrium. The period of equilibrium, he considered, is when the individual becomes easily adapted to environmental demands and consequently achieves good personal and social adaptation. It is considered, when an individual experiences difficulty in adapting to environmental demands and results in poor personal and social adaptation. It is acknowledged that one stage during development has more difficult behaviors than another, but if the behaviors are viewed by adult standards, there is no stage where there is no 'behaviour problem'. Indeed, when a person's behavior is specific to a particular age, and leads to poor adaptation, it can be considered a behavior-problem. Most of the difficult, antisocial, and difficult-to-understand behaviors found at different stages of a person's development disappear as the person grows older and are replaced by other, more difficult-to-understand behaviors.
- 6. Each stage of development has constraints: Many studies suggest that each stage of life has physical, psychological or environmental constraints associated with it, leading to adaptation problems. It affects his personal and social adaptations.
- 7. Development can be aided by stimulation: Most development occurs in the context of maturational and environmental experiences, so efforts can be made to aid development so that it can reach its



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full potential. This can be done by directly encouraging the individual to use the strengths involved in the development process. This stimulation is more effective when given at a time when the strength is developing. However, it is important at all times.

Parents who talk to their infants and preschoolers have a stronger motivation for their children to learn to speak earlier. Likewise, neural skills develop earlier and better if neural activity is stimulated in the early years.

8. Development is influenced by cultural variables:

A person's development is shaped or molded according to cultural norms and standards. Hence changes in these norms affect developmental patterns. For example, in the past, standards for boys' developmental stages differed from those for girls. While parents and teachers were expected to mold children's behavior according to accepted norms, now some elders insist on traditional gender roles, while others accept the same norms for both. The problem for the teacher is to develop the children's behavior patterns according to the standards he has set.

9. Development has social expectations:

Havingharst termed it as developmental tasks, according to which developmental tasks are the tasks that a person can do at a particular stage of his life. Successful completion of this task gives one pleasure and helps to succeed in subsequent developmental tasks. is; Failure to do so creates pain in the individual and makes it difficult to succeed in later developmental tasks. Some functions develop as a result of maturation, such as learning to walk, while others develop as a result of social pressures; Like learning to read while some develop as a result of personal values and aspirations; Like choosing and preparing for a profession, developmental tasks arise in most cases from the combined effect of these three factors. The developmental functions of each stage are discussed in detail next.

- 10.Development is gradual: There is no change that happens overnight. The student learns
 - To hold a pencil, learns to answer questions; But it needs time.
- **∨** Difference between Growth & Development:



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	Growth	Development
1	Growth is only a physical	A combination of physical and
	phenomenon.	mental changes occur
2	Based on inheritance.	Depends on both heredity and environment.
3	Growth stops as the organ matures.	Development is a lifelong process.
4	Has an indirect relationship with behavior.	Has a direct relationship with behavior.
5	Growth takes place within certain limits.	The growth potential is huge.
6	It is a natural process.	Is a complex process.
7	A measure of size is growth.	The measure of action is that development.
8	The result of growth can be felt immediately.	Development can only be experienced through behavior.
9	Indicates a change in any part of the body.	Indicates a holistic change.
10	Measuring growth is easy.	Use of special tools and
	LON LOND	techniques to measure
		development have to do
11	Maturity of body parts is achieved at	At the end of development one
	the end of growth.	learns through experience.

▼ Factors affecting growth and development:

Growth is natural and automatic process but development is planned and deliberate efforts to bring desirable changes among children. The pattern of human growth and development is mainly determined by the genetic as well as environmental factors. Growth and development is the result of an inseparable mixture of heredity and environmental factors. It has been discussed below:



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- 1. Heredity factors:- The heredity or genetic factors determine the potential and limitations of growth and development. Heredity in the form of genes and chromosomes determine the growth rate of a child. It is believed that the size and shape of body, colour of eyes skin and hair, nervous system etc. are deeply influenced by the heredity system.
- 2. Environmental factors:- Environment in which an individual is born and brought up determines the pattern of growth and development largely. Environment is everything except his/her genes. These factors give direction to the genetic potential of growth and development of an individual. Environmental factors like climate conditions, nutrition, social, economic conditions, emotional support, opportunity of play, language training etc. affects the development and growth of a child.
- 3. Gender:- The gender of the child is a very common but important factor affecting the physical growth and development of a child. The growth pattern of girls and boys is quite different like boys tend to be taller and physically stronger than girls on the other hand girls tend to mature faster during their adolescence than the boys.
- 4. Hormones:- You must be knowing that hormones belong to the endocrine system and influence the various functions of our bodies. Hormones secreted from different glands that are situated in specific parts of our body and control many of our body functions. The proper functioning of these hormones plays a major role in the normal physical growth and development of the children. If these hormone-secreting glands cannot function properly, children may suffer from growth defects, obesity, behavioral problems, and some other diseases.
- 5. Nutrition:- Growth and development is also highly depend ed upon nutrition. A proper balanced diet and nutrition leads to normal growth of a child. Thus availability of healthy diet like protein, vitamins, amino acid, zinc, calcium etc plays a major role in the development and growth of a child.



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6. Socio Economic & Cultural Factors:- Economic, social and cultural factors also highly influence in the growth and development of an individual. Different socio-economic & cultural backgrounds lead to differences in psycho- physical development of an individual with different rate of growth maturation and development.

In fact, a constant and complicated interaction of genes, hormones, nutrition and other environmental factors throughout the lifespan influence the process of growth and development. In humans, the Growth Hormone is known as Somatotropin. Plants also contain such hormones called Auxins, Gibberellins, Cytokinins, Ethylene, Abscisic acid. These are also called Plant Growth Regulators.

 Stages of Human Development: Characteristics and Educational Implications

1 PRENATAL STAGE: (Before birth to born)

- **ü** The entire period of prenatal until the birth of the child is considered to be about nine months before the birth.
- ü The growth of a skilled person is very difficult.
- **ü** The essence of the physical growth that takes place in this state rests on the old vader of the mother.
- **ü** Both female and male have 46 likerencell chromosomes arranged in 23 pairs, compared to 22 pairs of chromosomes in seeds. There is a difference between the two in terms of key.
- **ü** The twenty-second chromosome pair of a cut contains one vote and only x while that of a female.
- **ü** A sperm contains 1 chromosome. At the time of implementation, both of them should be presented from the ready
- **ü** A boy is born when the male's twenty-third pair of chromosomes and the female's combine with the chromosome.
- 2. INFANTILE STAGE: (Born to five-six year)



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- **ü** This stage is also called the infantile stage, as this stage is considered to be the period from the birth of the child to the age of five or six years.
- **ü** The physical growth of the child is rapid in this state.
- **ü** In this state the child needs another person in all matters.
- **ü** Mental and social development of the child in this stage itself Follow-up of the child during this stage.
- ü Curiosity and creativity are revealed.
- **ü** During infancy the child interacts with household members about establishing relationships and recognizing sexual differences Consciousness is cultivated.
- ü A child's physical growth is rapid.
- Symptoms of Infantile stage:
- ü Infants have a very flexible mind.
- ü In this stage the child is more imaginative.
- ü Children's behavior is trying to satisfy their needs.
- ü The behavior satisfies his needs and makes him frequent behaves happily.
- **ü** It could not adapt to the surrounding environment.
- ü It is easily affected by the external environment.
- ü Good thinking and judgment is lacking.
- ü In this state, children imitate each other.
- ü It lacks discipline.
- ü There is narrow selfishness in him.
- **ü** He is dependent on others for his physical needs.
- ü They are ignorant of the reality of the world.
- **ü** In this state, the child's behavior is impulsive.
- ü Children in this state curiosity are strong.
- ü It is easily influenced by the outside world.
- 3. CHILDHOOD: (6 to 12 year)
 - **ü** The time span of this stage is considered to be from five or six years to twelve years.
 - **ü** During this stage the child's endocrine glands become functional and social qualities related to group spirit develop.
 - **ü** The pace of physical development is seen to be slow, while that of gesture-



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gestural development happens quickly.

- **ü** The child forms gangs by making street friends and hoarding becomes stronger.
- **ü** In this state, the child talks about his teachers-friends rather than family members
- ü Trust more.
- ü Reading, writing and many other skills in a child during childhood.
- **ü** Physical development in this stage is a little mantra. stability in physical development is achieved.
- **ü** Its endocrine glands become active, development is accelerated.
- **ü** His curiosity is awakened, his reasoning power develops.
- ü His sociability also develops.
- **ü** Adolescence is a stage of illusory maturity. A ten-year-old teenager has as much stability as a grown man.
- Symptoms of childhood stage:
- ü Physical development is rapid. Height increases, weight increases.
- ü Head growth increases by 95%.
- **ü** There are 350 bones and 32 permanent teeth.
- **ü** Children in this stage understand the cause-and-effect relationship.
- ü He prefers to stay outside the house for 5 to 6 hours.
- ü He does not like advice or advice from anyone.
- ü There is no special attraction towards persons of the opposite sex.
- ü His hoarding becomes stronger.
- ü It stores pictures, writings or other objects.
- **ü** A longing for freedom awakens in him, so his fighting instinct also becomes strong.
- **ü** He becomes a rebel against the bonds and a sense of hero-worship or person-worship arises in him.
- **ü** Attracted to a great player leader or actor.
- ü His curiosity gets stronger.
- ü Loves to learn and hear new things.
- ü It becomes extroverted.
- **ü** The magnitude of the intensity of the impulses is seen to decrease.



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- ü His shoulders widen.
- ü Heart rate drops from 100 to 85.
- **ü** His mental development is accelerated.
- 4. ADOLESCENCE (12 to 18 years)
 - **ü** The condition is known by different names like Tatunavstha or puberty.
 - **ü** This stage begins at age 11 or 12, and lasts from 19 or 20.
 - CHARACTERISTRICT OF ADOLESCENCE:
 - (1) Physiological:
 - ü Rapid physical growth and changes occur during puberty.
 - ü Maturity occurs in a person taking shape due to endocrine changes.
 - ü This is directly related to sexual disorders.
 - (2) Psychological:
 - **ü** Progress towards mental, intellectual and emotional maturity takes place during this time period.
 - **ü** Adolescents begin to show adult-like independence tendencies during this period.
 - **ü** It is during this period that the young man experiences strong sexual impulses for the first time.
 - ü Try to define their relationship with the opposite sex.
 - ü This period is considered to be a psychologically stressful and crisis period.
 - (3) Socio-Cultural:
 - **ü** Some developments result from the interaction with the current sociocultural environment.
 - **ü** Redefining social relations begins here.
 - (4) Adventure activities and accidents:
 - **ü** During this time, most of the youths are ready to do adventurous activities.
 - ü Accidents happen so quickly even during puberty.
 - **ü** Strains due to double standards in family and society.
 - **ü** A dilemma arises in the mind and because of it a complete state.
 - **ü** Families and schools do not allow adolescents to be active and self-reliant, resulting in low self-confidence.
 - (5) Duality and Union:



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- **ü** Family and society do not get proper place due to low awareness about adolescence stage in society.
- **ü** In today's competitive age, people have grown increasingly impatient with the vinegar of standards, while the West is over-psychological.
- **ü** Feel the pressure.
- (6) Defiant behavior:
- **ü** Defiant behavior 1 towards destructive activity when depression prevails in youth takes own behavior.
- **ü** Sometimes they consume drugs and sometimes they try to commit suicide due to extreme depression.
- (7) The activity of new knowledge:
- **ü** In this state, to discover the secrets of the world and willing to know.
- **ü** As a result those experiments towards which is motivated.

5. YOUTH:

- ü The youth, i.e. the onset of puberty, takes place after 20 years.
- **ü** Thus, this entire period can be considered from 30 to 40 years, in this case physical interest is easily fulfilled.
- Characteristics of Youth:
- ü Has physical development.
- **ü** Physical and mental maturity is to be seen.
- ü Social qualities are developed in the train.
- **ü** Attempts to achieve social adjustment or adaptation.
- **ü** Certain ideals and values become prominent in his life.
- ü An entrepreneur is born in him
- **ü** Willing to undertake ventures becomes choosing a partner.
- **ü** Any person in this age to live his own life and gets ready to get married and he gets married.
- **ü** Husband and wife learn to live together.
- ü Raising a child
- ü Driving home Joining a business



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ü Carrying out duties as a citizen.

6. ADULTHOOD:

Duration of this stage is 40 to years.

A person is entirely concerned with physical development and social development.

Achieves reaching perfection in every task.

In this state he is in the process of attaining a willingness of reputation.

- Characteristics of Adulthood:
- ü His sexual propensity slows down.
- ü His enthusiasm is reduced.
- ü In this state he becomes more social.
- ü Seeks more social security.
- **ü** He tries to maintain social prestige by adapting more and more with his family and other members of society.
- **ü** Taking social and civic responsibility.
- ü To maintain a standard of living commensurate with economic status.
- ü Helping children to be responsible and happy.
- **ü** Turning to appropriate activities during free time.
- **ü** Maintaining good relations with elderly parents.
- 7. Old Age: (Up to 60)
 - ü The period after 60 years is considered as old age.
 - **ü** In this stage a person's physical and mental strength begins to wane.
 - **ü** His senses become educated.
 - ü His memory slowly fades.
 - **ü** In this state a person becomes introverted.
 - **ü** In this state, sometimes a person feels confused in maintaining balance with family or society.
 - Symptoms of old age:
 - ü Their sense powers are reduced.
 - $\ddot{\textbf{u}}~$ The immune system of the elderly and the elderly is Ray.
 - **ü** Their mental powers become weakened.



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ü They have a dissonance in their ideas with the new generation.

1.4 MEANING OF ADOLESCENCE:

- **ü** The condition is known by different names like Tatunavstha or puberty.
- **ü** This stage begins at age 11 or 12, and lasts from 19 or 20.
- **ü** Puberty is the time of the formation of future youth power, the flowing time of hopes and dreams.
- ü Age is known by different names like puberty or puberty.
- **ü** Also known as the transition period, puberty is a period of struggle, depression and confusion.
- **ü** Psychological guidance is needed at this time.
- DURATION OF ADOLESCENCE STAGE:

Ø PRE-ADOLESCENCE STAGE:

- **ü** Age of girls 11 to 12 years and age of boys 13 to 14 years is called preadolescence stage.
- Ø INITIAL ADOLESCENCE STAGE:
- ü Age of girls 13 to 14 years and age of boys 15 to 16 years is called initial Adolescence stage.
- Ø MIDDLE ADOLESCENCE STAGE:
- **ü** Age of girls 15 to 17 years and age of boys 17 to 18 years is called middle Adolescence stage.
- Ø LATE ADOLESCENCE STAGE:
- ü Girl's age 18 to 21 and boy's 19 to 21 years is called late adolescence stage.
- Adolescents can also be divided into two main substances:
- ü 11-12 to 13-14 years (puberty, early Adolescence)
- ü 13-14 to 17-18 years (Late Adolescence)
- Umashankar Joshi about adolescence:
- 1) Physical Development:
- **ü** Growth in height and body shape.



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- ü Primary and secondary sexual qualities.
- ü Distribution of body fat.
- 2) Mental Development:
- ü Development of intelligence.
- **ü** Heterosexual attraction.
- ü Awareness of social responsibility.
- ü Confusion Mental turmoil and conflict.
- 3) Health behaviors:
- ü Greater awareness of body and appearance.
- ü Venture to plow risks.
- ü Smoking, drinking and drug use.
- 4) Sexual Behavior:
- ü Production of secretions.
- ü Greater attraction to the opposite sex.
- ü Sexual function.
- ü Sexual dreams.
- ü Dreaming in boys, romantic thoughts in girls.
- Physical development and change:
- ü Physical development continues from 12 till to 20 years in this stage.
- **ü** During this state, the body has developed arthritis at some point which leads to a kind of confusion of adolescences, trying to find solutions.
- **ü** Thirst is more than the impulse in the body, lasso is obtained in dilution.
- **ü** Rejuvenation is the finalization of body shape, size and shape. Internal organs of the hands and feet.
- **ü** Development is maximized.
- **ü** Males have a softer, darker voice, while female voices tend to be softer and Males have a softer, darker voice, while female voices tend to be softer and slower.
- **ü** Maturity occurs in the person taking; who's sexual is directly related to.



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- Emotional development:
- Social development:
- **ü** Social relations begin to be redefined.
- **ü** In this state, the youth wants to accept his personality and ideas, but he does not find the restrictions imposed by his parents suitable.
- ü Leadership qualities develop in this state.
- **ü** In this state the youth is adventurous, athletic and fearless trying to be.
- **ü** Girls make a new effort in this state are smart, extroverted and well-composed.
- **ü** In this state he chooses a friend of the opposite sex himself.
- **ü** Instead of looking at the behavior of boys and girls towards the opposite sex with suspicion, efforts should be made to develop a healthy outlook on this matter.
- Intelligence development:
- ü Physical development reaches maturity during this stage.
- **ü** Try to implement new ideas and modern methods doing.
- ü Strength and focus develop.
- ü Develops creativity and e-creation the corresponding dark.
- **ü** Parents feel pressured due to increasing expectations of parents.
- Ethical and religion development:
- **ü** In this state, religion falls into activities connected with religion.
- **ü** In this state, the society tries to follow the rule of the culture.
- **ü** Men and women want to understand rather than accept their family's religious practices.
- **ü** Instead of accepting religion, they seek to understand and understand it becomes curious to know.
- **ü** Moral values like truth, non-violence, courage, honesty, compassion, etc. are developed.
- **ü** During this stage, it is necessary to teach different religions in schools, not formally, but directly or indirectly.



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- Reading Development:
- **ü** Love and factual books are to be read during this stage.
- **ü** They like to read news related to newspapers, sports, movies.
- ü Prefers to read business oriented books.
- **ü** Literature is also inspired by art writing, etc.
- ü on different subjects according to their personal taste reads books.
- Sexual Development:
- **ü** During adolescence, major biological as well as psychological developments take place.
- **ü** Development of sexuality is an important bio-psycho-social development, which takes an adult shape during this period.
- **ü** During adolescence, an individual's thought, perception as well as response gets colored sexually.
- ü In the presence of a person of the opposite sex in a young woman in state
- ü Symptoms like being excited are seen.
- **ü** Take special care of your face and face in the mirror frequently.

∨ Problems Of Adolenscence:

I. Physical problems:

- **ü** During the stage, girls compare their appearance and body with others, similarly weight, height, hair, body parts shape are compared with other girls.
- **ü** Feeling confused due to physical changes during this stage.
- **ü** Embarrassment, confusion, and fear are allowed when adolescent girls experience menstrual bleeding.
- **ü** Meanwhile this young women feel weak, confused without proper guidance.
- **ü** Suffering from hypothyroidism due to inability to adapt.

II. Social problems:

- **ü** A longing to be freed from social bonds.
- **ü** Adjustment problems with members of family.
- **ü** Conflicts with parents and elders.



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- ü Intergenerational gap.
- **ü** Aversion to traditional traditions and systems.
- ü Religious and dubious attitudes towards social beliefs.
- **ü** Do not want these social controls and constraints.
- **ü** The longing for magical freedom becomes stronger in them.
- ü they want acceptance in society.
- **ü** Between the constant control of Law and the constant advice they give feels thunder.
- ü Hence, a gap arises between the two generations.
- **ü** Adolescences who cannot adapt socially to the situation, run away from the society and sometimes resort to lionism.
- **ü** Real teenage girls living under the controls unable to find a way out of the situation, one becomes depressed and various problems arise from it.

III. Sexual problems:

- **ü** Individuals with this condition experience strong sexual urges.
- **ü** In this state, the development of their sexual organs awakens in them the desire for sexual satisfaction, but they cannot feel the satisfaction of sexuality due to social restrictions and rules.
- ü Hence, they find different ways for sexual satisfaction.
- **ü** They want a heterosexual minister.
- **ü** They develop a strong longing for the companionship of the opposite sex, yet with social norms in the way, they seek unsuccessful avenues for sexual gratification.
- **ü** They fall victim to some taboo concepts about sexuality.
- **ü** Menstruation or menstruation begins in girls of this stage.
- **ü** Hence, they feel confused. If proper guidance is not given in this regard, they suffer from sexual problems.
- **ü** Sexual problems become confusing in persons of this condition.

∨ Educational implications of Adolescence:



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- 1. Education system for physical development:
- **ü** Teachers should provide theoretical guidance on corresponding physical matters physical changes during puberty.
- **ü** Provision for adequate exercise and sports equipment and other facilities in the school.
- **ü** Adolescents and young women of sufficient physical ability of the above studies to be able to attain them about how they can make the most of it must inspire.
- 2. Religious Educational:
- **ü** Instead of accepting the religious practices of their family, they desire to understand them, in that they become curious for a religion that they understand.
- **ü** For this, it is necessary to teach general religion in schools directly or indirectly, not in the formal way of different religions.
- 3. Education system for mental development:
- **ü** Excellent for proper mental development academic education should be imparted in school.
- **ü** For this, special care should be taken for proper mental development by giving individual attention to each student.
- **ü** Psychological tests should also be used frequently to measure his mental development, so that the extent of his mental development can be known.
- **ü** Apart from this, special co-curricular activities should also be provided to him for proper mental development.
- 4. Education system for social development:
- **ü** To establishment various communittees according to their interests.
- **ü** should be given to different societies in the school and through it for the social development of opportunities.
- **ü** The treatment of boys and girls towards the opposite sex rather than watching, they should develop a healthy outlook on this matter.
- 5. Education system for emotional development:
- **ü** If only visual punishment is administered to maintain emotional balance, it is less likely to be successful.



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- **ü** Instead, activities that reinforce their instinctive tendencies will not only relieve tension, but also free up their energies.
- **6.** Education according to individual differences:
- **ü** No two persons can ever be exactly alike. Therefore, as far as possible, the taxpayer should personally know and monitor his behavior.
- 7. Teaching methods:
- **ü** The mental powers of girls and young women are constantly developing.
- **ü** Since instead of teaching them only by lecture method, they think self-motivated self-discovery, questioning various methods should be tried like arrival method.
- 8. Gift of talent:
- **ü** Often teenagers and young adults are the path of their future life crash and get stuck in the world of waves.
- ü Scholars who have achieved achievements in various fields should be introduced to the learners on occasion.
- **ü** So that those learners are inspired to develop the same image by adopting a statue like scholars according to their ideal.
- 9. Behavioral learning system:
- **ü** Behavioral learning is an affordable but expensive weapon of educational vision for the teacher.
- **ü** If any important achievement is achieved by the young men and women who are exemplary and exemplary, then they should be encouraged by giving them prizes and also public appreciatio.
- 10. Arrangements for sex education:
- **ü** Proper sex education should be provided in schools so that young girls do not develop distorted thoughts and ideas about sexual impulses due to sexual organs.
- 11.An intuitive learning system:
- **ü** He often feels very confused by his circumstances that he does not understand and his own behavior patterns that he did not anticipate in that context.
- **ü** If he is reprimanded by his elders while coming, sometimes he gets angry, sometimes he gets depressed.
- ü Hence, instead of scolding or scolding him for his strange behavior, he



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should be given sympathetic understanding.

- 12. Cushite freedom:
- **ü** Young women and girls could not accept the teachings of others or countries as they were.
- **ü** Hence, instead of forcing them to strictly follow such teachings or commands, they should be given free rein to think and provide enough context to come to a conclusion on their own.
- **ü** If the freedom given to them seems to be slipping away into luxury, it is equally important to keep proper control over them.
- 13. Professional guidance:
- **ü** Young men and women are naturally their own price business this year becomes concerned about.
- **ü** They want to be certain by taking some decision about this in time and want to get toy achievement in the business they venture into.
- **ü** Adequate arrangements should be made to provide guidance in this regard in educational institutions.
- 14.Co-education:
- **ü** It is natural for young men and women to experience heterosexual attraction as a result of strong sexual development.
- **ü** If at this stage they are pushed away from the opposite sex at school, there is a possibility of becoming biased towards.
- **ü** Co-education is natural and frees students from prejudices is a suitable step.



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2.1 Piaget's Cognitive Development Theory:

Ø Introduction of Jean Piaget:

He was born on 1879 in Newey, Switzerland. History of his ha creen literature. Teman Mata was dynamic, intelligent and religious in nature, but mentally a little disturbed. Hence the family life was shattered. This mental state of his led Pierre to be initially interested in psychoanalysis. Pichai's role model was the Swiss scholar Samuel Cote, who instilled in Piaget an interest in philosophy and epistemology. Pierre had only the knack of systematically working out the smallest details from his parents. He achieved one achievement after another very quickly. At the age of just fifteen he published his first scientific paper, and at the age of 22 he received his Ph.D.

31 universities of the world, including Harvard, recognized his services by awarding him honorary doctorate degrees. Received eleven international prizes besides Erasnos Prize (1972). He died on September 12, 1980 in Geneva, Switzerland.

Ø Concepts of Cognitive Development Theory: Piaget was originally a student of biology, but after receiving his Ph.D., he became



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interested in psychology, epistemology, and logic. Hence his field of psychology uses terminology from biology, philosophy and logic to explain his theory of cognitive development. Hence to understand his developmental theory it is necessary to understand some important terms used by him.

(1) Reflex Action:

Reflex actions are absorbed in having various reflex actions at the time of birth. These transcriptional actions are different in members of each class, when an irritant arises in the pavira, the organism automatically responds to this irritant by specific behavior. This action is known as Pratikshipt action year. Anticipatory response does not require any type of study, training or other experience with the environment. Hereditary predispositions are the mechanisms for such automatic responses. Suppose that when a lamp is presented, it activates the system and produces a response. Examples of this reflex action include sucking, crying, etc. A newborn does not have to be taught to suck, and the body structure of the newborn is such that it automatically expresses its need when it is hungry. Piaget states that reflexive actions or other automatic behaviors have no role in the development of human intelligence. Only newborns' behaviors rely on these types of transcriptional actions. Priyaj's research has shown that after a few days of life, a newborn's experiences improve reflexive actions and transform them into cognitive structures.

(2) Cognitive Structures:

Soon after birth, the baby shows behavioral patterns. As seen further, behaviors such as reflexes are caused by hereditary factors. However, such heritable factors cannot explain all behavioral adaptations of newborns.

For example, a two-month-old baby usually sucks his thumb or finger. Cover his hands when he is placed in the cradle ,his speed and ability to bring near is seen to increase regularly. This is what we call in common parlance that the baby has acquired the habit of sucking the organs. The word 'habit' implies regularity and consistency in the child's action. Thumb-sucking is not a completely inherited physical condition. Sucking on something that touches the court is a counterintuitive action. Bringing the hand to the mouth is not a basic posture. This action has to be learned. Piaget calls such a combined behavioral and cognitive structure of behavior. This cognitive structure is not fundamental, but experience is today.



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Based on the forms of knowledge, Piaget has classified two main types of cognitive structures. A person has two forms of knowledge:

- (1) Operative knowledge
- (2) Figurative knowledge

Knowledge about why to do any action is called action knowledge. Tying a shoelace, writing a paper, etc. are examples of action knowledge. Knowledge of facts is factual knowledge. Birds have wings, mammals have four chambered hearts, etc. are examples of factual knowledge.

Corresponding to these two forms of knowledge are two forms of cognitive structure:

- (1) action-oriented cognitive structure (Schemes)
- (2) factual cognitive structure (Schemata).

The cognitive structure through which a person represents knowledge for action is called an action-oriented cognitive structure. For example, after a child develops an action-oriented cognitive structure to respond to a favorite toy, when an object approaches the child, a sequence of actions such as hand movements, grasping, pulling to the mouth follows. A cognitive structure that represents factual knowledge is called a factual cognitive structure. A child and an adult preedit this type of cognitive structure differe on the basis of similar attributes to actualized events.

(3) Basic trends:

Piaggio has two fundamental values of one hypothesis (Organization) and (Adaptation). Pidha calls it the common heritage of all beings. The tendency of every living being to arrange the physical or mental parts in a particular system is described as a trait of organization. It is due to the combination of the four different organs of the body that physical systems are formed, due to which various physical actions are possible. Just as there is a tendency of physical organization. Similarly, psychological organization is affected. In order to interact with the surrounding environment, a person tends to organize his psychological or cognitive structures into a coherent system.

For example, a young child has different behavioral structures for looking at or grasping an object. Initially, both It does not associate, but after a certain period of development it organizes these two separate structures into a higher order structure, which enables it to grasp anything it touches. Or a general tendency or



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tendency to organize into systems or structures.

Adaptation or adaptation is another tendency of all organisms. Every living being has an inborn tendency or tendency to adapt to its environment. Non-species organisms have different ways of adapting or adapting to their environment. There are variations in this ghost from person to person in each caste as well as from person to person at each stage.

Two processes have been considered responsible for adaptation to the environment: (1) Assimilation and (2) Accommodation.

As we eat, our digestive system tries to digest the ingested food and mix it with the blood (digestion), but when a food cannot be digested in normal diseases, the digestive system changes its working system and digests new food (fitnessestablishment) As the child interacts with the environment around him, the cognitive structures undergo changes due to the process of manipulation and thus competence-building, which results in the child's intellectual development. From the example of digestion, it can be understood that the act of connecting new information with the information contained in the cognitive structure is the act of processing or understanding the new information in its context. When the new information cannot be integrated into or understood in the context of existing action-oriented or fact-oriented cognitive structures, cognitive structures are revised to integrate new information with existing information. This action is known as ta-yogita- the action of installation. That is, existing cognitive structures are adapted to new information.

Thus, for his intellectual development, the child on the one hand introduces features of external facts into his intellectual institutions and on the other hand modifies his existing cognitive structures according to environmental pressure. For example, when a four-month-old baby first sees a dove hanging from a crib, it uses the actions of rotation and appropriability as it tries to catch it. To catch that doodhra he has to perform a series of actions such as desi activities, moving according to the distance between himself and the toy to reach the doodhra, adjusting his fingers according to his shape to grasp the toy and tensing the muscles according to its weight etc.

That means changes have to be made. All these changes are environmental requirements. Along with these changes, the process of digestion also takes place.



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A child has a secure grasping behavior-structure.

Let us understand the same thing through example, when a child becomes familiar with a cow, he has a factual cognitive structure of "cow". Then if one sees another animal shaped like a cow, 'mare, 'donkey', etc., because of their resemblance to a cow, consider them also as cows - Paripachana. After more experience he realizes the difference between the two, the factual cognitive structure of 'mare' is constructed as Assimilation.

Thus it becomes clear that these two processes are complementary to each other. Transformation involves the individual in the act of interacting with the environment in terms of cognitive structures, while competency-building involves the individual in the act of changing cognitive structures in relation to the environment. Moreover these two actions are simultaneous in each action.

(4) Balance:

A child has a limited number of large cognitive structures so he cannot fit every new knowledge with existing knowledge. Similarly not all new information can be established as appropriate; Because doing so creates many factual and action-oriented cognitive structures that arise from limited experiences; This makes it difficult to determine the equivalence between existing and new knowledge for each knowledge.

Piaget argued By doing so, the child strives for a balance between digestion and establishment of activity. Mental development always progresses in the direction of developing more and more complex and stable cognitive structures. An imbalance between processing and subsequent incorporation occurs when existing cognitive structures cannot easily accommodate new experience. A feeling of imbalance motivates a person to establish balance. Equilibrium is achieved when Stimulant (new knowledge) can be embedded in a new or improved cognitive structure.

Thus every organism tries to develop instructions that are effective in interacting with reality by means of a balancing act, i.e. when a new event occurs the organism applies existing knowledge to it and readily modifies existing behavior patterns to meet the needs of the new situation. As experiences grow, the organism acquires more and more structures and can therefore adapt better to more and more situations.

∨ Cognitive Development stages:



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cognitive development is a logical and gradual process with changes based on existing cognitive structures and processes:

- 1. Sensor-motor stage
- 2. Pro-operational thought stage
- 3. Concrete operations stage
- 4. formal mental operations stage

Piaget states that specific cognitive development occurs at each stage. But the duration of the state is not rigidly fixed. Nor does one stage end and the next begins, but each child goes through each stage in this order. The speed at which each child completes each stage may vary.

The main goal of Piaget's theory is to describe and explain the development of human cognition. Pichai is not interested in what knowledge man acquires, but what is the structure of the knowledge he acquires. The main hypothesis of Piaget's theory is that 'the knowledge that humans acquire has a specific structure. This is a real fact, because the activities through which this knowledge is obtained also have a very specific structure is crying such piaget research has focused on the structure of knowledge acquisition activities that disrupt knowledge acquisition.

In the four stages of development that Pia has shown, mental directions (Open tions) have been used in three stages. What it means is that at each stage the sound chakra acquires the ability to perform physical or mental yantras. A different kind of knowledge is obtained through this medicine.

∨ Piaget's studies:

Piaget's findings about the cognitive development of a child in infancy stem from observing the behavior of his three children – Poussin, Laurent and Jacqueline. Both husband and wife have made these observations together. He did not use any scientific apparatus or primitive snakes. A second observer's letter was not used to check the reliability of the observations. His studies were of naturalistic type. Their husbands also have their limitations and advantages. The sample for their study was only three characters, which is hardly sufficient to generalize the results. It is usually impossible to find a cause-effect relationship when naturalistic observations are used. He did not use standard numerical methods for analysis. Despite all these limitations, piaget's this method has definite advantages.

1. Piaget himself was a very sensitive observer of children.



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- 2. To trace the process of development due to close associations with the characters of the study of charge which was observed in the laboratory used to go without or without a plan.
- 3. His intimate familiarity with children has given him insight into delicate questions of interpretation.
- 4. Farming them a chance to replace characters for a long time. Burning studies of such length are rare in psychology.

In a study using this method. Piaget, there are six sub-stages of penile sensation from nabul to state.

Infantile stage: The sensory-spinal stage (2 years from birth)
 Piaget belongs to this state. The cognitive development that occurs during the substages is described as:

Subdivision-1: (1 Month after birth)

Newborns are born with certain inherited powers. One of them is the sucking reflex. When anything touches the lips, it automatically starts sucking. Piya" says that the reflex action of sucking does not arise only when an external object touches it, the infant also initiates the action on its own. These latent krishas become the bases for future development. When the baby is not hungry, it is chews to use its cognitive structure from fingers, shawl etc.anything that comes near it, but when its hunger becomes very strong, it will suck.

For shows preference or distinction in choosing a thing. Piaget termed this phenomenon as cognitive assimilation. This is a primary stage of development in newborns over the course of one month.

Subdivision -2: (1 month to 4 Months)

In the second sub-stage of the sensate-nayu stage, the infant develops some of his physiological and therefore simple habits. After a month of experience, he now develops the primary cyclical responses through which he performs such actions live which is useful for him and related to his body. That is, now instead of moving aimlessly, he moves to gain something. Mudra moves the hand to bring something into the mouth. At first it was sucking when the object was in the mouth. Now starts the sucking action before the object enters the mouth.

That is, it develops a primary predictive hypothesis.

During this saupan, the cognitive structure of a person develops in him. He sees more and more things. At the same time its intake becomes selective. His plan



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focuses more on the new thing. It means curiosity to see something different from what he is familiar with. In addition, this level of muscle-sensation involves imitation and understanding of the external reality of one's surroundings. Subdivision-3: (4 to 10 Months)

The following changes in the child's behavior take shape during this substage

- 1. An action that has previously happened accidentally Kiya now again with the verb to do interestingly cognitive structure develops.
- 2. The action of the imitator becomes more systematic. Its cognitive structures vary in number and extent. Hence more models can be simulated.
- 3. A sense of cause and effect develops. Using the experience of getting milk by knocking the bottle once, knock the bottle to get milk a second time.
- 4. Competition and eye coordination develops. That is, towards whatever it touches can concentrate.

Subdivision -4: 10 to 12 Months

During the period of 10 to 12 years of age, the child develops a sense of pride.

- 1. The child acts with a specific goal. When there is an obstacle in achieving that goal, he feels the need to remove the obstacle. To remove this obstacle in order to achieve the goal, a different action is used.
- 2. The concept of Kammiya of a thing develops, even if the thing is hidden, it is the number that the thing exists.
- 3. He imitates such actions as he can with the antecedents in his present tense structure, this imitation is not absolute.

Subdivision-5: (12 to 18 months)

- 1. Need to find innovation. Now own it more and more beings become curious about the things around them. He starts doing experiments. Throws, breaks, rearranges things. Both these behaviors are for knowledge of the outcome.
- 2. Finds new ways to achieve goals.
- 3. Enables systematic simulation of new models.
- 4. Can understand the situational relationship between an object and other elements of the environment.

Subdivision-6: (18 months to 2 years)

A children during the last feeding

1. The thought process begins. Hence, by combining different experiences, one can think of ways to solve the problem.



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- 2. When he sees the action-model he only mentally notices his actions. Then can actions in absence of the model.
 - 2. Early Childhood to Primary School Students: Pre-mental Action Thinking Stage (2 years to 7 years)

Vidharja called this state the preactive state, because in this state the child can perform mental action in one direction. Kisha could not be done in the direction opposite to the direction in which the mental action was taken. A person can understand that the square of 9 is 49, but if he is given the number 49, he does not realize that it is a square of . That is, the concept that these two are related to each other is not developed at this stage. The main features of the development of this state are as follows:

- 1. In this state, his language development is fast. By the age of two, a child with a vocabulary of just a few words will have a vocabulary of more than 5000 words in his mother tongue by the time he reaches this stage. However, this stage belongs to the development of his spoken words. These words do not have to be taught to him. Piase points out that children's use of words in this state is deceptive. When a young child uses a word, he is not sure what he is actually using it for.
- 2. Egocentrism is another sign of this state. He believes that what he thinks is what everyone thinks, that is, what he thinks is true. Hence he is not ready to believe that he thinks wrongly. As a result it cannot accept other's ideas. This centrality of thought is gradually removed when one comes into contact with peers and feels the conflict of one's own thoughts with their thoughts.
- 3. The concept of continuity is not developed. A five-six-year-old child should arrange eight coins in parallel and tell them that there are equal number of coins in both necklaces. After that, by moving the coins of one necklace out of his sight and making it longer than the other car, ask whether the number of coins in both necklaces is the same? Then the child will say that there are more coins in the long necklace. In his mind the idea is attached that the greater the length, the greater the number. It means that at this stage his thoughts have not become logical. Its decisions are based only on 'realisation'.
- 4. Curiosity to learn new things is high. Hence constantly asking questions.
- 5. Between 2 and 5 years, the child fails to consistently use specific rules or properties to classify given objects into different categories. By the age of 5 to 7, a



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child can classify objects by determining specific properties. A categorical classification can be done when there is more than one characteristic of classification.

- 6. 2 to 5 year old child cannot arrange objects according to their length, but a 5 to 7 year-old child can. That is, between the ages of five and seven, the concept of order develops, but cannot determine the equivalence of two different objects arranged in two different cars.
- 7. At this stage the child's thoughts are one-way and focus on limited information. 8.At this stage the child has not developed the concepts of continuity, variability or decentering, but has important intellectual abilities. One of the continuity experiments, when the liquid from the fat is poured into another vessel, it says that there is a change in the volume of BP Pravani. P to him. It follows that both he and the traveler are the same. The opening and closing of the curtain can be understood as both sides of the curtain are mutually exclusive.

In this situation, he should implement the following disciplinary measures for the education of children:

- 1. Used tangible and intangible members wherever possible. For example, (1) demonstrate its shape on fairboard or cardboard during concept as in complete or half. (2) Use colored pieces, stone tee stick pieces during mathematical concepts like addition, subtraction.
- 2. Use actions and words for instructions. Avoid giving lengthy instructions. For example, (1) explain a couple's game by presenting one part of it with an action.
- 3. Students one of the world around him don't expect others to show consistency in seeing from another's point of view. Generously, state the rules for using any literature together, but avoid long explanations of the reasons.
- 4. Be aware that students are likely to give different meanings for the same word or different words for the same meaning.

For example, (1) 'Nap` and 'Rest' may have different meanings to a child. So if Saber is asked to take 'Nap', he will say that I will not 'Nap' but 'Rest'. (2) The child uses words tells to give its meaning.

5. For teaching successful skills such as singing-arth, give more of a simple body. As a first (1) construct sentences written on a separate card by choosing the constructs and words. 2. to be used to form simple mathematical statements and divide the popcorn ears into two equal parts. Activities such as classroom



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modeling on the paper, etc.

6.provide a unique experience for learning concepts and language development. For example (1) invite the class to have a visit to a zoo, a cinema, and a story teller. (2) words to describe what he does, hears, sees, tastes, smales.

3. Pre-Primary to Middle School Years: Tangible mental action stage: 7 to 11 years

This stage is known as the stage of concrete mental operations, because during this stage the child can solve concrete problems logically. Tangible means the actual presence of an object phenomenon. At this stage, if problems are presented to the child by placing objects in tangible form, he can now perform some of the mental operations which he could not do so far, such as the following.

- 1. At this stage the child can categorize the given objects in series. Also, at any stage of the classification, a decision can be taken as to which of the items other than the given items can be added to it. At any point in the classification the concepts of I and 'Part' have come into conflict. This means that at this stage the ability to classify concrete objects and establish relationships between levels of the classification hierarchy is developed.
- 2. The concept of sequence is further developed. Can quickly sequence tangible objects, determine one-to-one compatibility relationships between two different array elements, and this relationship. Continuity is also developed.
- 3. can form two groups that are numerically equal and even if the members of both groups are transferred, the number remains the same. The concept of being develops.
- 4. The child develops the concept of the continuity of the quantity of matter. Can give reasons why the amount of liquid in different shapes is same or equal.
- 5. Simultaneous attention to many aspects of a problemcan give and determine the relationship between them.
- 6. Can pay attention to changes in the situation. It realizes that things are loosed in one of the two even numbered necklaces. that the length of one necklace is greater than the other the space between objects has also increased.
- 7.A concept of reciprocity develops. He may think that one glass is long and thin,



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the other short and wide. One difference balances another difference. At this stage, the teacher should implement the following teaching-plans for teaching the students:

- 1. Continue to use tangible and visual tools at this stage, especially when discussing abstract concepts and facts. For example:(1) use timelines in history education and three-dimensional models in science education.
- 2. Give students an opportunity to work with an object, object or tool. For example: let's do simple experiments. Allow simple professional tasks to be performed.
- 3.Provide students with reading literature in a tracked and well-planned format. For example: (1) read a booklet of short stories.(2) Divide your oral presentation into sections and present them sequentially.(3) After sufficient coverage of one section, present the second section.
- 4. Use familiar examples to explain more complex ideas to students. For example: (1) ask the children to compare their own lives with the character in the story. If the subject of the story describes a child growing up on a deserted island, ask after the story is over: Have you ever been alone for a long time? What did you feel at that time? (2) Teach the 16 concept of area of two different area classrooms.
- 5. Provide opportunities for classifying and grouping objects at more and more complex levels. For example, (1) Ask students to create a paragraph from sentences written on separate slips. (2) Compare the various systems of the human body with other systems. Like human brain and computer, heart and pump, tell the story to be divided into elements like characters, place, time, dialogue, narration.
- 6. Present students with problems that require logical and analytical thinking to solve. For example, (1) riddles, rpoverbs, etc. (2) Ask free-response questions that stimulate thinking. How are plates and bowls similar?
- 4. Higher Secondary and college years: formal mental action operation stage: 11 to 15 year:

Piaget considered this institution to be a linguistic document, although it does contain all the necessary inversion theorems for meturely metale reasoning. He develops the Clinical Metho. In these particular studies he had given epic problems and solutions for adolescences. Everyone those qualities or values were



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given.

- 1.The key findings were that the capacity to realize the potential in a given situation is developed. E also analyzes the task before performing the task and makes predictions about the outcome. Design an experiment to test these hypotheses. Accurately observes the results of the experiment and takes appropriate measures. Can give reasons for conclusions and give new interpretations to coclusions.
- 2. The tunes have reached the output level of balance. His cognitive skills have developed to the point that he can effectively deal with many types of mino and problems. This is not Sanano's situation, but it is well-developed enough to be easily digested. Hence the establishment of sub-satisfaction with regard to Doe's own structures. Didn't have to turn too much to do it. It also does not mean that the cognitive development of teenagers is over at the age of 16. He still has a lot to learn. Yet Piaget asserts that by the end of adolescence their ways of thinking, that is, their cognitive structures, are almost completely formed.
- 3. Adolescent minds are flexible. They have a large number of cognitive operations available to solve a problem. Ideas are more flexible and can solve a problem in many ways in different contexts.
- 4. Don't be confused by unexpected results; the reason that he has already considered all the possibilities.
- 5. They have the ability to think in both directions. That is, the thought proceeds in one direction and can return to the original place by passing through the same steps.

This state should implement the following teaching plans for the teaching of students:

- 1. Give opportunities to find answers to questions about unusual things. For example, give essays and group discussions arguing for and against events related to the environment, national economy, etc.
- 2. Give students problems to solve and ask them to give reasons scientifically. For example, (1) organize a group discussion in which they plan an experiment to answer the questions.
- 3. Remember that many teenagers are not entirely formal thinkers. Piaget believes that formal thought-processes develop during eleven to fifteen years; But at this age many young people are in the stage of concrete mental thought-



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processes. or still in the early stages of formal thought-process. Therefore, teaching plans tailored to the embodied thinking-processing stage should continue to be used by teachers of this stage as well.

- 4. Assign students to work on projects. Periodically ask them how they get information and how they interpret it.
- 5. Remember that young people prefer to use formal thought processes in areas in which they have expertise and experience. For example, a student who achieves more in English, reads and writes English more will use more formal thinking in that area. That student is more likely to use embodied thinking rather than formal thinking in mathematics will do.

Thus, cognitive development is the developmental process of the structure of cognitive structures from birth to adulthood. Initially these structures are based on muscles and sensations. After that gradually develops his entire world. A child has to interact with the environment for his development. Through these actions old and new knowledge is connected and updated. As a result, a factual cognitive structure develops. Each stage of development makes the individual more effective in interacting with his environment. Each new modification of factual cognitive structures produces a qualitative change in his thinking power. The range of development is the same for every child, but the rate of development varies considerably from child to child. From Piaget's point of view, sexuality has no effect on this development. Boys and girls develop at the same rate. There is no difference in the mental functioning of children going to school and not going to school. There is some influence of culture on mental development. Children of all cultures go through a similar series of developmental stages, but they differ in the acquisition of certain specific concepts.

▼ Implications of Piaget's Theory:

1.Piaget did not make specific pedagogical recommendations. He was more interested in understanding the thought process of children. He believed that the main goal of education is to teach the child to learn to love and education is to mold the minds of the students. (Form not Furnish), Piaget did not create any teaching programs based on his ideas; But by studying Piaget's ideas, the National Association for the Education of Young Children has prepared guidelines for developmentally appropriate education. Pishai Apa has taught us to listen carefully to the child, the way they solve the problem, we know how a child thinks



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by observing what is not. If we understand the child's thought process, we can better match our teaching methods to the child's abilities.

For a teacher to prepare his teaching-plan, it is necessary to keep the following three things on the page:

- 1. Understanding students' thought processes and to develop
- 2. Constructing knowledge through activity.
- 3. Acknowledgment of the value of play.
- 2. Understanding and Developing Students' Thinking Processes: Students in the classroom vary widely in their cognitive development and content-knowledge. How can you, as a teacher, determine whether a student's difficulty in learning is due to their lack of requisite thinking skills or lack of requisite foundational knowledge? To determine this, observe how you solve problems given to students. What kind of logic does he use? Does it focus on only one solution to the problem? Does it suggest a systematic solution or just guesswork? Ask them to explain how they tried to solve the problem. Listen carefully to their plans. What reasoning is responsible for their repeated mistakes? The answers to all these questions can be very useful to get information about the thinking-equity of the students.

An important implication of Piaget's theory, "The Problem of Match" is neither give a task so easy that the student gets bored nor too difficult to master. An imbalance must be maintained to continue cognitive development. The student's Correct the imbalance in the situation that creates mistakes on the part maintains level when students experience conflict between what they believe to be happening and what is actually happening, they rethink the situation, resulting in the development of new knowledge.

3.Constructing knowledge through activity: Piaget's basic belief was that a person constructs his own understanding. Solstice is a constructive process. Hence the teacher should take care that the learner is actively involved in the learning process at every stage of cognitive development. In his view, to perceive is not only to look at an object and form a mental copy or image of it, but to know is to process it. To know is to modify, to transform the object and to understand the process of this transformation, and as a consequence to understand the way the object is constructed.

This activity should be both physical and mental at every developmental stage.



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For example, after informing students about different professions and jobs, the teacher may show a picture of a woman and ask what this person might be. Students should answer, teacher, doctor, secretary, lawyer, sales woman etc. The teacher will tell to fill in these answers that it could be a daughter? Students will add... mother, sister, aunt, grandmother, etc. This activity helps students to think about different aspects for classification and focus on other aspects of the situation.give students opportunities to interact with teachers and peers, so that they can express their ideas, get cards against their ideas, get resistance and others fly in the head like this. It's missing. When the teacher or here the student instructs to think about the matter in a way that is not the body, then naturally there is an imbalance. Hence, as a general rule, the student should make his own observations by writing or talking about what he has experienced. Concrete experiences provide the raw material for thinking, and sharing these experiences with others gives students the opportunity to use, test, and modify their thinking abilities.

4.Acknowledgment of the value of play: Piaget agrees that "Play is children's work." Brain development is stimulated by stimulation, and every stage of the game provides some form of stimulation. In the muscle-sensory stage, infants learn through actions such as sucking, throwing. Children love to play during the pre-psychic action stage. In these games he interacts with others through the use of signs and language. They start playing simple games with predictable rules. Even at the embodied-mental-thinking stage, children begin to play more complex games and learn cooperation, compromise, win-lose, etc. Simultaneously language development also takes place. During puberty they take responsibility for their own development.

Thus, the teacher should accept the importance of games at every stage in his teaching-plan and adopt a teaching approach through games.

2.2 Vygotsky's Theory of Cognitive Development

Introduction of Vygotsky

Lev Semyonovich Vygotsky born in western Russia in 1896. He graduated from Moscow University with a bachelor's degree in law with a major in literature. Now he began a career as a neurologist, working closely with Alexander Luria and Alexei Leontiev. He began research in the fields of developmental psychology,



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education and psycho-pathology. He was very productive throughout the years, but died of tuberculosis in 1934. Died very young.

His very short career has put his name at the forefront not only of psychology, but of the social sciences, philosophy, language and literature.

Factors Affecting Cognitive Development

Vygotski has studied the impact of two main factors of society and culture on cognitive development: (1) language and personal dialect and (2) the role of adults and peers on cognitive development. The relationship of both these factors with cognitive development is discussed here.

Language and personal dialect: Language is a very important tool for cognitive development. It provides a means of expressing ideas and asking questions, providing levels and concepts for ideas, providing a bridge between the past and the future. When we think about a problem, we usually think in words and partly in sentences. Vygotsky believes that language in the form of personal speech actually drives cognitive development.

Children usually talk to themselves while playing. Piaget called this child's self-directed talk ego-centric speech, he believes that this ego-centric speech is proof that young children do not see the world through the eyes of others. As they mature, especially when they disagree with their peers, children develop social speech. They learn to listen and exchange ideas.

Vygotsky explains this personal dialect or self-talk differently. This murmur plays an important role in their cognitive development. His children refer to themselves to guide their behavior and thoughts. Especially when a 4-5 year old child is playing a game of combine or puzzles alone, he is heard stuttering "No, it doesn't quite fit, bring it here..., maybe it will apply here,..." As the child matures, his this self-talk becomes muted. At first it was a spoken mumble, then an indistinct mumble, and then only lip movements. Eventually, children utter only guide words. This self-talk is at its maximum during 7 years. Usually disappears by age 9. In bright children these changes are completed earlier.

Vygotsky identified this transition from audible personal speech to direct inner speech as a fundamental process of cognitive development. This process enables the child to use language to perform important cognitive activities such as drawing pages, problem solving, planning, forming concepts, and achieving self-control. Especially children are more likely to use personal speech when they are



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confused, in trouble, or have made a mistake. Inner speech is used not only to solve problems, but also to regulate behavior. You may have observed that you are practicing with yourself. Like "Let's see, this is the first step..." or "Where did I put my goggles?" Here you use the inner dialect to re-list, to encourage, guiding yourself.

Personal speech helps children control their thought processes. So children should be allowed, sometimes even encouraged, to use it in school. Very quiet when children are counting difficult patterns the insistence on staying makes that task more difficult for them. An increase in murmurs indicates that they need help. There is an approach to help students learn in these friendships- 'Cognitive Self-instruction'. In this approach, teachers talk to themselves through learningwork. For example, students remind themselves to move slowly and carefully. They call their victory while acting like this: "Okay, what do I have to do? Correct. Multiply these two numbers and add this number to it…"etc.

Role of Adults and Peers: Language has another role in cognitive development. Vygotsky believes that children's cognitive development occurs through interactions with more competent adults or more competent peers in their own culture. These people act as mentors and teachers by providing the information and support the child needs to develop intellectually. Parents listen carefully to the child and provide genuine support for the development of the child's understanding. Thus, the child is not alone in 'discovering' the cognitive operations of immanence or categorization. Family members, teachers and peers help in this search. Most guidance is given through language. In some cultures this guidance is provided by observing skillful action.

Social interaction is the origin of higher mental processes such as problem-solving. He stated that every function occurs twice in a child's cultural development, first at the social level and then at the emotional level. Example: A six-year-old child loses his toy. Ask his father to help him. His father asks him when the last time he made with a toy was. Child says I don't remember. His father asks several questions passively – was that in your room? Was out It was at the neighbor's house! The child answers 'no' to each question. Next asks, was it in the car? The child says maybe it was and goes to get the toy. The act of recalling and flying away from the plane has been done over the years by the interaction, which has been done by the child in this process in order to



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find out who does not return any money. Problem: del non pona. is Actions at the target level of such a teaching scheme are seen first between the child and the teacher, then between the child and the teacher.

USES:

Culture behavior can be done in three ways:

- 1.imitative learning
- 2.instucted learning
- 3.collaborative learning

Vygowski believed more in theory than in direct teaching, his vision the term also refers to other forms of cultural studies. Directly taught and delivered

Vygowski's ideas are very helpful for teachers designing environments. Three important ones related to installation the conditions are:

- 1.Learning
- 2.Evaluation
- 3.Teaching

It is discussed here how teaching in these broad contexts can be helpful for teachers thinking about the cognitive development of Vygowski.

Assisted learning:

Students can be assisted in the classroom by providing information, reminders, encouragement at the right time and in the right amount. Then they should be allowed to act more and more on their own. That so the teacher can do the following tasks:

- 1. Select literature or examples appropriate to the students' level.
- 2. Demonstrate skills or thought processes.
- 3. To take students through a series of complex problems.
- 4. Solve part of the problem.
- 5. Dispute confirmation and revision time to eat.
- 6. Asking questions that focus students' attention.

Often there is a question that how to understand 3 what to help? Help then? To answer it, Vygowski has introduced the concept of The Zone of Proximal Development (ZPD). ZPD is a stage of cognitive development where he can dominate a task if given the right support. Vygosky defines 2PD as: "The



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developmental stage determined by the child's ability to solve problems individually and the developmental stage determined by the child's ability to solve problems under the guidance of an adult or in cooperation with more knowledgeable peers." According to Vygomsky's ideas, any development But at a certain stage there is a problem that the child is on the verge of solving. The child needs a little reminder to solve it, steps, motivation to keep trying, etc. Some problems, even if the steps are clearly explained, he does not have the ability to solve them. ZPD is an area in which a child cannot solve a problem alone, but can succeed with the guidance of adults or the cooperation of more developed peers, as this is the real learning environment.

In an attempt to understand how the contribution of personal communication to cognitive development fits with ZPD, the parent typically helps the child solve problems by providing verbal cues and structure. Elderly help gradually diminishes.

For example:after helping the father in terms of finding a toy, the child will now think to himself when his book is lost, "Where is my math book? Used it in class. However, I put it in the bag after the class was overYou, but I had a meeting in the bus. That boy kicked my bum. Maybe my book.." Thus, the child can now systematically brainstorm ideas for the search.

II. Assessment:

Most standardized tests measure what the student can do alone. This information is useful; But it does not say anything about how the teacher can help the student to study further. As alternatives to this standardized test, assessment approaches have been introduced:

- (1) dynamic evaluative
- (2) learnability-assessment

These assessment approaches aim to determine a child's ZPD by asking them to solve problems and then encourage or support them to learn how they learn, make changes, and use guidance. The assistance given to him is systematically increased. It gives an idea of how much help is needed and how the child responds to it. The teacher observes, listens and carefully notes how the child uses the help given to him and how much help he needs. The teacher then uses that information for teaching-grouping, peer learning, learning tasks, and self-learning.



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III. Teaching:

Students should be placed in situations where they are required to reach a level of understanding, while also being supported by other children and the teacher. Often a student who has found a solution to a problem can be a good teacher, because that student is almost always processing within the teacher's ZPD. Vitthi's theory states that the teacher should create an environment so that the student can find the solution to the problem on his own. To provide him with opportunities for cooperative learning, including explanations with other students get guidance in demonstrative and actionable form. It is helpful for a teacher to have the opportunity to work with a student who is doing a little better than that. Also the student should be encouraged to organize his thoughts and use language to describe what he is trying to achieve. Savad and debate are important way of learning.

Vygowski's theory can help you in the classroom in the following ways.

1. Learning with the needs of the students add help for.

Example:

- Provide models, guidance, and feedback to students as they begin new tasks, minimize help as students progress, and provide opportunities for independent work.
- Give students the choice to decide the difficulty-level and freedom-level of the project.
- 2. Facilitate access to tools that support student thinking. Example:
 - Teach students to use organizing schemes, research-tools, language-tools (dictionaries), computer programs etc. for learning.
 - Demonstrate the use of these devices: For example, have students create how electronic notebooks can be used for planning and time-management.
- 3. Emphasize dialogue and group-study: Example:
 - Teach students why to ask good questions and time useful spells.
 - Experiment with self-directed study-planning.

▼ IMPLICATIONS OF VYGOWSKI'S THEORY:



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A teacher can use Vyovsky's theory in the following ways:

At Zone of Proxiral Development Take the child to the upper level of Zaun Start teaching with the goal of going.

- 2. Observe students' intentions and efforts, providing help where needed and encouragement where confusion is felt give.
- 3. Give students the opportunity to work with more skilled peers.
- 4. Encourage cooperative learning.
- 5. Provides a cultural context for learning.
- 6. Give children the opportunity to use personal dialect and encourage them to use it.
- 7. Instead of measuring children's intelligenceMeasured his ZPD.

3.Kohlberg's Moral Development Theory:

Concept of Moral-Reason:

oral-development has a great impact on children's cognitive and intellectual development. Another term ethics-logic-development is also used for moral development. Moral-logic means 'right or wrong?' The thinking involved in the decision-making process regarding the answer to that question. That is, in a social environment, a person uses his own moral reasoning to judge the right and wrong of his own behavior. To take a friend's thing without asking him or not? To share chocolate-toffee with a friend or not? Should you tell the teacher about the bad behavior of your friend or not? etc. Situations of helping and harming others occur frequently in children's lives. Their moral reasoning helps them decide how to act in that situation.

Moral-reasoning consists of several components. They need three skills to make decisions about ethical behavior:

- 1. Children should learn how their decisions can affect other children. For example, how would a friend feel if they took their favorite toy without asking?
- ✓ 2.How should children use good valuedicision how to behave in a way that really helps others? For example, Prashant should learn not to force Charmi to look like a picture if she doesn't want to look like a picture.
- 3.Children should be taught appropriate skills for evaluating and



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implementing behavior.

For example, what should Sheila do if Sheila's friend falls while walking and starts crying? Sheila feels a lot of sympathy for him, but doesn't know how to express that sympathy. Should Sheela say anything to him? what to say Should you rush to get help from others or should you tie your handkerchief on his wound?

Thus, there is a lot of complexity associated with morality. This is why there is no consistency in moral behavior of children.

✓ Kohalberg's Theory of the Development of Moral Reasoning: Lawrence Kohlberg was born on 25 B 1927 in Bonesville, New York. He was the only child of his parents. His mother was rich. Instead of using the family's wealth, he decided to become a sailor in the merchant marines. During his naval career, he also worked to help the besieged Kheer Jews in Palestine. This situation led to Kohlberg's interest in the developmental study of moral reasoning.

After World War II, Kohlberg began studying psychology as a graduate student at the University of Chicago. Ph.d. Received the degree of colombo spent most of his time at Yale University. Then in 1967, his work went to the university. Kohlberg's main work during his career was work ethics—a study of the development of work. His studies are mainly focused on the study of Na Piare Mane Han Dewey. His mother remained a professor at the university and spent most of his life there In 1973, Kohalberg was born with a disease. Due to this, he became unable to do the important work and became seriously depressed. He went missing from the hospital on 17th January 1987.

Publications:

Stages of moral Development, 1971.

Kohlberg presented a two-level theory of moral development. Each of these levels includes twenty stages, meaning they present a total of six stages of moral development. Kohlberg conducted a 12-year sociological study of ten- to sixteen-year-old children in which responses to ten morally ambiguous situations were elicited by interviewing characters. In each of these moral dilemmas, the character had to choose between behavior and authority-obeyed behavior and the well-being of others. This study was conducted in countries like America,



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Mexico, Taiwan, Turkey etc.

Sample of Paradoxical Case

One of the paradoxical cases presented by Kohlberg is the following:

One in Europe is dying of a particular type of cancer. A medicine man has developed a radium-based drug that can cure cancer. To make it medicine it cost \$400, but it costs \$4,000 for a little medicine made from it. Sick C's husband collects money from acquaintances to buy medicine. He collected 2000 dollars and stayed with the medicine man. He told the medicine man, his wife is on the verge of death. He may reduce the price of the medicine or keep half the money, but the medicine man says. "No, I have found medicine; I want to make money from it." Heinz failed in all legitimate efforts and broke into a drug store at night, obtained the medicine from it and gave it to his wife.

Ouestions:

- 1. Can the center steal medicine?
- 2. Why yes? Why not?
- 3. Is the Heinz's duty to steal medicine?
- 4. Why yes? Why not?
- 5. Why not if that Heinz does not love his wife, should he steal the medicine?
- 6. Why yes? Why not?
- 7. Suppose the person on the deathbed is not his wife and is a stranger, would Kendra steal the medicine area?
- 8. Why yes or why not?
- 9. Is it necessary for a person to do whatever he can to save another's life?
- 10. Why not why not?
- 11. In general, he tries to do whatever he can to obey the rules what should I do?
- 12. Why not why not?
- 13. What should Heinz do given these facts how does it apply?

By presenting the above case, Kohlberg asked each character the above questions. The main question was whether the man should have done what he did. Why?

Kohlberg was not particularly interested in Pak's talent as to whether her husband was right or wrong, but more interested in knowing how they made their



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decision. He tried to understand the moral structure of Jane's character from that description. Based on the characters' descriptions of their own decisions, Kohlberg develops morality. Introduced the theory of stairs. He stated that morality develops in stages. Although the order of the stages is defined, it is not certain that the age of these stages will be the same in all people. Many people never reach the highest level.

Kohlberg, in his early descriptions of moral development, stated that the fifth and sixth stages of moral development are reached by only 20 percent of the world's population. At the sixth level, only people like Mahatma Gandhi, Mother Teresa, Martin Luther King Jr. are very few can reach at this stage. Hence he accepted only five stages of moral development later in his theory, even though he stated that even the fifth stage is not universal. Its development depends on higher education.

Here first Kohlberg about moral-development the original six steps measured are listed. After that a detailed description of the new five steps given by him is presented.

▼ Stage of Moral -Reasoning-Development:

Kohlberg, in his Early Thoughts on Moral Development (1969), presented six stages of moral reasoning as follows.

Level-I: Pre-Traditional Moral (Birth to Nine Years)

Stage-1: Obedience and Punishment-Orientation: Children at this stage behave to avoid punishment. "Heinz should not steal the medicine, because if he is caught he will go to jail."

Stage-2: Hedonistic and instrumentalist approach: to behave in ways that will bring him some happiness or change. "The camel must steal the medicine, because the shopkeeper has set a very high price for the medicine."

Level-2: Traditional Moral Reason (Nine Years to 20 Years)

Stage -3: Good Girl / Good Girl Orientation: Behaves as an effort to gain the good wishes of others. "As a good husband he should steal."

Stage- 4: Law and Order Orientation: Behaviors for social acceptance. "Heinz should not steal, because it is against the law. He should obey the law."

Level-3: Post-conventional ethics-reasoning (very few adults)



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Stage 5: Orientation to Social Contracts and Individual Rights: The appropriateness-inappropriateness of behavior is defined in terms of societal norms, needs and rights. "Ho should steal, because his duty is to take measures to save the life of his wife rather than to preserve the rights of the shopkeeper." Stage - 6: Orientation towards Universal Moral Principle: Not only follows the rules of society, but also considers the extent to which universal moral principles apply. Sometimes they even sacrifice themselves for these principles. Even though we are strangers and he has no wife, Kendra must steal, because he must follow the voice of his conscience."

▼ Kohlberg's Moral Developmental Theory:

Kohlberg (1984) in his existing theory of moral-development, moral-reasoning Five stages of development have been presented. About it the discussion is presented here.

LEVEL-1 HETERONOMOUS MORALITY:

During the first stage children's morals are controlled externally. A child at this stage considers behavior as moral behavior, which behavior is not punished by others. Any behavior is immoral because it is punished for that behavior and that behavior is punished because it is immoral. Goodness or badness is seen as a characteristic of behavior. During the first stage the child firmly believes that 'stealing is wrong' is as true as the grass is greener. A child may be asked why it is wrong to steal? The answer can only be: "Because it is theft."

This type of child is self-centered. The motive behind any child's work is to relieve pain, control and anxiety. For example, Suresh sees his brother Mahesh stealing money from the house. Should Suresh tell his mother? A child of this stage will answer 'no' to this question, because he thinks that Mahesh will punish him if he tells. Here the child thinks only of physical consequences. The elders have authority and power. It should be subdued.

LEVEL-2 PERSONAL AND EXCHANGE:



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In this way, the child does activities of his own interest, so the activities are also done by others. Children of this step open? The thoughts of others may be different from one's own thoughts, and the thoughts of others and one's own thoughts may also be mutually contradictory. If we want to get something from others, we have to accept the needs of others and respond accordingly. Thus, these stage children behave with the intention of getting something in return from others. If a child perceives a behavior as helping him satisfy his needs, he considers that behavior to be my behavior. In the example of our discussion, Suresh would think "I shouldn't tell mom. Sometimes I do wrong too. I should not let Mahesh judge me."

LEVEL-3: MUTUAL EXPECTATION AND INTERPERSONAL ACCEPTANCE:

This step is where traditional moral reasoning begins. Now children's behavior is not just because of power bond or just for pleasure. Children now value relationships based on mutual trust and loyalty. No longer are others viewed as objects of manipulation to achieve a particular goal. Now he cares for others. Behaves by understanding his responsibility towards others. They consider such responsible behaviors as moral behaviors. They try to appear a good person. Personal interests become cheeky. Mutual consent is preferred. In swimming, the development of the ability to experience everything from another's point of view is the development of morality. At this stage, Suresh thinks "I must tell mom, otherwise mom will think bad about me." The criterion of good or bad here is not just punishment or satisfaction, but the family's worth.

LEVEL-4 SOCIAL SYSTEM:

This stage is also of traditional morality-hell, but more developed than the third stage. In this way one thinks of society abstractly rather than directly thinking of interaction with another person. An abstract understanding of society is now developed. Even now it values personal relationships, but tries to understand these relationships in the context of the legal, religious or social system of society. (Fulfilling social responsibilities, cutting corners, contributing something to the society and its institutions is considered moral. One behaves in such a way as to fulfill one's duty and maintain the social order. Antisocial behaviors are considered wrong. The entire social systemis destroyed. In the example for discussion, Suresh thinks that stealing is not right according to the social order."



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That is, people are right-wrong with respect to the acceptance of their behavior by existing.

LEVEL-5: SOCIAL CONTRACT:

I This level is the level of post-conventional ethics-narc. This step involves a belief in morality that was not present in the previous steps. Whether a behavior is right or wrong is determined by mutual consent between the individual and the authority, not just by blind obedience to the authority. In other words, in this state one asks the basic question that why is it necessary to follow the rules? How does society determine rules? They understand that in society. If there is a group of people who think logically, a mutually beneficial society will be formed. In such a society there will be a good process of making and enforcing rules.

These norms are understood by the people to be followed by Nidhi, as they are derived from social contracts and apply to the society and every individual in the society. These people are sensitive to social commitment and ready for it, but rules and social commitment are not accepted without understanding. Here people see that the rules should be followed strictly, but if doing so violates the moral value or dignity of the individual or violates the logical social contract, then the rule. The entire social structure or religious system will be abandoned. For those who think this way, the social system is important, but does not accept that society has the ultimate authority to determine what is morally right. Society also needs to be evaluated on the basis of morality.

▼ EDUCATIONAL IMPLICATIONS OF KOHLBERG THEORY:

The educational implications of Kohlberg's moral reasoning-developmental theory are as follows:

- 1. Don't Ignore Ethical Events: Encourage students to discuss ethical events that occur at school or in other life events. In such a discussion, the teacher should involve the students by asking questions that help them identify the moral-conflict involved in the event. Such a discussion can be done by taking imaginary events as well.
- 2.Emphasize morality: When discussing creative phenomena, students should be careful not to focus on unethical phenomena. When such a discussion gets out of hand, the teacher will guide them to bring them to the moral reasoning of the problem. On the opinion of students 'Why? Ask questions to get them to think



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about and explain their reasoning

- 3. Emphasize acceptance of points of view: Ask students to think about events from other people's points of view related to the event. For that they can also be asked to play the recitation of various characters of the event.
- 4. Encourage student-to-student interaction: Asking students to discuss in small groups by arranging a circular seating arrangement increases interaction among them.
- 5. 'Don't be an authority': Students consider the teacher as an 'authority'. After starting the discussion, you separate yourself from them. Just keep the discussion focused on the issue.
- 6. Look at any moral problem or conflict from a child's point of view: In such cases: Give students the opportunity to observe how you behave, so they can learn by imitation.
- 7. Place different situations in ideas, opinions, opinions, etc. in the class environment: allow time for thorough discussion.
- 8.Consider students' moral-reasoning-developmental stages. If the teacher knows what level of moral reasoning the student is using, asking the right questions can help guide them to higher levels of moral reasoning.
- 9.Moral Reasoning-Development: Kohlberg. Emphasize generalization: Moral development is not a simple case of moving from one level of moral reasoning to another. It requires the student to apply the newly acquired ethical skills in a wider context.

▼ Bruner's Theory of Discovery Learning

• INTRODUCTION:

Jerome seymour bruner was born on October 1, 1915 in New York City. He completed his undergraduate studies at Zooke University and his post-graduate Ph.D. at Harvard University. His Ph.D. thesis was on the Psychological Analysis of International "Radio Broadcasting of Belligerent Nations". He then worked as a research assistant with Gordon Nahyo. After completing his Ph.D., he joined the United States Army's intelligence corps. He undertook aggressive campaigning, in



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which he was aided by the knowledge of his Ph.D.

In 1945, he started teaching at Howard University. Quickly rising from lecturer to professor there (1952), he founded the Canter for Cognitive Studies there (1960) and remained its director until 1972. In 1972, he assumed the responsibility of Watts Professor of Experimental Psychology at Oxford University. In 1991, he came to New York University in law school. There he is Adjunct Professor, Research Professor Mayer took over the responsibility as Visiting Professor, since 1998 he is working as a University Professor in the form of affiliating faculty in this university. He have assumed the presidency of APA in 1964-65.

His best known books are:

- 1. A Study of Thinking (1955)
- 2. The Process of Education (1960)
- 3. Studies in Cognitive Growth (1966).
- 4. Towards a Theory of instruction (1966)
- 5. Learning about teaming (1956)

✓ <u>Discovery Learning:</u>

Bruner distinguishes between two approaches to learning:

- (1) expository
- (2) exploratory or discovery approaches

A constructivist approach is an approach to learning in which the teacher takes the decision in the learning-teaching process. Adhyeta remains inactive. A teacher is considered a subject matter expert. It gives precise explanations and presents an analysis of information about the subject to be taught. This approach starts from primary school used at university level.

Professorship in Non-Conceptual Learning approach what Participates in making decisions about when and how to learn and plays a key role in making such decisions. Instead of the teacher telling the content to the students, the students have to pick up examples of the principles and concepts to be taught and draw conclusions or concepts from them, i.e. the problem is presented to the teacher. The student has to find his alternative.

∨ Adavantages Of Discovery Learning:



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Laws of Exploratory Study Bruner states four advantages of using exploratory study-studies.

Enhancing Intellectual Ability The use of exploratory learning enhances the following aspects of learner's intellectual ability.

- 1. Problem-solving research develops.
- 2. To transform information and it increases organizing power. so that information can used in maximum places
- 3. Teaches the student to acquire information in such a way that the information obtained can be more easily used for problem-solving.

External Confirmation Builds Internal Validation: In this approach, students learn concepts and principles by finding relationships between examples. Hence this method encourages students to derive satisfaction from the learning process itself. This inculcates in him an attitude that Adhyavan himself rewards him. When he is convinced that he has achieved dominance, he is satisfied enough. This cannon gives him prestige.

Plans for Future Developments: Given the abundance of effective search processes, why search for new information can be well understood. Brenner asserts, "I no one has seen improvement in the ability and skill to investigate who is engaged in any activity other than investigation.'Thus, if students are introduced to the inquiry-based approach to learning at the school-level, a large number of them can become good researchers.

information-retention and retrieval: Incorporating new information into the learner's personal cognitive structure increases its salience as well as aids in retrieval. Information organized around one's aptitudes and existing military cognitive structures becomes more useful and more adaptive in the new situation. Brunner notes that "a positive attitude towards new instances and a 'retrieval' function facilitate easy retrieval of information that has been stored in memory."

Thus 'exploratory learning' is concerned with both pedagogy and academic bridges. As an educational method, 'exploratory adoption' refers to providing the environment rather than imposing whatever learning imparts on the learner. Behind this is the assumption that a student who wants to learn something will learn more if he finds it with minimal help from the teacher. 'Exploratory learning' as an educational objective develops the attributes, knowledge and skills that



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enable one to identify and solve problems. Thus, making a person more powerful to adapt to the needs of life.

- **∨** Principles of Discovery Learning:
- Bruner's has been present four principles of discovery learning, which helps to teachers in designing for teaching-learning plan.
- 1. Three aspects of Discovery Learning the beginning, maintenance and direction of action.
- 2. information has a definite structure.
- 3. the cognitive ability to solve the organization the structure should contain minimum information.
- 4. Studies done at the right time of the result depend on it.
- (1) Three aspects of Discovery Learning the beginning, maintenance and direction of action.

When a child enters the classroom, he should be eager and energetic to learn. Cultural, motivational and personal aspects play an important part in determining this orientation; But all three have given more importance to three cognitive aspects for learning-orientation. These aspects are: (1) initiation of action, (2) maintenance and (3) direction. It states that something must go on, something must go on, and so on in order to find solutions to a problem.

There has to be something to prevent it from happening accidentally. Beginning of action means commencement of action. If any uncertainty is created in front of the student, the student initiates any activity to remove this uncertainty.

Maintenance means continuing the activity started. For that the search activities against it should be continuous. Hence the situation should be created in which the student has to face different puzzles or problem situations.

Direction means to know at the same time whether the search activity for the solution of the problem is in the right direction of its solution. To prevent the refugee from engaging in accidental activities and Consequential exploration requires ensuring that he is making progress in his problem-solving process. It becomes necessary to determine the goals and criteria for measuring the actual efforts made towards the goals. Efforts made to reach a goal may be right or



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wrong. Knowledge of wrong effort leads him to right effort and knowledge of right effort advises him of his progress.

(2)Information has a specific structure:

Each field of knowledge has its own specific structure, meaning each field of knowledge has a continuum from simple concepts to complex concepts, rules and principles. The learner first grasps the concepts and principles of this field of knowledge in concrete form, then grasps the information in the form of diagrams and can then grasp the information in abstract form. Hence the teacher should arrange the study-object in its logical order and present it to the student. That is, the teacher should decide the sequence of learning experiences to be given to the student. Although Bruner acknowledges that there may be no sequence that is best for all teachers and for all educational purposes; But it suggests that devise some rules for planning the teaching-process. The rules presented by Bruner for determining the sequence are as follows:

- 1. Consider students' information-processing strengths.
- 2. organizing learning information into a simple form, As the student can understand more easily and can process it.
- 3. For secondary school students to give a concrete example before graphical representation of information as well as an illustrative example to explain an abstract theory or concept, because the sequence of development action. From the tangible, the faint to the abstract and from the head to the complex.
- 4. teacher should provide a range of experience that maintains the student's interest in the particular academic issue being taught.
- 5. Without experience, one cannot decide only on the basis of specific apana status or mother's progress, but factors such as errors of puronga, type of opportunities given for creativity, power of transitioning given things, etc., are taken as hostages to determine the sequence.
- (3) The learner's cognitive structure should contain minimum information to solve the problem. In exploratory study the researcher needs some information to solve the given problem. Advaita is parsimonious in its use of information if it has to use the least amount of information to solve the problem. That is, parsimony occurs when the least number of steps are used to perform any data version. If a solution to a problem requires more information to understand the problem, it has to go through more steps to process that information, hence the



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efficiency is reduced.

Austerity is based on the following.

- 1. As more signs are used, more frugal, less frugal as tangibles are used.
- 2. Organization and presentation of study material.
- 3. Relevance of information. As information becomes more relevant to the problem, fewer steps are required.

Hence the discipline should impart information in a manner that is appropriate to the level of the learner, to the appayana-situation and to the objectives of the study, Minority Perspectives on Learning Bruner.

- (4) Studies done at the right time of the result depend on it. which is the power and the place where the knowledge of the result can be used for improvement at the time and place where that knowledge becomes useful for learning. Whether the knowledge about the result will be useful to the student or not depends on the following factors.
- 1. When and where the subject may use the above information for work.
- 2. In what situation such corrective information is relevant to time and place can be used.
- 3. In what form to get update information has come.

In discovery learning, the subject proceeds in a series of steps. Hence it is necessary for the adhyeta to know whether the stage he is on is true, but merely to know does not help him. This should be done at the right time, at the right stage, in the right situation and in the right form.

Bruner emphasizes giving feedback to the learner when the learner compares his or her learning efforts to the learning criteria he or she wants to achieve. The information should indicate whether the student is making progress toward the desired academic goal. Information about what not to do is not as effective as information about what to do.

Bruner accepts reward and punishment as central to behavior modification, but he advocates internal rather than external reinforcement. It advocates a teaching-plan that enables the learner to assess his own progress and receive feedback from it by studying accordingly. With such a scheme the Adhyeta will discover his own strength and progress in it by determining how well his conquests are suited to any task.



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▼ EDUCATIONAL IMPLICATIONS OF BRUNER THEORY:

Although there are some criticisms regarding exploratory learning, the teacher can use it in organizing the classroom in the following ways:

- 1. Teaching II based on Brun's theory is learner-centered and makes the learner an active partner.
- 2. Giving the student established facts and knowledge in a final form. Avoiding learning-teaching-situations.
- 3. Presenting feedback at an appropriate stage in the form of knowledge useful to the learner to move towards the achievement of the goal.
- 4. Designing lesson plans that develop basic intellectual skills common to different subject areas, such as skills in using documents, making inferences from minimal information, critical reading, etc.
- 5. Experience collections should use all the resources possible to touch, hold, feel and engage in other hands-on experiences, especially for young children. Using pictorial material for older children. As cognitive development progresses, teaching tasks should become cue-based.
- 6.A child's cognitive development takes place through interaction with the teacher, other students, and learning-literature. Hence student silence is key in learning.
- 7. Knowledge should be presented in a sequential manner so that the student can easily grasp it, analyzing the knowledge to organize the knowledge and then organizing it from simple to complex form.
- 8.In Bruner's view, the desire to learn is an internal motivation. Therefore, he rejects external motivation or reward.



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Unit 3: Intelligence, Personality and Creativity

- 3.1 Individual Difference: Concept, areas of Individual Differences,
- Educational Implications

v Introduction:

The development of psychology has many implications for education. The principles of psychology are used in solving many problems of education as well as planning in many aspects of education. One of the most important gifts psychology has given to education is the theory of individual differences. Psychologists have proven through studies that an individual differs from other individuals in their own distinctive traits as well as individual traits. Education has accepted this principle and started preparing teaching- plans in the classrooms, designing courses and providing physical facilities according to the needs of the students. The details of the facts that have become clear as a result of the studies about where these differences are found in which areas and what factors actually arise from those differences are presented in this chapter.

▼ Individual Differences: Concept:

Students in a classroom are seen to differ from each other in aspects such as appearance, height, color, thinking, remembering, problem solving, generating ideas, treating others, etc., and also in aspects such as orderliness, cleanliness, taking leadership, helping others. Seen behaving differently. Psychologists have



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named this variation in the characteristics of students as Individual Dimererce. Psychologists state that if a large sample of people is taken, each trait in the sample is normally distributed. If its distribution is graphed, 2.5 percent of the characters at the bottom end and 2.5 percent of the characters at the top end are abnormal for that trait. While 95 percent characters are normal counts. This is because the pattern of development of each developmental trait varies from person to person. Based on this discussion individual differences can be defined as:

"The differences among individuals, that distinguish or separate them from one another and make one as an unique indi- vidual In oneself, may be termed as individual differences."

According to the definition given by Good (1959) in Dictionary of Education,

- 1. Individual differences stand for the variations or deviations among indi-viduals in regard to a single charac-teristic or number of characteristics,
- 2. Individual differences stand for those differences which in their totally, distinguish one individual from another."

Thus, individual variation means variation in two traits within an individual as well as variation between two individuals in a trait.

✓ Areas of Individual Difference:

Here we are following individual differences we will discuss the areas:

1. physical development

3. Moral development

5. Language development

7. Applicability

9.Aptitude

2. Social development

4. Emotional development

6. intellect

8. Academic achievement

10. Attitude

Ø Physical development:

Physical development is the change in the length, weight and size of the various



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organs and functional capacity of a child from birth to old age. From the time of birth to adulthood, the length, weight, height, etc. of its various organs are constantly increasing. It stabilizes during adulthood and thereafter decay comes in it. The process of cell regeneration and proliferation is constant throughout life. In the beginning the regeneration process is faster as opposed to the rush process. As a result, development is rapid and incremental. After adulthood, the process of regeneration is slower than wear and tear. As a result, development is slow.

Ø Social Development:

A child is centripetal and arbitrary from birth. As the child grows older, he is introduced to parents, siblings, friends, relatives, teachers and others. A self-centered and non-self-centered child gradually learns to control his self-centered and self-centered behavior by focusing on the direct or indirect presence of other persons. This kind of change is considered the development of his sociality.

Social development means the development of the ability to adapt to the norms, customs and traditions of the society or group in which one lives, the development of the wisdom that it is better to live in cooperation with the society and not in conflict. A socially developed individual accepts the responses of others, communicates with them, and can establish harmony between the environment and the self. He has the skills to establish and maintain relationships with other people, notices the needs of the society and tries to satisfy them and considers himself as an integral part of the group.

Ø Moral development:

A person who lives in the society should be willing to do his duty properly without being affected by anyone's shame, fear or coercion. Being willing to sacrifice one's personal gain for the sake of welfare, all these behaviors are the year expressing morality. In a person of morals, learn to speak the truth, keep the behavior clean, be honest. To develop respect for everyone, to learn to behave fairly, to develop tolerance etc. traits are developed. Moral development requires determination, sense of duty, goodwill, restraint, alertness etc.



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A child is at the stage of premorality at birth i.e. it performs certain moral behaviors out of fear of punishment. Gradually, his behavior is judged according to criteria such as self- interest, good looks in the eyes of others, law, right versus duty. Finally, accepting the universal spirit controls one's behavior. The self becomes totally subordinate.

A person who lacks moral development develops socially criminality.

Ø Emotional development:

It is a condition of whole nervous system activity. It means that when a person feels any kind of excitement, his entire nervous system becomes highly active. After birth, the child gradually feels the emotions of joy, love, anger, fear, jealousy etc. in accordance with his Udipakas and each of these emotions is expressed in his behavior. A young child initially experiences object fear. At puberty these reasons change and are replaced by social fear. A toddler feels angry when his basic needs are not met, a teenager feels angry at a sudden attack on his pride. In infancy, a child feels love for a mother who takes care of its hunger or safety. Slowly his love characters are added. At first the child expresses any of his emotions freely, but gradually based on experiences learns to hide or control. All these changes in perception and representation are social development. A person matures in terms of emotional development by post-puberty. Emotional development is an important developmental aspect that differentiates child, adolescent, and adult behaviors.

Ø Language development:

Language is the medium of whatever a person wants to say or present to others. The development of this language also has a definite pattern. A one- month- old baby makes different sounds for different reasons. A mother can determine what a baby's crying indicates. This is the undeveloped and primitive form of the language. A baby of two to four months tries to express simple words in babbling language. At the end of one year the child utters some words which the parents can understand with little effort. By the end of two years, about 270 words are ready with him. Gradually the number of these words increases. At the same time mastering different idioms to use the language correctly. Thus, using advanced forms of language, increasing the number of words, increasing the length of



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sentences, such as: mastering syllables, etc. On the linguistic developmental spectrum: they are behaviors that indicate slowness in learning.

Ø Intelligence:

Children's IQ scores show that they can take care of themselves and live independently based on adult scores. The matter is different. The classification made by psychologists on the basis of IQ and the characteristics of each type are as follows:

Talented: Children who have an IQ of 130 or higher are called gifted children. They are superior in intellect and have high reasoning power. Compared to other children, they need to be involved in educational activities like studying in schools. Can perform mental operations more efficiently and quickly, such as grasping concepts, remembering, objectifying, seeing relationships, generalizing, abstracting, critiquing, and problem solving. They have a wide attention span so they can make connections. Has the potential for high academic achievement. They take the lead in intellectual work and can understand complex instructions. The number of such children is small compared to normal or normal children. A group of children whose IQs fall between 90 and 100 and can benefit from regular school programs with varying degrees of effort are called normal children. Disabled: Some children have disabilities due to low intellectual ability or special learning disabilities. Children with low or below normal IQ are called mentally retarded children. Due to insufficient intellectual level, they have difficulty in learning and cannot adapt to the needs of society. There are three levels of mentally retarded children, which are:

On the heart line: they are slow in learning. They have an IQ of 90-70.they can take care their self and can live independentaly as being adult Trainable retarded children (IQ 50 - 35): They are able to learn basic literacy and simple vocational skills. They have some ability to take care of their personal needs and can be trained in skills for daily tasks. Special classes for such children should arrange.

Children with severe mental retardation (score below 35): have very limited adaptation to religion. They are never in school. They depend on their family for their personal needs.

Children with specific learning disabilities are called the learning- disabled group.



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They are typical children with above- average intelligence, but have difficulty with one or more of the psychological processes involved in understanding or using language in numbers (written or spoken). These difficulties are their listening, speaking, reading, writing. Manifested in the power of spell or gamitic calculations. Such difficulties are known as language (Phasia - difficulty in understanding spoken language), reading (Dyslexia - difficulty in reading), semantic (Hyperlexa - lack of understanding or little understanding), arithmetic (Dyscalcula - difficulty in calculating numbers) and writing (Dyspraphia - difficulty in writing). is Some are hyperactive. That is, they are overactive, inattentive, impulsive. They do not follow instructions properly and often do not complete tasks.

Ø Applicability:

Students vary in aptitude. One student may have a mechanical aptitude, another may have a mathematical aptitude, another may have a language, music or sports aptitude. Differences in these are due to differences in the combination of cognitive processes, perception, and psychoneurological pathways associated with women. For example, mechanical aptitude is a combination of spatial relations, the power to acquire information about mental matters, and the power to understand mechanical relations.

At the same time, it also includes both the samvana and the monaic powers. Similarly, Science 3. Maths requires different strengths and requires different types of learning for each.

There are many staircases where some students enter a field after training and find success. While other students cannot succeed in that field. Hence their suitability should be considered in providing academic and vocational guidance to the students. It will enable students to utilize their strengths properly. Differences in applicability can be determined using applicability tests. Aptitude tests can be used to determine achievement in each area of student performance for areas such as mechanical skills, math, science, language, music, and art. Aptitude tests are used to select students for study in fields such as medicine, engineering, business management, law or teacher-training. In fact, the aptitude test measures the future success or learnability of the candidate in the field of study. That is, the QoT answers whether the candidate possesses the readiness or



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necessary aptitude to benefit from studies in the relevant field of study.

Ø Academic achievement:

Differ in their academic achievement, but it is important to determine how they differ. You know that those who have the right pre- expected knowledge are more effective than those who lack this knowledge.

Thus, there is variation among students in terms of academic achievement even though the same teacher is teaching the same class. Acknowledging this diversity, the teacher should prepare the teaching- plan in the classroom, brave Physical and psychological factors, socioeconomic roles, daily and environmental supports, social pressures, populations, information access, and learning outcomes are not the same in all students. Hence they differ from each other in terms of their tastes differences in the aptitudes of adolescents and children can be clearly seen in almost all classes in terms of play, recognized activities and various subjects at the school level. Their Chio ranges from very low to very high.

Differences in prior knowledge among students, for example, produce most of the learning- differences in some children. As such differences in knowledge increase, cumulative knowledge- trafficking arises. Such differences are known as the 'Matthew effect'. Meaning those who are academically rich get richer and those who are academically weak remain poor. Thus, differences in students' knowledge arise due to differences in prior knowledge and stored knowledge. Similarly, they differ in their power to apply knowledge in a given situation and these differences can be identified in the form of power to use, analyze, synthesize and evaluate knowledge. In fact, ability is a necessary condition for learning, and strengths related to intelligence, resourcefulness, and creativity are critical to academic achievement.

Ø Aptitude:

Evidence of infants' aptitude is found in the form of their attention. During the first two or three years, infants especially enjoy exploratory activities. 25 year olds are more interested in moving toys. Boys' interest in movement increases with age and girls' interest decreases.

At the age of five or six, aversion is not the same. There is variation in the likes



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and dislikes of children. Boys have an aversion to inappropriate things. Girls avoid physical activities, and rarely express anger.

There are significant differences in sexuality during infancy and after entering puberty. Young children play with children of both sexes. A group of pre-school children develop an unusual friendship. Five to eight- year- olds have no qualms about playing with the opposite sex. Nor are they confused about receiving physical attraction from adults. During puberty both sexes express an interest in sexual group activity. Teenagers prefer personal attractiveness and being with someone of the opposite sex.

Hence a teacher should always keep in mind that there is a lot of diversity among students in terms of their interests. Hence some students in the class are always ready to meet other people, attend social events, participate in picnics. While some students are willing to read books and participate in meditation classes.

Ø Attitude:

There are individual differences in attitudes among adolescents. For each adolescent, maturity level, planned and incidental experiences, physical environment, amount of warmth shown towards him, democratic behavior and what he is fed at home. Desires, school life, friends on the playground etc. are not the same. Similarly, the individuals from whom a child seeks self- identification and whose attitudes he seeks to assimilate, or the individuals whom children dislike and whose attitudes they generally disapprove of, are not the same for all three. The same happens with objects or things. Substances that are liked by one teenager may not be liked by others. As a result individual differences arise in adolescents, in order for an intellectually mature person to change and correct his attitudes, he must be convinced that his attitudes are narrow, prejudiced, or wrong. In contrast, the intellectually immature person clings to his attitudes despite ample evidence that those attitudes areas of Individual Differences are undesirable.

Children of different ages have different attitudes towards cheating and stealing. Ten- year- olds have a strong tendency against cheating and stealing. Sixteen-year- olds, in accordance with the environment and physical level in which they find themselves, express an aversion to Chauri; But admits to stealing in special situations like exam etc.



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Young children have a respectful attitude towards religion. Religion is formal for them at this age. Youngsters doubt the existence of God. There are individual differences in the level of assertiveness and self- esteem among adolescents. Youngsters now worry about the religious concepts acquired in childhood. Adolescents differ in their attitudes towards authority (teachers, principals, leaders and parents). This difference depends on the satisfaction or dissatisfaction the youths get during their interaction. Adolescents' negative attitudes toward authority are generally referred to as rebellious attitudes and children's positive attitudes toward authority as acquiescent attitudes.

Therefore, the teacher should get information about what person, thing, idea, activity each person has a particular attitude towards and use this characteristic to achieve the goals of the teaching-learning process.

▼ EDUCATIONAL IMPLICATIONS OF Individual difference:

- 1.In any group there are individuals who differ from the group norms. A classroom is equally likely to have very bright and very weak students along with normal students.
- 2. Every teacher needs to make an effort to get information about the abilities, interests, aptitudes, aptitudes and other personality traits of the students in his class. And this knowledge must be used to guide students to make the most of their talents.
- 3. It is wrong to expect all students in a class to achieve equal success in any one area. Due to intelligence, backwardness, lack of interest, etc., some students may lag behind in achieving in one or the other field.
- 4. Not all students benefit equally from a particular teaching husband and the same and rigid curriculum.
 - Intelligence: Concept and theories (Guilford's SOI) Measurement of Intelligence and its educational implications:
- Intelligence: Concept and Characteristics
 The most important variable that affects schooling or performance of a job is intelligence. Psychologists have interpreted the term intelligence in different



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ways and there is no construct whose structure is different in different individuals.

The vagueness of the term arises due to the fact that intelligence is not a concrete material it is rather abstraction from the behavior of the individual, which is indirectly inferred and elaborated as an adjective. The dictionary meaning of term -intelligence is the capacity to acquire and apply knowledge boring defines intelligence as what an intelligence test measures.

Definitions of intelligence

Several psychologists have classified and defined intelligence in several ways. Some of them are as follows:

Ø Vernon's classification of intelligence:

a.Biological approach: Man is an organism among millions living on earth. Environment works as a foe for him. Intelligence is the capacity to adapt to the environment or ne situations of life at every moment.

This definition of intelligence can be criticized on the ground that there have been many intelligent and renowned persons, who were will adapted to their social and physical environment. Besides if we want to study individual differences in a society, this definitionserves no practical purpose.

b.Psychological approach: According to psychologists, intelligence Hebb and R, B Cattle distinguished two kinds of intelligence. The first is intelligence _A' which is _fluid' intelligence' and which is related to genetic potentialities or inner qualities of the individual's nervous system. Second is intelligence is the relative defined intelligence as the innate general cognitive ability.

c.Optional approach: these definitions help us to understand the concept of intelligence in clear and definite terms. For example In order to determine a child's IQ, we first administer a test of a specific kind. Then, we observe his performance in the test. And finally draw certain conclusions in the context of pre-determined objectives.

Ø Freeman's classification:

a. Ability of adjustment: an individual is intelligent to the extent to which he is able to adjust to new situation and problems of life. The more a person is intelligent, the more he is able to adapt to his environment in antagonistic



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conditions. The person who is low in intelligence has less capacity to adjust to the new situations of life.

b. Ability of learning: learning ability is also an index of intelligence. The more people are intelligent the more he is able to learn new things.

c.Ability to carry on abstract thinking: This category of definition of intelligence is related to the effective use of concepts and symbols in dealing with situations and solving problems through the use of verbal and numerical symbols. According to Thurman an individual is intelligent to the extent he is able to carry on abstract thinking.

Ø E. I. Thorndike's classification:

a.Concrete intelligence: the intellectual ability in relation to concrete materials is called concrete intelligence. It is the ability of a person to comprehend the actual situations and react to them adequately. This kind of intelligence is measured by using performance test or picture tests in which the subject manipulates the concrete materials.

b.Abstract intelligence: it is the ability to respond to worlds, letters, numbers, or symbols. This type of intelligence is required in all academic activities in school or outside the schools. The highest level of abstract intelligence is manifested in the thoughts of philosophers or in the inventions of scientists and mathematicians.

c.Social intelligence: it is the ability of an individual to react to social situations of life. It is the ability to understand other and to react to them in such a manner that they may not feel unjust

Intelligence as a global capacity:

A comprehensive definition of intelligence: Stoddard (1943) and Wechsler (1944) have defined intelligence in the following words:

Intelligence is the aggregate or the global capacity of the individual to act purposefully the thinkrationally and to deal with the environment effectively. Stoddard further elaborated that intelligence as the capacity of a person to undertake activities that are as follows:

- Difficult
- Complex
- Abstract



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- Economical
- Goal directed
- Valuable from social viewpoints
- Original

These activities demand concentration energy and resistance to emotional forces.

Ø Characteristics of Intelligence

From the above definitions we can draw the following characteristics of intelligence:

- 1.Intelligence is the composite of several intellectual skills such as thinking doing, reasoning, dealing, learning, etc.
- 2.Intelligence is displayed by the behavior of the individual as a whole and intelligent behavior isalways goad directed.
- 3.Intelligence is the ability to adjust to abnormal and challenging situations of life.
- 4.Intelligence is not related to ordinary tasks of life. It's always related to extra ordinary manipulation.
- 5. We chsler included the concepts of drive and incentive which are implied in his statement to act purposefully and to deal effectively however many psychologists are of the view that drive and if they are included in test of mental ability more confusions will be created thereof.
- 6.There are seven fundamental elements of intelligence according to Stoddard. Intelligent person can undertake difficult and abstract tasks with evade. He can manipulate and dial with the abstract ideas and concepts efficiently, economy refers to the rate at which a mental task is done or a problem is solved. If _A' solves a problem sooner than _B' then _A' solves a problem sooner than _B' then _A' isconsidered to be more intelligent than _B' the term social value indicates whether a mental task performed by a person is in accordance with the socially desirable and acceptable norms or not. The last term originally farers to a person's ability to discover something new and different, that is this term is directly related to creative potential of a person. Discovery of some new facts and principles and inventions of new concrete materials by the scientists are few examples of originality.
- 7.Stoddard's definitions of intelligence had been criticized on two grounds: a.It includes social values in intelligence that is intelligent task must be socially desirable. Psychologists criticize this point by saying that social value is a



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subjective phenomenon that is what is desirable for me may not be necessarily desirable for theirs so there is no scope of subjectivity in an objective intelligence test.

b.He included two conditions of intelligent behavior in his definition. First is concentration of energy and second is resistance to emotional forces. Psychologists say that these elements are non-intellectual traits and hence they should not be included in mental abilities at any cost.

Ø Classification of Intelligence Test

- Individual Intelligence test:
 This test is administrated to only one person at a time. Binetsimon scale is an example.
- 2. Group Intelligence test:
 - This test is one which can be administered to more than one person at a time. Army alpha and army beta are two examples of such tests. Some general characteristics of group intelligence tests are as follows:
 - a. They have been developed on the assumption that intelligence is a general capacity and can be measured by sampling a variety of mental activities.
 - **b.** In group tests the similar types of items are pooled together in different subtests
 - c. Every group test is standardized for a special range of ages or school grades.
 - d. Construction of individual test is also very difficult and costly as compared to group tests. Their scoring and standardization is also a time-consuming process.
 - e. It is very difficult to establish rapport between the examiner and the examinees and hence examinees cannot be motivated properly in group tests of intelligence. These two limitations are not seen in individual tests.
 - f. Group tests are superior to individual tests in the sense that norms established here are more dependable than that of individual tests. It is because these norms are calculated on the basis of a sample.
 - g. Individual test provides qualitative performance of the individual while group tests are mostly point scale and express the performance



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in quantities.

Classification from the point of view of nature of items of the test

1. Verbal test:

Verbal test of intelligence is one in which instructions and items are produced before the examinees trough written language. So examinees must be literate to take these tests. And jalota's group general mental ability test are some examples of verbal tests of intelligence of Indian origin.

2. Non verbal test:

A non-verbal test is one that requires the use of language onlyu to impart instructions. The examinees are asked to manipulate the test materials in their own way. Since language is not needed to respond to items here it can be administered to illiterate persons as well. They are also culture. Test items are usually of figured relation type. Army beta is a good example of non-language test.

3. Performance test:

A performance test is one in which a subject has to perform something or to manipulated some concrete materials without much use of the language ability. Non-verbal and performance tests are useful for the following groups of people:

- a. Deaf and dump: those children who cannot hear or speak can be tested with the help of performance test.
- b. Illiterates: verbal test of intelligence is useless for those who cannot read or write. Performance test is useful for them.
- c. Shy children: many withdrawn children are educationally poor, they will perform poorly on intelligence. If children are educationally poor, they will perform poorly on intelligence test too and thus will be wrongly declared as children of below average intelligence. Such a problem can be overcome by using performance test or non-verbal intelligence test.
- d. Useful for children of other culture: A particular culture dominates in every verbal intelligence test and thus the test is suitable for these foreign students.



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Ø Intelligent Quotient (IQ):

- It is also based on the concept of mental age. It is the ratio of mental age to the chronological agemultiplied by 100.
 IQ = MA / CA X 100
- Suppose the mental age of a 10 year old child is 12 years, on the basis of his scores in an intelligencetest, his IQ will be 12 / 10 X 100 = 120
- Similarly, if mental age of a person is 9 years 2 months and his age is 12 years 6 months, then his IQwill be 110 / 150 X 100 = 73.3
- Ø General classification of persons in terms in of IQ is as follows:

IQ	Classification
140 and above	Genius
130 – 140	Very superior
120 – 130	Superior
110 – 120	Bright
90 – 110	Average
80 – 90	Dull
70 – 80	Borderline
Below 70	Mentally retarded

1. Shortcomings of IQ:

Some of the main shortcomings of IQ are as follows:

a. It is a well-known fact that after 18 years, the mental age of a person tends to stabilize. Thus, if IQ is calculated after this age the result will be misleading that is a person will be less intelligent if he grows in age.



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- b. Variability of IQ scores from one test to another is not the same. As a result IQ scores for different tests would not be directly comparable.
- c. It has also been found that variability in IQ scores for different age levels on the same test is not the same test is not the same. In that case IQ scores would be a misleading index because it indicates that a person's IQ may increase or decrease as he grows in age. The

following example illustrates this point:

Here, IQ of 120 of both the children is not the same due to difference in SD.

- 2. Deviation IQ: now a days IQ ratio is converted into a normalized standard score and SD remain constant through all the age levels. It means that if a child's score is 1 SD above the mean this DIQ will be 100 + 15 = 115 similarly if his score is 1 SD below the mean his DIQ will be 100 15 = 895 and so on. Thus with the help of these DIQ scores inter age comparison is also possible.
- Ø Uses of intelligence test Intelligence test can be applied in the following situations:
- Measurement to general learning abilities: intelligence and achievement in school are highly correlated. If a person is high on an intelligence test he is expected to score high in school achievement also. Conversely, if a person scores high in an intelligence test and still his school achievements is very poor we can find out other reasons for his educational backwardness.
- 2. Assessment of individual differences and categorization: With the help of intelligence tests we can categorize a particular class into several convenient groups and plan our instructional strategies accordingly. Thus



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intelligence testing is very useful for educational guidance.

3. Exact definition of mental retardation is possible: It is said that those who are below 70 in IQ are retarded but to what extent they are mentally retarded and what can further be studied with the help of higher screening. We may define the three groups of mentally retarded in the following ways.

Category	IQ level
Morons	45-69
Imbeciles	25-45
Idiots	Below 25

- 4. Identification of gifted children: Gifted children are a treasure of society. They must be indentified in the earlier stages of their lives so that they can be fully guided and helped for their better advancement which is directly related to the advancement of the society as well. Intelligence testing helps the concerned organization to chalk out plans in desired manner.
- 5. Vocational guidance: some children are very forward in verbal abilities and some are superior in non-verbal abilities. This identification is possible only with the help of intelligence test. Since academic subjects need verbal intelligence and technical subjects need non-verbal or performing abilities hence children may be guided accordingly.
- 6. Screening: in today's age of competition and rush, screening has become a necessity every school has limited seats of submission and it has to select only those students who can raise the academic level of the school



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high and get a name for it. Same is the case with appointments I jobs. For all these purposes intelligence testing is a must.

7. Study of mental growth: mental abilities develop in a sequential order. We can use intelligence tests for studying the trends of mental development of individuals. Intelligence tests have made it clear that mental development of children is steady mind does not develop rapidly in the period of adolescence like the physical and emotional development but in childhood it develops rapidly.

Ø THEORIES OF INTELLIGENCE:

What is intelligence? How is the development of intelligence? How do people differ from each other in terms of intelligence? Many such questions are central questions facing psychologists who study intelligence. Based on the studies conducted to answer these questions, various theories about intelligence have been derived.

These theories attempt to describe the structure of intelligence by studying how individuals differ in intellectual opinion. Some established theories about intelligence are discussed here.

Ø THURSTONE'S THEORY:

In 1938, this principle was discovered on the basis of statistics throne has through of a new shape of intelligence. This has been named as factor analysis according to the Thurston's intelligence comprises of primary mental abilities (PMA)

- 1) PRECEPTUAL ABILITY
- 2) FLUENCY OF WORD
- 3) GENERAL REASHNING POWER
- 4) VISUAL OR SPATIAL ABILITY
- 5) NUMERICAL ABILITY
- 6) ASSOCIATIVE MEMORY
- 7) VERBAL COMPREHENCIA

IN DETAIL,



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PRECEPTUAL ABILITY: This is known as _P'.This ability consist of recognizing similarity and dissimilarity in words and numerical.

FLUENCY OF WORD: It is known as _hi'to spear words in sequence, to speak words steadilyto use words in general, this to click is present.

GENERAL REASHNING POWER: It is named as _I'or _R'in beginning, had given inductive and deductive but then after key grouping these two, made only are factor.

SPATIAL: It is named as _S'to recognize pistons or to arrange different shaped structures.

NUMERICAL ABILITY: It is named as _N'. The simple calculation, number problems.

ASSOCIATIVE MEMORY: It is named _M' .This factor is also recognized as memory torecognize those respelling synonyms and antonyms etc VERBAL COMPREHENCIA: It is demolished as _V'verbal logic, the understanding ofreading matches the following disarranged words.

Ø One-factor theory (Unifactor theory):

This theory was first developed by Alfred Bienne. According to this principle, intelligence is made up of a single element. All to a lesser extent in intellectual pursuits

Ø Duel –factor theory (Bifactor theory)

A principle in 1904 Charles Spearman was introduced. According to him intelligence is two composed of,

- (1) General power (g factor)
- (2) Specific power (s factor)

Charles Edward Spearman analyzed scores on mental tests. His results showed that every mental act is caused by two forces - one, a general force that underlies all acts, and another, a specific type of force that is different for each act. Spearman calls the common element mental energy. It is inherent in every person from birth and remains the same throughout life, but its proportion varies in different functions of a human being.

The special factor is not by born. It can be cultivated.



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Ø Multifactor theory:

American Louis Lignon Thursten concluded that it consisted of seven primary forms of salvation. M is the path to salvatio

- 1. Verbal understanding (Virtual corporeonson) the ability to know the meaning of words and the relationship between them is found in lexical similarity, disordered sentences, verbal reasoning, arranging proverbs etc.
- 2. Word fluttery: This component is measured by tests of speaking words quickly, rhyming words, etc.
- 3. Numerical ability: This power determines the speed and accuracy in arithmetic calculations in a person.
- 4. Associative memory: Memorizing the words in the pair match, giving one word and saying another word. This term becomes necessary.
- 5. Perceptual response (Perceptual response) this component is essential in making quick comparisons of directly visible figures or names.
- 6. Spatial ability (Space ability) Understanding geometric figures, pictures, shapes, etc., this element becomes necessary in the act of arranging such figures in space through imagination.
- 7. Induction or general indoctrination (Induction of General reasoning): An element necessary for solving logic-questions, questions, etc.

 According to Thorsten, there is no such thing as general intelligence, but intelligence is made up of seven basic, primary powers. Among these seven powers, there is a relationship between them. So these seven powers are not independent, but they also have some common parts, i.e., not a single power for any one activity.

Ø Guildford's theory of intelligence:

Guilford's Structure of Intellect (SOI) theory states that a person's success in general intelligence may be traced all the way back to fundamental mental talents or intellectual elements. He used up to 150 different mental capacities and arranged them into three categories in his SOI model: operations, content, and products. With the expectation that a person could be exceptionally gifted in some of these talents while lacking in others, he set out to create tests for every possible scenario of ability on these three dimensions. Guilford studied



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and produced a wide range of neuropsychological tests to assess the talents anticipated by the SI principle. The numerous qualities of Guilford's theory of intelligence are operationalised through these tests. Factor analysis was utilised to see which assessments reflected similar or slightly dissimilar competencies.

J. P. Guilford was a psychologist connected to the development of tests to choose individuals for flight testing during World War II. As he broadened his study interests to include evaluating a variety of other specialised reasoning skills, he constructed a model to direct his research and organise his thoughts about all of the other talents he was examining at the same time. Guilford is widely regarded as the person who inspired the discipline of psychology to begin investigating the phenomenon of creativity. During his 1950 presidential address to the American Psychological Association, he emphasised the critical importance of creativity as a study issue, while highlighting the shortage of documented research on the subject. In his opinion, most people believe that creativity is a natural by-product of intellect, as indicated by IQ. As a result, they have not started to investigate the topic of creative thinking. Guilford declared his plan to employ a factor analytic technique to begin extracting the many aspects of thinking to distinguish creativity and other qualities from the factors evaluated by IQ.

Ø Categories in Guilford's Structure of Intellect theory

Guilford's "Structure of Intellect" approach categorizes and organizes the varied talents into three categories: content, product, and operation. Each dimension is briefly described in the next section.

The structure of intellect consists of six <u>operations</u> or general intellectual processes:

 Cognition - Cognition includes aspects like understanding, comprehending, discovering, and becoming aware of the information.



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- Memory recording Memory recording is the proficiency to integrate and encode information.
- Memory retention Memory retention is the ability to recollect facts or information.
- Divergent production Divergent production describes the ability to develop different ways to solve problems; it also refers to the ability to be creative.
- Convergent production Convergent production is the capacity to derive singular answers to problems from a set of rules; it is also known as rule-following or problem-solving.
- Evaluation Evaluation is the ability to determine whether a piece of particular information is corrected, reliable, or trustworthy.

Ø Content Dimension

SI comprises five main categories of information to which the <u>human</u> intellect uses the six operations, which are as follows:

- Visual Visual information is information encountered through the sense of sight.
- Auditory Auditory information is processed through the sense of hearing.
- Kinesthetic Kinesthetic information is experienced through one's body movements.



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- Symbolic Symbolic information is seen as symbols or signals that have no significance in and of themselves.
- Semantic This is concerned with the meaning and concepts conveyed by words.
- Behavioral Behavioral information is thought to be the result of human actions.

Ø Product Dimension

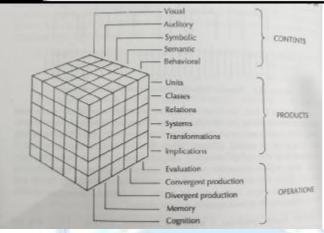
As the name implies, this dimension shows the outcomes of specific operations being applied to specific items in a specific order. The SI model consists of six products, each of which increases in sophistication:

- Units Units are discrete pieces of information.
- Classes Classes are groups of units that have characteristics in common.
- Relations Relations are groups of units that are linked together as opposites or in correlations, series, or parallels.
- Systems Systems are made up of multiple relations that are interconnected to form structures or pathways.
- Transformations Transformations in knowledge include shifts in viewpoint, transitions, and alterations in knowledge.
- Implications Implications are expectations, conclusions, outcomes, or assumptions of knowledge based on existing information.



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Combining these three elements results in the identification of 5 x 6 x 6= 180. It is crucial to remember that this model was established as a roadmap for a research study to investigate the relationships between the different categories and the capacity to integrate test results into this framework. The diagram does not explicitly depict the relationship between the different cells in the matrix. According to Guilford, they are centered solely on the cognition of a specific type of behavioral element.

∨ Educational implications of intelligence:

- 1. Both heredity and environment are important as determinants of 2.
- 2. Every geneticist admits that the environment is responsible for 20 to 25 percent of the development of intelligence. Whereas extreme environmentalists accept that 1/4, as much variation in intelligence is due to genetic intelligence.

Immature Born Beds or Pains A newborn baby's bed is normal. Inadequate nutrition, infertility, and the period between two children have a monetary adverse effect. Between mother and child in the early months.



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Tremors are too much for normal cognitive development is important.

School quality has not been shown to have a significant effect on a child's academic performance

As the concept of socio-economic level is not clear enough, there is no clear star about its effect on intelligence.

- Personality: Concept, Affecting Factors:
 - Introduction:

From a research point of view, the study of personality in psychology has provided a wide field of study. In current times, many aspects of personality have attracted the attention of many researchers for study. The concept of personality has become clearer as a result of the vast body of research undertaken to explain variance; Personality-study methods have become more systematic and systematic; Personality- has become more pronounced with development.

The ultimate goal of psychology is to understand and explain human behavior. Personality acts as a role of a person's behavior. Any behavior of a person without reference to his personality has no meaning. Hence a person who is trained as a teacher needs to acquire the ability to understand the behavior of the students properly when he takes responsibility in the classroom as a teacher. His success as a teacher depends on how well and correctly he can do this carp.

Keeping this fact in mind, this chapter discusses the concept of personality, factors affecting personality, theories of personality-development and the concept of deviation in personality.

- Concept of Personality:
- **Ø** Meaning of personality:



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A person's behavior and subjective experiences-(thoughts, feelings and desires) have two aspects of source:(1) external stimuli that affect it from outside and (2) internal basic tendencies that result from the interaction between inherited physical characteristics and experience with the external world. A child attacks his friend because the friend has insulted him; No child is interested in filling the class, because the teacher is weak in teaching. etc. examples prove it that man's behavior changes from moment to moment, from situation to situation, from the changing situation presented to him.

It is accepted that the behavior of a person changes according to the external situation; Although external factors cannot be solely responsible for behavior, individual characteristics have also been partially attributed to it. For example, some people do not give up or become discouraged in the pursuit of a goal even in the face of adversity; While some give up after a single troublesome experience. This leads to the conviction that a person's behavior is not only controlled by temporary external impulses, but also by his stable marriages. These stable traits are known as personality.

Ø Definations of personality:

In english languageword "personality" derived from latin language word "persona". Persona means mask, worn on the face of a character playing a lesson, by speaking or acting or wearing it at home to represent the character. The existing definitions of existence have also been developed in a similar context. Personality is not a single concept. The ideas of various psychologists who have tried to clarify the concept of personality will be that it is a multifaceted concept.

"Personality is a person's thoughts and inventions, inclinations and interests. His unique behavior and philosophy of life or the summation manifested by all these."

- Woodworth

"Personality is the sum total of a person's behaviors in a social situation. These behaviors include not only external actions, but also the feelings that the



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situation evokes in the individual, which the individual himself interprets through introspection."

-Trexler

"Personality is the ability to predict what a person will do in a given situation." -- -- Ketal

"Personality adapts to environment there is a mechanism of adaptation, especially the social environment towards"

Allport (1961): *Personality* is dynamic organization within the individual of those psy-chophysical systems that determine his/her unique adjustment to the environment.

Kemph: Personality is the integration of those systems of habits that represent an individual's characteristic adjustment to his environment. Thus, we can say that all those characteristics which are needed for adjustment in the society determine the personality of an individual.

Stages of Personality Development

Stages	Age conflicts
Oral	0-2 years trust/mistrust
Anal	2-3 years autonomy/shame
Genital	3-6 years imitative/guilt
Latency	6-12 years industry/inferiority
Adolescence	12-18 years intensity/confusion
Young	18-21 years intimacy/isolation
Adulthood	21-50 years
	creativity/stagnation
Maturity	Above 50 years
	integrity/despair

- Characteristics can be derived about pesonality as follows:
- 1. Those mental powers, aptitudes, competence is concerned with disposition, thoughts, feelings, and behaviors.
- 2. It is a dynamic system, it is not inert or passive, but a factor acting in a certain direction in a certain way, this functionality to satisfy a need.
- 3. By it one can predict the future behavior of a person.
- 4. Personality is not only based on physical factors or only mental factors; In fact, there is a combination of these two, a combination of both first.



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- 5. All the actions of a person are done according to some kind of adjustment.
- 6. No two individuals adjust to their environment in exactly the same way. Each individual has a unique combination of physical and mental strengths, resulting in a different adjustment process.

The state of the s

• Factors Affecting Personality:

In the early years of the development of psychology an extreme view prevailed that biological inheritance is the main determinant of personality. That is, it is the result of a person's personality and some kind of inheritance. As a reflection of this way of thinking, the way of thinking about the importance of the environment came into being. As psychology developed, both these ideologies were scientifically verified through research. These studies have provided Not all aspects of personality can be traced to genetic factors or genetic factors alone. Each park is the result of an interaction between the factors in question. Effects on personality and outcome there have been studies about that, on the following pages effects of clothing on personality has been done.

- 1. Biological inheritance factor
- 2. Physiological factor
- 3. Social Factor
- 4. Cultural Factor

1. Biological Inheritance:

Biological inheritance is an important and crucial factor in shaping the particular structure of personality. Each person receives it directly from their parents. But it has a consecutive series. This heritage determines the similarities and differences of each katha lavan in it. Each individual inherits a unique combination of chromosomes from his species, lineage, family and parents. Thus the decisive influence of genetic factors is considered as the origin of the genetic differences observed in the case of an individual, there have been many studies examining how and to what extent an individual's inheritance is a determinant



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of personality. Among them the studies of Gortsman and Shildz (1972) are significant. They studied the personality of 34 single and 34 extra-large babies. All these Aedas were brought up in an environment almost identical to that of man. They measured 16 general personality factors. It found correlations between scores on only two of the components were higher than those of obese individuals on five of the ten components when their mental health-related components were measured. Twins found higher correlations than individuals. In Thomas' experiment on rats, placing female rats in a state of constant anxiety-conflict during pregnancy found their infants to be more anxious after birth. From all three results, it can be said that heredity plays a greater role as a determining factor in predisposition to mental illness than general personality components.

2. Physiological Factors:

The chemical balance of a person's core, glandular system, nervous system and body structure regulate the person's contact with the external world. If any of these physiological factors are not functioning properly, a person's contact with the world and opportunities to gain experiences become limited. As a result the circle of personality-development becomes limited. Inadequate performance occurs due to insufficient amount of water, salts, vitamins etc. in the body. Endocrine function is important in matters such as impulsivity, temperament, activity, agility, enthusiasm etc. The nervous system plays an important role in the development and coordination of personality. Disruption of endocrine balance stunts personality-development and in some cases leads to malformed personality, neurological deficits in attention, memory, visualization, learning process. Higher mental faculties like thinking skills etc. are adversely affected. There is no clear association between structure and personality traits; However, Sheldon and Kemmer have studied this area and presented important findings. There is a constant interaction between the mental and physical aspects. As a result the behavior of a person assumes a certain shape.

3. Social Factors:

Social factors like family, school, society etc. have contributed to personality development. In it family is a special contributing factor in personality-



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development. The comic environment meets the needs of the child. a child becomes an adult when properly satisfied. Then his personality is healthy and balanced. Emotional relationships are the most important aspect of family life. Emotional instability arises in a family that lacks emotional relationships and interest in the other, conflict between parents, lack of peer relationship between parent and child, and family breakdown due to death or separation. Older educated parents are more likely to be agitated and have less emotional control. Emotional instability of parents causes universal instability of children. the socio-economic level of the family has a direct and indirect effect on the personality of the system. The kind of restrictions parents place on a child when it becomes a child has direct effects. Especially in middle-class families, parents keep an ashram near the youth so that they don't have to beat their children. Such feelings create feelings of insecurity and anxiety.

A study of college-level students found that those who came from poor economic backgrounds suffered from anxiety, introversion, loneliness, social dysfunction, and feelings of inferiority. Those who came from a higher economic social level found independence, self-confidence and influence as special. Minority water children are found to express inferiority complex and resentment towards society. They have a weaker cell of self adaptation than social adaptation.

4. Cultural Factors:

Whether a spouse or a member of a cultural group, cultural norms, traits and values are embedded in the individual. Which gives importance to the economic value in the society Where a person is motivated to develop his energies towards economic production, i.e. the prevailing values of the society play an important part in determining the direction of personality development. Similarly, professional activities remain an effective factor in developing personality-traits that are useful in developing mutra personality-trees.

▼ Types of Personality (Introvert, Extrovert, Ambivert)
Sigmund Freud's disciple Dr. Yuga has tried to divide individuals into two categories according to their personality based on person-to-person interaction. His classification divides individuals into two



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categories (1) Introverts (2) Extroverts. Those who are not included in these two categories and have the characteristics of both categories are called amphiphiles. In this regard, apart from the above two types of personality, a third type of ambivalent personality has also been given.

(1) Introvert personality:

The personality traits, nature, and aptitudes of such individuals are not readily apparent externally. Such a personality is called an introverted personality. They are more interested in their own mental and emotional life than in the outside world. The characteristics of his nature are as follows:

- (1) They are self-absorbing. They are extremely sensitive
- (2) They are introspective and introspective. They are soulful and influenced by personal emotions.
- (3) They are shy and shy in nature, so they are lonely, there is more interest in working.
- (4) They are timid by nature. They are insensitive to others.
- (5) They are concerned with their own things they are also very aware of their belongings and pains.
- (6) Those who worry about their vows and are anxious.
- (7) They lack adventure. They are suspicious and excessive sawan is.
- (8) They are averse to praise.
- (9) They are self-centered, so they cannot become eternally popular.
- (10) They are less talkative. They are more prone to writing than speaking, so they may be good writers, but not great speakers.
- (11) They are averse to crowds.
- (12) They are generally of a calm disposition, but sometimes some he is quick to anger in all matters.
- (13) They are very fond of reading books and magazines, but not particularly fond of sports, traveling etc.
- (14) They are relatively conservative. Hence they lack supervariability.
- (15) He is a specialist in philosophy and science.
- (16) They are unexpressive and private are moody.
- (17) They have an impact on the person opposite to their personality.



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(2) Extrovert personality:

An extrovert tries to bring out his life force (ilblo). Their interest lies in the external world:

- (1) Extroverted individuals are active and have a strong desire to act.
- (2) They are highly opinionated and interested in working against others.
- (3) They are participants in social functions and events, because they have a special interest in the external society and its activities.
- (4) They are constant runners after popularity.
- (5) They are interested in sports. He is especially interested in physical sports.
- (6) They are easily bendable.
- (7) They are fluent speakers and eloquent, loquacious also, there are those who treat other persons like a friend.
- (8) They avoid solitude.
- (9) They are constantly cooperative with other individuals.
- (10) Extroverts have a carefree and somewhat carefree nature.
- (11) They are skilled in organizing people, so they in politics can be successful. They love power. They cooperate also succeeds in managing activities.
- (12) They are constantly trying to attract people's attention.
- (13) They are always hungry for self-appreciation.
- (14) They are careless towards their deeds and sufferings and also neglectful of their possessions.
- (15) Extroverts with a friendly demeanor and others hope is easy to get along with.
- (16) They are proud, unruly and aggressive cells by nature.
- (17) Extroverts are calm and optimistic.
- (18) They are outgoing. Spending life in consecutively, It is very painful for them.
- (19) Extroverts are interested in heroic deeds.
- (20) They are not easily greedy or confused as well as inflamed don't even get scared.
- (21) Extroverts are strongly affected by the environment.
- (22) Extroverts' purpose in life is their own environment, One has to adapt the situation according to one's needs.



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- (23) Extroverts adopt qualities that people respect is motivated to
- (24) Extroverts are usually conservative or conservative.
- (25) Extroverts are easily drawn by objective facts
- (3) Ambivert Personality: Some individuals are neither introverts nor fully extroverts. Such persons are ambivalent. Their behavior sometimes shows the traits of an introvert and in other situations they behave like an extrovert. Thus they have both personality traits. Such individuals are known as developmentally ambivalent individuals. In some respects they are more like introverts. So in some other respects they are more like extroverts. Total introverts or total extroverts are less common in the population. Most individuals in a group are extroverts.

Unit 4: Mental Health and Adjustment

Mental Health: Concept

Mental health is the ability to adequately adapt to the environment on the ground of reality.

Mental health means – "the ability to face and accept emotions, desires, realities of life in daily life."

Mental health means a well-rounded personality. Well-rounded personality means the harmonious integration of various psycho-physical aspects of personality. In general terms it can be said that the harmonious functioning of the whole personality means mental health.

According to Carter V. Good's dictionary, Mental Health means "The wholesomeness of the mind." Mental health is related to physical health. Just as physical health is related to one's bodily organs and their functions, mental health is related to one's mind and its functioning.

Let us examine the views of some scholars to understand the concept of mental



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health from a psychological point of view.

"Mental health is perfectly balanced has to do with personality development." Waltin J. E.W (1951)

"Mental health is the complete and harmonious functioning of the whole personality."

J. A. Hadfield (1952)

"Mental health a great one individuals foot with effectiveness and happiness and there is an adaptation to the world. It is the mother of rebellion against nature, and accepted behaviors."

K. A. Meninjar (1967)

"Mental health is the ability to help a person adapt to difficult situations in his life."

Analyzing all these definitions, it can be concluded that mental health is the health of a person's mind, which can be proved as a competent determinant of well-rounded personality and balanced behavior identified on the basis of his adaptation story with himself and with the environment.

Factors Affecting Mental Health:

Factors Affecting Mental Health Factors Affecting Mental Self this is as follows:

- 1. Poverty of parents and family: Children also face failure in affairs due to poor economic condition of the family. So they lack confidence. Such children have not been able to get facilities like other children, so they feel inferior compared to them. With increasing age, this hypothyroidism causes aggression. Such children have to endure a lot of heat, cold, hunger, etc., due to its effect on the inner mind, they feel insecure.
- 2. Intense dislike or hatred of parents: This kind of parental attitude develops the



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following qualities in children: Rejected children become picky eaters. Considers himself disabled in all areas. They have a constant longing for loving behavior. When such a child grows up and gets married, he tries to get love from his partner. It does not get all the satisfaction it needs, so it continues to ache.

- 3.Excessive love of parents: Lack of self-confidence is seen in such children. Cannot face difficulties. Could not take leadership.
- 4. Parental Discrimination: A child who receives less love among tenants becomes jealous and quarrelsome. Due to feelings of injustice, he develops negativity towards parents as well as other elders and vassals, instability, flagellation and meditative activities.
- 5. Very high esteem or respect of parents:Parents fitam Levy, Panthi Vayu. a scramble. The novels keep children away from witches etc. This creates a conflict between ideals and the reality of society.
- 6.Effect of Society (Camimurity): The trouble caused to children in the society by early group, more page controls, dubious money etc. develops jealousy, anger etc. in them.
- 7. Too much competition in school: More in schools children who fail due to competition become demotivated, develop self-esteem, and ultimately their own consider as a defect.

Gravity develops in the successful. Children become self-centered.

• Concept of Mental Hygiene:

The following values are equal to the concept of mental health.

"Mental health can reduce the incidence of mental disorders through preventive and preventive measures and promote religious health as well."

- American Psychiatry committee

"Mental nutrition has to do with maintaining and actualizing the health and functioning of the mind." - clain (1965)



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"Mental health is a science.measures to prevent mental illness include maintaining mental health and menstruation is the science of curing disease." Crow and Crow (1969).

Analyzing all these definitions, it can be concluded that mental hygiene is a science which –

- to develop and implement principles and techniques for promoting and promoting mental health of the individual
- as well as for the prevention and treatment of menstrual disorders, disorders and abnormalities leading to adequate adaptation and balanced development of the individual doing.

OBJECTIVES OF MENTAL HYGIENE :

Three main points of mental hygiene the aspects are:

- (1) Prevention, (2) maintenance and (3) treatment.
- Between these three aspects, Crow and Crowe's three objectives of mental hygiene presented.
- 1. Preventing mental disorders by understanding the relationship that exists between the refined personality and lived experiences.
- 2. Improving both individual and group mental health.
- 3. Diseases for the treatment of mental illnesses-the rape tic measures or finding a cure and use it.

In the first phase, mental hygiene is about taking steps to protect the individual from conditions that lead to mental illness, addictions, and disorders. In this direction, the objectives of this stage of mental health are:

- 1. of personal as well as social compliance making list of various reasons.
- 2. Providing information on values, needs, motivators, conflicts between motivators, values and tensions etc.
- 3. To suggest ways and means of achieving physical and social adaptation.
- 4. To suggest solutions to internal conflicts and frustrations and thereby relieve the individual of stresses, anxieties and providing relief from emotional



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disturbances.

Another major area of mental health is concerned with the promotion of mental health and possible measures to promote it. These sub-points of the main purpose are as follows:

- 1. Finding remedies to develop one's whole potential.
- 2. Finding ways to achieve universal maturity and stability.
- 3. Social and personal safety as well finding ways to achieve sufficiency.
- 4. Healthy interpersonal relationships and group interactions find ways to develop.
- 5. A person with strong physical and mental health
 Corresponding sub-points relate to treatment and remedial measures which are as follows:
- 1. Essentially related to various types of mental illnesses, disorders and diseases providing knowledge.
- 2. for the treatment and cure of certain mental illnesses and disorders to suggest various psychotherapy approaches.
- 3. To suggest ways of rehabilitation and readjustment of maladjusted, mentally disturbed and mentally ill persons.

Thus, "The aim of Mental Hygiene is to assist every individual in the attainment of fuller, happier more harmonious and more effective existence."

Shaffer and Shoban (1936)

∨ Adjustment: Concept

Meaning of adjustment

Adaptation means adapting to the environment and social environment of human life and drinking, sometimes when a person is unable to cope with family, friends or business. Depression is up and running. The pre-twentieth-century approach to adaptation ran on a moral quagmire. There was no letter without attaining the status of Ut Anujan if the mother arising in Javan was to be taxed. It was believed that it was either removed or given extreme for punished, but that practice failed to solve the wind problems. Therefore, the psychological study of the human



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condition is important in the knowledge of bonds. Adaptation has two meanings in ecology. It is first and foremost done in terms of acquisition. Accomplishment is used in reference to achievement when it comes to the fact that something is contingent or accretive.

Another meaning of adjustment is to refer to 'action'. Adaptation is basically a fortress of from biology. Adaptation is thus a psychological process by which an individual adjusts or adapts to various situations (Lazarak, 1969). This theory emphasizes understanding the dynamics of adaptation. Not on assessing the pluses of adaptation. Of these meanings, the second one is now more acceptable. The need to adapt arises either from an individual's internal state or from an external situation. Each person has needs, wants and motivations. One tries to satisfy it and thereby relieve stress. This is an attempt to adapt to oneself. Similarly, the external situation changes from moment to moment and puts new pressures on the individual. These pressures can be overcome only with adaptation of the individual to the changed situation. To understand adaptation properly let's first study some definitions.

• Concept of Adjustment:

"adjustment is the harmonious relationship between the individual and the environment. The level of this harmony depends partly on certain abilities of the individual and partly on the nature of the environment:

- (1) the environment, which may include personal, family, socio-economic, and academic roles, and
- (2) mental strengths, which include cognitive and personality-related roles.

"Satisfactory relation of the individual to the environment." Simondrews (1946)

"It is through the process of adaptation that people can establish and maintain satisfactory relationships with the physical world around them, with other people, with culture, and with their conquests." – Kahlen (1952)

"Adaptation has been considered as a process by which an individual changes his behavior to produce a harmonious relationship between himself and his environment." – Kaul (1971)



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"Adaptation is a system of behavior in life situations like growing up, growing old, at home, at school, at work, etc. Fundamental changes in behavior must follow fundamental changes in environment." – Sharma (1979)

All these definitions suggest that adaptation is between a person and his situation to all is a constructive activity.

▼ Characteristics of Adjustment:

- 1.It gets complicated. It is constantly changing in his life due to human evolution. This is why it cannot be assumed that the adaptive adaptation to any one situation will continue forever. In human life, just as relationships and situations provide labour, it is imperative that a person consciously and continuously strives to harmonize with the situation.
- 2. Whether a person or a piece of soil can be molded as it is, annexation sak is the old belief that only the person adapted to the environment. In the ear the individual affects the society. Behavior changes due to the effect of social behavior on the individual. Then the changed person affects the environment. Thus, adaptation is an upward spiraling process.
- 3. Individuals act directly or continuously to change themselves and the environment or both. Successful adaptation occurs when the process of changing oneself, one's environment, or both creates a satisfactory state. Achieving successful adaptation requires insight and skill in the individual.
- 4. A husband goes through muwada stages during his life. With the rain on top, the situation is also bad. Every stage also has a different types of adjustment's problem. In these two aspects, a person's personality is more effective in determining the adaptation process of his/her solar type. The mental health of person must be of excellent quality.
- 5.Perfect adaptation to all elements in all contexts and situations is only a matter of imagination. In fact some individuals can achieve relatively compromised adaptations. A complete, ideal and absolute response to the constantly changing human environment is impossible during the lifetime of the car.
- 6. The adaptive behavior of any animal covers its survival. Aspects of personality, intelligence, impulses, character, life values, etc. From root to root, mutual understanding leads to healing.



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7. A person's response to adaptation is either conscious or unconscious.

Maladjustment:

Compliance is the opposite of adaptation. In this condition the person feels that his needs are not being met. It is everything that fails to establish harmony between its needs and its environment. Thus, the maladjusted person experiences severe behavioral and adaptive problems that affect the well-being of the individual and others.

A number on the process of adaptation suggests that as long as a person's basic needs (physical and psychosocial) are satisfied or there is some hope of satisfaction in the future, he remains adapted. It becomes maladaptive when its needs are denied.

Causes of maladaptation:

Certain maladaptations in an individual there is no causation, meaning that it is difficult to pinpoint a specific cause for each maladaptive behavior. Several causes of adaptation are thought to be primarily environmental. its effect how much will happen depends on the development of the person in infancy plane. Some of the causes of adaptation are these pathways:

- 1. Adolescence: are the main attraction of young people. It is such a state. For which you are not mentally prepared. So in order to be adapted some of the requirements of this state must be met. For example, in this state, it is necessary to satisfy the need for safety, the need to receive and give love, the need for uniqueness, the need for emotional distress, etc. These requirements. Due to lack of satisfaction during this stage.
- 2. Environment: The environment in which bips live, especially the pollen, creates an individual's adaptation.
- 3. Excluded Compulsions and Desires:Adolescence puts a lot of behavioral pressures on him as well as expectations of him to behave responsibly. The fear of failure along with this approach leads to anxiety.



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- 4. Emotional shock: Severe emotional trauma that continues over a long period of time is responsible for maladaptation.
- 5. Personality: Some individuals have the ability to adapt to new situations and pressures. Hence they can adapt without experiencing unnecessary stress. While some people could not change their behavior; They collapse from adaptation fatigue. There are three types of personality in general—temperance and adaptability. (1) Rigid personality which makes a person extreme in his behavior, (2) Selfish Personality which makes a person feel that the whole world revolves around him and (3) ego-existence which makes a person feel that he is introverted, the blind sees the flaw.
- 6. Failure, Struggle and Oppression: A person experiences happiness when he is motivated to achieve his goals and there is no obstacle. As pressure arises from a person's invulnerability, the conditions of the forest create pressure for certain behaviors. In all these situations a person feels some kind of stress. When a person cannot reach they want, maladjustment is absorbed in him.
- 7. Insecurity: A feeling of high insecurity in children creates maladjustment in them.
- 8. Socio-Economic Level: Children coming from low socio-economic level are found to be maladjusted in the areas of school life, self, relationships with others and family life etc(Muli, 1971 Singh and Sharma, 1974).
- 9. Self-concept: Children with low self-concept are found to be disadvantaged. (Kkar, 1967, Pathak 1967, Khatri, 1973, Paresh, 1974 and Goswami, 1978).
- 10. Person's nature: Person's nature some related characteristics are responsible for its adaptation. Like,
- -Unrealistic goals and ideals of life
- -Lack of social maturity
- -Lack of emotional maturity and control



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- **∨** Defense Mechanisms: Types and Implications:
- DEFINATIONS:
- "In order to escape the effect of frustrations, an individual may use those psychological devoices which have been described as defense mechanisms, mental mechanisms and adjustment mechanisms."
 Chauhan
- "Defense mechanism is any enduring structure of the psyche that enables a person to avoidawareness of the unpleasant or the anxiety arousing" English and English
- "Adjustment mechanisms are the habits by which people satisfy their motives, reduce their tensionsand resolve their conflicts." Shaffer and Shoben
- "Mechanisms are concerned with managing in some way the impulses whose direct and natural expressing give rise to anxiety." P.H. Symonds
- Defense Mechanisms:Implications
 - They help the mind cope with uncomfortable or traumatic situations or emotions.
 - However, some people routinely use defense mechanisms as a way of avoiding their feelings and emotions or excusing their behavior.
 - This can have a negative impact on a person's mental health and relationships.
 - While defense mechanisms are often thought of as negative reactions, we all need them to temporarily ease stress and protect self-esteem during critical times, allowing us to focus on what is necessary at the moment.
 - ▼ TYPES OF MACHANISMS:
- DAY DREAMING:



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- Generally every people want to freedom. In reality the youngsters did not achieve their aim, goal and neediness. They leave that real situation anyhow and then after they live with their dreams and rules. Therefore they enjoy their neediness with their dream.
- The person leaves the real situation by this technique. They married in the dream and they will take divorce in the dream. They live in day dreaming. Ex. The hungry people always dreaming for meal. Youngsters get a good mark in their study, they dreams that get a opposite persons. And therefore they full fill their day dreaming n live with day dreaming.
- This type of day dreaming is motivating the person. With day dreaming the person develop and chance to live their dream in reality. Some people are become a businessman, poet, etc by day dreaming.
- If the people or person lives in day dreaming very highly then may the person going to be mentally disorder.
- FANTACY:
- When the people is fail or he misbehavior for real reason instead of good reason that called a fantasy. Ex. The student is fail in their exam and he give the reason oh I don't want to get good marks that's why I m fail. This called as a fantasy.
- IDENTIFICATION:
- When people meet to another person or visit to any factory or school at that time the person is an emotionally attached with that. The person is thinking that any good time bad time or any work of other person is mine. Some of people think that I m Tendulkar or Amithabh,. Even some girls think that they are a big actress. Even they follow them. That's why the person has to very carefully to follow the any another person. If they follow to good people they develop their self with good way. If they are not following their proper way then maybe they are mentally upset.
- COMPRENSATION:
- The person is fail in one field and in another field he is bravo this called compensation. Ex. If the student is fail in maths and science but he get a prize for drawing or any game. It's called compensation. The student or person get a good prize for activeness and satisfied with their dreams. If the persons is not success in her dreams come true then another choice



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for her that they should be think that I am not successful in my dream never mind but my child should be full fill my dreams.

- SUBLIMATION:
- One psychologist said, -In success sublimation the direction and aim of the repressed drives has been in to pathways new of creative Endeavour.
- When the person did not achieve their goal then they will choose the wrong way to achieving the goal this called sublimation. In this mechanism the person will do the unsocial activities for full fill their dreams. But if someone is guide to that people or person then that people is very useful for social activities. Ex. If the person is failed in love ship or relationship, the person become a very upset but at that time someone is guide him for any drawing, music or games etc. may the person is amaster in their choosing filed which is guided by some other person.
- RATIONALIZATION is a <u>defense mechanism</u> (ego defense) in which apparent logical reasons are given to justify behavior that is motivated by unconscious instinctual impulses. It is an attempt to find reasons for behaviors, especially one's own. Rationalizations are used to defend against feelings of guilt, maintain self-respect, and protect oneself from criticism.
- Rationalization happens in two steps:
- 1. A decision, action, judgments is made for a given reason, or no (known) reason at all.
- 2. A rationalization is performed, constructing a seemingly good or logical reason, as an attempt to justify the act after the fact (for oneself or others).
- Rationalization encourages irrational or unacceptable behavior, motives, or feelings and often involves ad hoc hypothesizing. This process ranges from fully conscious (e.g. to present an external defense against ridicule from others) to mostly unconscious (e.g. to create a block against internal feelings of guilt or shame). People rationalize for various reasons—sometimes when we think we know ourselves better than we do. Rationalization may differentiate the original deterministic explanation of the behavior or feeling in question.



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PROJECTION:

Projection is also a manifestation of aggression. Projection is when a person puts his faults or faults on others to maintain his reputation or image. He imputes or projects his faults or works on others. So this is another form of rationalisation. Just as a student who fails an exam says that the paper is difficult, the teacher blames his failure on the teacher by saying that he did not check properly. Teacher blames traffic for being late to school.

This is an intuitive process. A person blames others for their own failures to escape from their own inadequacies. It also prevails at the unconscious level. When this technique is overdone, mental disorders arise from it.

SELF-CENTEREDNESS:

Sometimes a person feels unpleasant or insecure mentally. Feeling thus lacking in mental security, he tries to satisfy his ego by attracting attention from others. He constantly strives to establish himself and to show his importance. Such as speaking loudly in a meeting, arguing, drawing attention to people by making loud criticisms, boasting, praising oneself and one's forefathers, breaking a wat or causing mischief or vandalism to attract attention. All these behaviors are part of a person's self- actualization activity. Egocentric humans have their self-centeredness in every activity. He tries to consider himself the best at everything. Hence he always yearns for learning. They are not ready to accept their failures or defeats, they are not ready to accept other people or their achievements or achievements. In this situation, jealousy, resentment or such mental disorders are created in such persons. Such persons sometimes have the enthusiasm and energy to act, but sometimes it turns out to be harmful to the person who has turned into vanity.

NEGATIVISM:

A person sometimes has negative tendencies. Some individuals behave differently than what is prescribed or expected of them. However, their intention behind doing so is to draw others' attention to themselves. Sometimes it also shows



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negative attitude due to attitude towards other people or things. These vines are usually seen in infancy in two or three years. Children sometimes develop negative attitudes from childhood if not careful, and they become temperamental at an older age. Usually young students have resentment towards teachers or principal so they sometimes disobey their instructions and adopt a negative attitude.teacher development and teaching- learning process it is seen that such an attitude is adopted towards the elders at home as well. Negative attitudes that become strong become fatal for a person. They cannot achieve anything constructive by it, but struggle without achievement.

WITHDRAWAL:

Some individuals become detached to escape from the situation or reality rather than face it. This technique is called withdrawal. When the situation is not favorable, a person takes refuge in escapism. In this situation the person withdraws himself from the situation instead of preparing himself for the conflict, instead of facing it. Like a child sucking a finger. Some people shy away from competitions for fear of embarrassment or loss of reputation. Sometimes a student does not participate in sports competitions or elocution competitions for fear of being laughed at.

PHYSICAL PAIN:

Sometimes a person cannot face the situation or reality, then he suffers physical pain or pain. For example, a student gets headache, diarrhea or stomach ache during the exam. Unable to cope with the situation, suffer hysteria like pain. Mental condition affects physical condition. This is also a kind of defense technique.

FIXATION:

Psychologically, it is believed that every person develops physically, mentally and emotionally in a natural way. A person develops naturally through infancy, childhood, adolescence and puberty. But sometimes a person cannot adapt intuitively to this sequence of development. A person feels insecure or helpless when moving from one state to another. In this situation it gets fixed in one particular state. This technique is called fixation. Through this technique a person



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accepts old ways instead of behaving according to his development.

