

THEORIES OF HUMAN DEVELOPMENT

Introduction:

Good Morning students,
Today let us look into the topic Theories of Human Development, the related concepts and issues.

The study of human development is a rich and interesting subject.

We all have personal experiences that go with development, but sometimes it is difficult to understand how and why people grow, learn, and act as they do. For example, consider the following example.

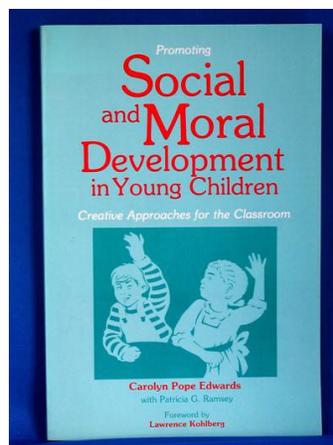
Four year old Divya is keen to dress herself up every morning. But lo! She regularly wears her shoes on the wrong feet, misses buttons, and puts shirts on inside-out.

When her mother tries to help her, Divya refuses and screams, “NO! LET ME DO IT! Sure, we all have come across incidents like this and been in trouble because, many times it is not possible for us to come up with the right solutions to such situations.

Why does Divya behave in this way? Does her behavior relate to her age, family relationships, or is it an individual temperament?

Developmental psychologists try to answer such questions.

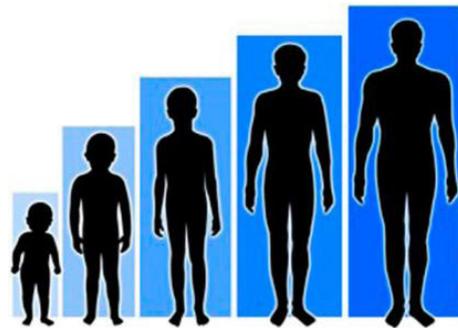
Developmental psychology seeks to understand, explain, and predict behaviours that occur throughout a person's lifespan, from conception to death.



The scientific study of human development seeks to understand and explain how and why people change throughout their lives. This includes all aspects of human growth, the physical, emotional, intellectual, social, perceptual, and personality developments.

This field is broad-based and examines a range of topics, such as motor skills, cognitive development, executive functions, moral understanding, language acquisition, social change, personality, emotional development, self-concept and identity formation. It also looks into the influences of nature and nurture on the process of human development, and of its periodical changes.

Developmental psychology is concerned with a number of fields, such as, educational psychology, child psychopathology, forensic developmental psychology, child development, cognitive psychology, ecological psychology, and cultural psychology. The well-known developmental psychologists of the 20th century are: John Bowlby, Urie Bronfenbrenner, Erik Erikson, Sigmund Freud, Jean Piaget, Lawrence Kohlberg, Lev Vygotsky, and many others. The theories forwarded by them are: □ John Bowlby -- Attachment theory □ Urie Bronfenbrenner -- Ecological systems theory □ Erik Erikson -- Psychosocial development □ Sigmund Freud -- Psychosexual development □ Lawrence Kohlberg -- Moral development □ Jean Piaget -- Cognitive development □ Lev Vygotsky -- Cultural-historical psychology development



Now let us look at some famous theories of Human Development

Psychoanalytic Child Development Theories

John Bowlby (1907 - 1990) believed that mental health and behavioral problems could be attributed to early childhood. His 'Attachment Theory' suggests that children come into the world biologically pre-programmed to form attachments with others, as it will help for their survival.

He also said that the fear of strangers represents an important survival mechanism, built in by nature. Babies display certain innate behaviors, called social releasers like crying, smiling, crawling, etc.

Such actions ensure proximity and contact with the mother or 'attachment' figure and stimulate 'care-giving' from the adults. The fact that determines 'attachment' is not food, but care and responsiveness. The 'attachment' figure is the safe base for exploring the world. This acts as the case in point to all future relationships.

Urie Bronfenbrenner (1917 - 2005), a Russian-born American developmental psychologist, is known for his 'Ecological systems theory' of child development.



Ecological systems theory, specifies four types of nested environmental systems: Microsystem, Mesosystem, Exosystem, and Macrosystem. Each system contains roles, norms and rules that initiate strong development.

Microsystem -- the direct environment in our lives such as our home and school.

Mesosystem -- the relationships that connect to the microsystem.

Exosystem -- the larger social system; the child plays no role.

Macrosystem -- refers to the cultural values, customs and laws of society.

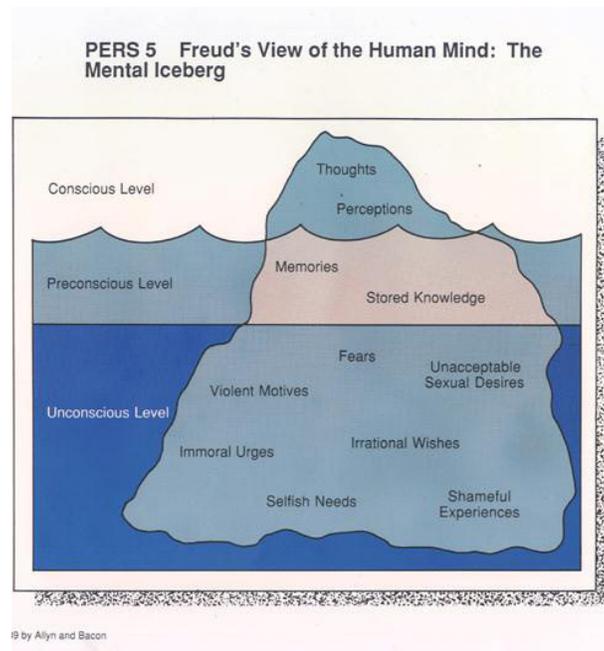
This conceptualization of development, from the family to economic and political structures, is viewed as part of the life course from childhood to adulthood. Sigmund Freud (1856-1939), the Austrian neurologist is best known for developing the theories and techniques of psychoanalysis.

The theories proposed by Sigmund Freud stress the importance of childhood events and experiences, libido and ego. They exclusively focused on mental disorders rather than normal functioning. Freud believes that we all have conscious, preconscious, and unconscious levels. The conscious level makes us aware of our mental process. The preconscious involves information that, though not available now, can be brought into consciousness. The unconscious includes mental processes we are unaware of. To explain this he has developed three personality structures: the id, ego, and superego. The id, the most primitive of the three, is the aspect of personality that is driven by internal and basic drives and needs, which are typically instinctual, such as hunger, thirst, and the drive for sex, or libido. The id is the completely unconscious, impulsive, childlike portion of the psyche that acts in accordance with the "pleasure principle". It seeks immediate pleasure and gratification and avoids pain.

The ego is rational and works to balance both the id and superego and mediates between the desires of the id and the superego. It helps to separate what is real, and reality of our drives. At the same time, it is also realistic about the standards set by the superego. It tries to strike stability between the impractical pleasure-principle of the id, and the equally impractical moralism of the super-ego; it is the part of the psyche that is usually reflected most directly in a person's actions.

The superego, the moral component, is driven by morality principle. It acts in connection with the morality of higher thought and action. The superego plays the critical and moralizing role.

Instead of instinctually acting like the id, the superego works to act in socially acceptable ways. It employs morality, judging our sense of wrong and right and using guilt to encourage socially acceptable behaviour. We can call this 'conscience'. This concept is usually represented by the "Iceberg Model". This model represents the roles the Id, Ego, and Super Ego play in relation to conscious and unconscious thought.



Freud compares the relationship between the ego and the id to that between a charioteer and his horses: the horses provide the energy and drive, while the charioteer provides direction.

Freud describes child development as a series of „psychosexual stages,“ In “Three Essays on Sexuality” (1915), Freud outlines these stages as oral, anal, phallic, latency and genital. Each stage involves the satisfaction of a libidinal desire and can later play a role in adult personality. If a child does not successfully complete a stage, Freud suggests that he or she would develop a fixation which would later influence adult personality and behaviour.

According to Sigmund Freud, personality is mostly established at the age of five. Early experiences play a large role in personality development and continue to influence behaviour in later life.

Psychosocial development Erik Homburger Erikson (1902 –1994), a German-born American developmental psychologist is known for his theory on 'Psychosocial development'. He is most famous for coining the phrase identity crisis.

Whereas Freud is an id psychologist, Erikson is an ego psychologist. He emphasizes the role of culture and society and the conflicts that can take place within the ego itself; whereas Freud underscores the conflict between the id and the superego.

Erikson affirms that as the ego develops, it successfully resolves crises which are distinctly social in nature. This involves in establishing a sense of trust in others, in developing a sense of identity in society, and in helping the next generation prepare for the future.

Erikson enlarges on Freudian thoughts by focusing on the adaptive and creative characteristic of the ego. He expands the notion of the stages of Personality Development and includes the entire lifespan. Erikson's theory claims that humans develop throughout their lifespan and consists of eight stages, which occur in different periods. Trust vs. Mistrust -- during infancy Autonomy vs. Shame & Doubt -- during early childhood Initiative vs. Guilt -- during play age Industry vs. Inferiority -- during school age Identity vs. Role Confusion -- during adolescence Intimacy vs. Isolation -- during young adulthood Generativity vs. Stagnation -- during adulthood Integrity vs. Despair -- occurs in old age

Each of the stages has a positive as well as a negative crisis. Each stage builds upon the successful completion of earlier stages. The challenges of stages not successfully completed may reappear as problems in the future.

Stage	Psychosocial Crisis	Basic Virtue	Age
1	Trust vs. mistrust	Hope	Infancy (0 to1 ½)
2	Autonomy vs. shame	Will	Early Childhood (1 ½ to3)
3	Initiative vs. guilt	Purpose	Play Age (3 to 5)
4	Industry vs. inferiority	Competency	School Age (5 to 12)
5	Ego identity vs. Role Confusion	Fidelity	Adolescence (12 to 18)
6	Intimacy vs. isolation	Love	Young Adult (18 to 40)
7	Generativity vs. stagnation	Care	Adult hood(40 to 65)
8	Ego integrity vs. despair	Wisdom	Maturity (65+)

Erikson believes that each stage of development is focused on overcoming a conflict. The crises are of a psychosocial nature because they involve psychological needs of the individual conflicting with the needs of society. For example, the primary conflict during the adolescent period involves establishing a sense of personal identity. This results in role confusion.

According Erikson's theory, successful completion of each stage results in a healthy personality and acquiring of basic virtues. Basic virtues are characteristic strengths which the ego can use to resolve subsequent crises.



Erikson was greatly inspired by the Father of our Nation, Mahatma Gandhi and his Non-violence movement. His book *Gandhi's Truth: On the Origins of Militant Nonviolence* won the Pulitzer Prize for General Non-Fiction and the U.S. National Book Award in the category Philosophy and Religion.

Cognitive Development

Cognitive development is a field of study in neuroscience and psychology. It focuses on a child's development in terms of information processing, conceptual resources, perceptual skill, language learning, and other aspects of brain development. It is cognitive psychology compared to an adult's point of view. Cognitive development is the emergence of the ability to think and understand. Cognitive Theory is concerned with the development of a person's thought processes. It looks at how these thought processes influence the way we understand and interact with the world.

Jean Piaget (1896-1980) is considered as the foremost cognitive thinker. He proposed an idea that helped to revolutionize how we think about child development. He was puzzled why children gave wrong answers to the questions that required logical thinking. He believed that these incorrect answers revealed important differences between the thinking of adults and children. Children think differently than adults.

According to Piaget, children are born with a basic mental structure, genetically inherited and evolved, on which all subsequent learning and knowledge are based. Piaget has proposed a theory of cognitive development to account for the steps and sequence of children's intellectual development. He believed that people move through stages of development that allow them to think in new and more complex ways.

Piaget's stage theory describes the cognitive development of children. Cognitive development involves changes in cognitive processes and abilities. In his view, cognitive development is a progressive reorganization of mental processes as a result of biological maturation and environmental experience. Children construct an understanding of the world around them, then experience discrepancies between what they already know and what they discover in their environment.



There are three basic key components to Piaget's Cognitive Theory.

1. Schemas – the building blocks of knowledge
2. Adaptation processes -- equilibrium, assimilation and accommodation
3. Stages of Development:
 - sensorimotor,
 - preoperational,
 - concrete operational,
 - formal operational.

Schemas

Piaget called the schema "the basic building block of intelligent behavior" – a way of organizing knowledge. It is useful to think of schemas as "units" of knowledge. Each one relates to one aspect of the world, including objects, actions and abstract concepts.

In Piaget's view, a schema includes both a category of knowledge and the process of obtaining that knowledge. As experiences happen, this new information is used to modify, add to, or change previously existing schemas.

Jean Piaget views intellectual growth as a process of Adaptation (adjustment) to the world.

Adaptation processes -- equilibrium, assimilation and accommodation

Equilibrium or a state of cognitive balance is, when a child's existing schemas are capable of explaining what it can perceive around it. For example, a child may have a schema about a type of animal, such as a dog. If the child's sole experience has been with small dogs, a child might believe that all dogs are small, furry, and have four legs.

Assimilation is using an existing schema to deal with a new object or situation. In case, the child encounters a very large dog. The child takes in this new information, modifies the previously existing schema to include this new information. The process of taking in new information into our previously existing schemas is known as Assimilation.

Accommodation happens when the existing schema (knowledge) does not work, and needs to be changed to deal with a new object or situation. Accommodation involves altering existing schemas, or ideas, as a result of new information or new experiences. New schemas may also be developed during this process. The process is subjective, because we tend to modify experience or information to fit in with our pre-existing beliefs.

Stages of Development:

The Sensorimotor Period (birth to 2 years). During this time, Piaget says that a child's cognitive system is limited to motor reflexes at birth. The child builds on these reflexes to develop more sophisticated procedures

The Pre-Operational Period (2 to 6 or 7 years). At this age, children acquire representational skills in mental imagery, and language acquisition. They are very self-oriented and view the world from their own perspective.

The Concrete Operational Period (6/7 to 11/12 years). Children in this stage are able to take another's point of view and take into account more than one perspective simultaneously. Piaget views that they cannot yet perform on abstract problems, and cannot consider logical outcomes.

The Formal Operational Period (11/12 years to adulthood). Children who attain the formal operation stage are capable of thinking logically and abstractly. Piaget considers this the ultimate stage of development.

You must have now understood the basic concepts of Piaget's theory. Where can we use this most important theory?

Parents can use it as a positive tool to nurture their child's growth.

Teachers must apply it for academic exercises, for example, while discussing the suitability of syllabus subjects for the different students' level, in the classroom training of the students and their evaluation.

Cognitive-Social Development

Lev Vygotsky

The Russian psychologist Lev Vygotsky (1896-1934), brought out a learning theory that has become very famous, especially in the field of education. Vygotsky's main work is in developmental psychology. He has proposed a theory of the development of higher cognitive functions in children. He believes that reasoning power in children emerges through practical activity in a social environment.

During the earlier period of his career he argued that the development of reasoning was mediated by signs and symbols, and therefore dependent on cultural practices and language as well as on universal cognitive processes.

Vygotsky's ideas have grown increasingly influential in areas including child development, cognitive psychology and education.



Vygotsky introduced the notion of zone of proximal development, an innovative metaphor capable of describing the potential of human cognitive development. His work covered such different such as

- the origin and the psychology of art,
- development of higher mental functions,
- philosophy of science and methodology of psychological research,
- the relation between learning and human development,
- concept formation,
- interrelation between language and thought development,
- play as a psychological phenomenon, learning disabilities, and
- abnormal human development

Vygotsky views: "Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first, between people (inter psychological) and then inside the child (intra psychological).

Like Piaget, Vygotsky also believes that children learn actively and through hands-on experiences.

His socio-cultural theory suggests that parents, caregivers, peers and the culture at large are responsible for the development of higher order functions. This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher functions originate as actual relationships between individuals.

Socio-cultural theory focuses not only on how adults and peers influence individual learning, but also on how cultural beliefs and attitudes impact and how instruction and learning takes place.

Vygotsky's theory promotes learning contexts in which students play an active role in learning, in contrast to the traditional teaching method -- „transmitting“ information to students.

A contemporary application of Vygotsky's theories is "reciprocal teaching", used to improve students' ability to learn from text. In this method, teacher and students collaborate in learning and practicing four key skills: summarizing, questioning, clarifying, and predicting. The teacher's role in the process is reduced over time.

The roles of the teacher and student are therefore shifted, as a teacher should collaborate with his or her students in order to help facilitate meaning construction in students. Learning therefore becomes a reciprocal experience for the students and teacher.

Behavioural Development

Behaviorism is the theoretical perspective in which learning and behavior are described and explained in terms of stimulus-response relationships.

The key assumptions of Behaviorist theory are:

- The environment influences behavior. People's behaviors are a result of their interaction with the environment. They become conditioned to respond to certain ways based on responses like feedback, praise and rewards.
- Learning is described through stimuli and responses. Behaviorists focus on observable events rather than people's thoughts, feelings and beliefs.
- Learning must involve a behavioral change. Learning does not occur unless there is an observable change in behavior
- Learning must result when stimulus and response occur close together in time. Learners must associate their response with a stimulus. These two must happen in conjunction with each other.
- Animals and humans learn in similar ways. Behaviorists conducted their experiments using animals because they believed the study of animals could explain human learning behavior.

Behavioral Child Development theories deal only with observable behaviors. Here development is considered a reaction to rewards, punishments, stimuli and reinforcement.

This theory differs from other child development theories because it gives no consideration to internal thoughts or feelings. Instead, it focuses purely on experiences that shape our personalities.

The major behaviorists you should know are: John Watson, known as the father of behaviorism; Ivan Pavlov, best known for 'classical conditioning'; B.F. Skinner, famous for 'operant conditioning' ; and Edward Thorndike, well-known for the 'law of effect'.

Ivan Pavlov -- Classical conditioning

Ivan Petrovich Pavlov (1849-1936), was a Russian physiologist, known primarily for his work in classical conditioning.

While at the Institute of Experimental Medicine, Ivan Petrovich Pavlov carried out his classical experiments on the digestive glands. Pavlov investigated the gastric function of dogs, and later, of children, by collecting, measuring, and analyzing the saliva, and its response to food under different conditions.



Pavlov's dogs, restrained in an experimental chamber, were presented with meat powder and their saliva was collected. He noticed that the dogs tended to salivate before food was actually delivered to their mouths. He set out to investigate this "psychic secretion", as he called it.

Over time, he noticed that salivation of dogs happen merely by the presence of the handler or by a clicking noise produced by the device that distributed the meat powder. Surprised by this finding, Pavlov paired the meat powder with various stimuli such as the ringing of a bell.

After the meat powder and bell (auditory stimulus) were presented together several times, the bell was used alone. Pavlov's dogs, responded by salivating to the sound of the bell (without the food). The bell was able to acquire the ability to trigger the salivation response.

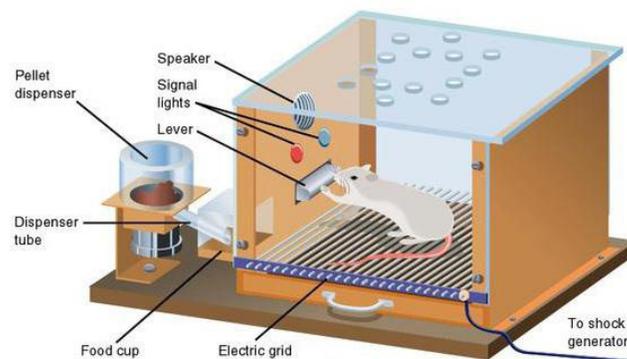
Pavlov regards the meat powder an unconditioned stimulus -- UCS, and the dog's salivation as the unconditioned response -- UCR.

The bell is a neutral stimulus until the dog learns to associate the bell with food. Then the bell becomes a conditioned stimulus (CS) which produces the conditioned responses (CR) of salivation, after repeated pairings between the bell and food.

Classical conditioning involves learning to associate an unconditioned stimulus that already brings about a particular response or a reflex, with a new conditioned stimulus,

so that the new stimulus brings about the same response. Classical conditioning is "classical", since it is the first systematic study of basic laws of learning / conditioning. Classical conditioning focuses on using preceding conditions to alter behavioral reactions. The principles of classical conditioning have influenced preventative antecedent control strategies used in the classroom.

B.F. Skinner -- Operant Conditioning Burrhus Frederic Skinner (1904 – 1990), commonly known as B. F. Skinner, is an American psychologist, behaviorist, author, inventor, and social philosopher. Skinner considers free will an illusion. He believes that human action is dependent on consequences of previous actions. If the consequences are bad, there is a chance that the action will not be repeated; if the consequences are good, however, the actions that led to it will be more convincing. Skinner called this 'the principle of reinforcement'.



Skinner is regarded as the father of 'Operant Conditioning'. His work was based on Edward Thorndike's "Law of Effect". Thorndike studied learning in animals using a 'puzzle box'.

Skinner introduced a new term into the "Law of Effect" - 'Reinforcement'. Behavior which is reinforced tends to be repeated, gets strengthened; behavior which is not reinforced tends to die out or weakened.

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

He coined the term 'operant conditioning'. It means roughly changing of behavior by using reinforcement, given after the desired response. Skinner identifies three types of responses or operants that can follow behavior.

- Neutral Operants: Responses from the environment that neither increase nor decrease the probability of a behavior being repeated.
- Reinforcers: Responses from the environment that increase the probability of a behavior being repeated. They can be either positive or negative.
- Punishers: Response from the environment that decrease the likelihood of a behavior being repeated. Punishment weakens behavior.

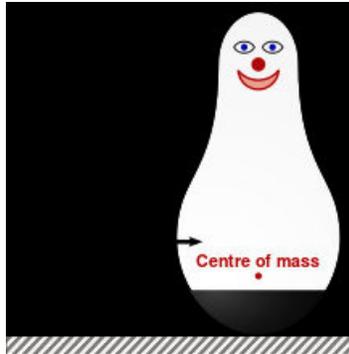


Sometimes our own behavior is affected by either reinforcement or punishment. As a child you probably tried out a number of behaviors and learnt from their consequences. A simple way to shape behavior is to provide feedback on learner performance, for example, compliments, approval, encouragement, and affirmation, such as saying, "very good", "well-done", "can do certainly very well", "rightly presented" and so on.

Social Development

Albert Bandura Social Cognitive Theory (SCT), is used in psychology, education, and communication. It holds that a portion of an individual's knowledge acquisition can be directly related to observing others within the context of social interactions, experiences, and outside media influences. In other words, the survival of humanity is dependent upon copying of the actions of others. SCT is the result of the work done by Neal E. Miller and John Dollard in 1941. They identified four key factors in learning new behavior: 1) drives, 2) cues, 3) responses, and 4) rewards. According to Bandura's theory of child development, children learn new behaviors from observing other people. There are five core concepts associated with the SCT framework: (1) observational learning/modeling, (2) outcome expectations, (3) self-efficacy, (4) goal setting and (5) self-regulation.

Depending on whether people are rewarded or punished for their behavior and the outcome of the behavior, that behavior may become a model. 'Self-efficacy' is believing in yourself to perform action. It is the belief in one's capabilities to organize and execute the courses of action required to manage prospective situations. The best example is Ekalavya, the hunter-boy in the Mahabharata, whose observational learning and self-efficacy make him an efficient archer. Bandura, along with his students and colleagues conducted a series of studies, known as the "Bobo Doll experiment", to find out why and when children display aggressive behaviors. These studies demonstrated the value of modeling for acquiring novel behaviors.



Unlike behavioral theories, Bandura believes that external reinforcement is not the only way that people learn new things. Instead, intrinsic reinforcements such as a sense of pride, satisfaction and accomplishment could also lead to learning.

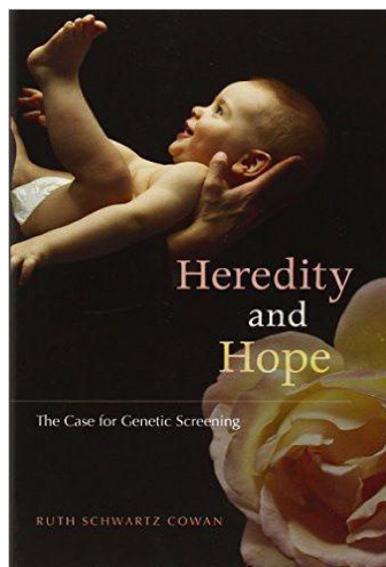
By observing the actions of others, including parents and peers, children develop new skills and acquire new information. SCT has been applied to many areas of human functioning such as career choice and organizational behavior, as well as in understanding classroom motivation, learning, and achievement.

Issues in theories of human development

So far, we have looked at the major theories of human development and how they have been adopted in the field of education. Now, let us consider some of the issues seen by the psychologists have found in these theories.

Nature vs. Nurture

The debate over the relative importance of heredity and the environment is one of the oldest issues in philosophy and psychology.



Philosophers like Plato and Descartes supported the idea that some ideas are inborn. On the other hand, thinkers like John Locke argued for the concept of tabula rasa - a belief that the mind is a blank slate at birth, with experience determining our knowledge.

Today, most psychologists believe that it is an interaction between these two forces that causes development.

Some aspects of development are distinctly biological, such as puberty. However, the onset of puberty can be affected by environmental factors like diet and nutrition.
Early Experience vs. Later Experience

The second vital consideration involves the relative importance of early experiences versus those that occur later in life.



Have you wondered about this? Are we more affected by events that occur in early childhood, or do later events play an equally important role?

Psychoanalytic theorists tend to focus upon events that occur in early childhood.

According to Freud, much of a child's personality is completely established by the age of five.

If this is indeed the case, those who have gone through deprived or abusive childhoods might never adjust or develop normally.

In contrast to this view, researchers believe that the influence of childhood events need not necessarily have a dominating effect over behavior throughout the life.

Many people with less-than-perfect childhoods go on to develop normally into well-adjusted adults. The classic example is Mahabharata's Karna, ill-fated to suffer abuse, but turns out to be a great warrior because of positive reinforcement.

Continuity vs. Discontinuity

The third major issue is between continuity and discontinuity. Do the changes happen smoothly over time, or through a series of predetermined steps?

Some theories of development argue that changes are simply a matter of quantity; children display more of certain skills as they grow older.

Other theories outline a series of sequential stages in which skills emerge at certain points of growth.

So, remember! as you study these theories of human development, understand that they are only suggestions on some ways of child and human development.

We still have unresolved issues in these theories. That is why, the researches and study in this field continue to expand, because no two human beings are the same at any time either in behavior or cognition.

Conclusion

Human development is a developing field of study in education. Various investigations, using different approaches and research frameworks have proved collaborative learning to be effective in many kinds of settings and contexts. Teachers should assign tasks that students cannot do on their own, but which they can do with assistance. They should provide just enough assistance so that students learn to complete the tasks independently. They must then provide an environment enabling the students to do harder tasks than would otherwise be possible. In the context of adults, peers should challenge each other in order to support collaboration and success. In the process of child development, the adults and peers have greater responsibilities; their cognitive growth is also simultaneous.

The educators and the general public should become aware of the different aspects of human development that leads to designing and improving the education system. Such a thinking makes a person continue education throughout his/her life and achieve the maximum potential in his/her lifetime. Just as our Great Guru Dr. S. Radhakrishnan affirms: "Learning is endless".