Block 3 Developmental Processes THE PEOPLE'S UNIVERSITY

BLOCK 3 DEVELOPMENTAL PROCESSES

Introduction

The third block of the course consists of three units. The first unit of the block discusses the nature and principle of human development. The unit discusses the meaning of development, issues and stages in development of humans, and then put forward different conception of stages involved in development. It also explains the importance of critical period in development. The second unit discusses about stages of development. Human development starts even before the infant is borned (pre-natal stage). Life span development deals with important common developmental stages that human beings pass through: birth, infancy, adolescence, adulthood, old age and finally death. As the humans grow up from stage to stage they learn to make use of their body parts, learn how to express themselves and communicate with others, how to form relationship with others, how to care for others, how to love and how to work. In this unit we will discuss two prominent theories of human development namely, Sigmund Freud's theory of psychosexual development and Erikson's theory of development.

The third unit comprises of moral and cognitive development. This unit deals with two major theories of cognitive development namely, Piaget's cognitive theory of development and Vygotsky's theory of cognitive development. Then, the unit also discusses the moral development with the help of Kohlberg's theory of moral development.



UNIT 7 NATURE AND PRINCIPLE OF HUMAN DEVELOPMENT*

Structure

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- 7.1 Objectives
- 7.2 Human Development
 - 7.2.1 Topical Areas of Human Development
- 7.3 Definition of Life Span Development
- 7.4 Factors Influencing Development
- 7.5 Issues of Human Development
- 7.6 Periods of Development
- 7.7 Life-Span Perspective on Development
- 7.8 Contextual Influence on Development
- 7.9 Critical Period Hypothesis
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7.0 INTRODUCTION



Fig.7.1: Sujit Kumar- The Chicken Boy of Fiji

Source: http://www.technogypsie.com

Sujit exhibited dysfunctional behaviour as a child. His parents locked him in a chicken coop. His mother committed suicide and his father was murdered. His grandfather took responsibility for him but still kept him confined in the chicken coop. He was eight years old when he was found in the middle of a road, clucking and flapping. He pecked at his food, crouched on a chair as if roosting, and

^{*} Contributed by Dr. Mamta Sharma, Assistant Professor, Department of Psychology, Punjabi University, Patiala & Dr. Arti Singh (IGNOU) (Adapted from BPC-002, Block 1)

would make rapid clicking noises with his tongue. His fingers were turned inward. He was taken to an old people's home by care workers, but there, because he was so aggressive, he was tied with bed sheets to his bed for over 20 years. Now he is over 40 years old is cared for by Elizabeth Clayton, who rescued him from the home.

- **Source:** http://www.technogypsie.com/faerie/?p=2309

Even after getting treatment can care by many psychologists, Sujit kumar is still not able to talk and walk like other people. Why after so many years staying with humans Sujit is not able to learn waling and community in human language? What do you think could be the reason of this failure? According to psychologists the reason is not able to learn any of the required behaviour within the timeline of 'critical period' of development. But what is critical period of development? To understand this we need to first understand the concept of development. The present unit therefore will discuss the meaning of development, issues and stages in development of humans, and then put forward different conception of stages involved in development. It also explains the importance of critical period in development.

7.1 OBJECTIVES

After reading this unit, you will be able to:

- Define and describe human development;
- Define life span development;
- Identify the human developmental periods;
- Explain the key issues involved in human development;
- Understand contextual influence on development; and
- Describe the importance of critical period.

7.2 HUMAN DEVELOPMENT

Development describes the growth of humans throughout the lifespan, from conception to death. Development does not just involve the biological and physical aspects of growth, but also the cognitive and social aspects associated with development. The scientific study of human development seeks to understand and explain how and why people change throughout life. This field examines change across a broad range of topics including motor skills and other psycho physiological processes. Cognitive development involves areas such as problem solving, moral understanding, and conceptual understanding; language acquisition; social, personality, and emotional development; and self-concept and identity formation. The scientific study of development is important not only to psychology, but also to sociology, education, and health care. By better understanding how and why people change and grow, one can then apply this knowledge to helping people live up to their full potential.

7.2.1 Topical Areas of Human Development

In this section, we will briefly discuss those areas which are the part of investigation among developmental or lifespan psychologists. Following are the major four such areas:

Nature and Principle of Human Development

- **Physical Development:** It involves studying those aspects of our body that are responsible for physical development such as brain, nervous system, genes, harmones and availability of nutrition etc.
- **Cognitive Development:** The focus of this area is to understand how intellectual capacity changes with growth and physical changes.
- **Personality Development:** This area studies the development or change in one's personality throughout the lifespan. Further, it aims at understanding the individual differences among people w.r.t. their personality structure.
- **Social Development:** Under this area, psychologists attempts to understand how people interact with other people and forms relationship with each other. It also focuses on those factors that affect social development.

A point to remember here is that these four domains or areas are not independent but are overlapping.

7.3 DEFINITION OF LIFE SPAN DEVELOPMENT

We can define life span development as given below:

"The pattern of change that begins at conception and continues through the life cycle."

Lifespan development can also be defined as a methodical, intra-individual change associated with progressions corresponding to age. The development progresses in a manner implicating the level of functioning. Life-span developmental psychology is the field of psychology which involves the examination of both constancy and change in human behaviour across the entire life span, that is, from conception to death (Baltes, 1987). Development occurs in different domains, such as the biological (changes in our physical being), social (changes in our social relationships), emotional (changes in our emotional understanding and experiences), and cognitive (changes in our thought processes). Some developmental psychologists prefer to restrict the notion of development only to changes which lead to qualitative reorganisation in the structure of a behaviour, skill or ability (Crain, 2000). According to one other view (Educational Foundation, 2001) life span development is a process beginning at conception that continues until death. The progression initiates with the emergence of a fetus from a one celled organism. As the unborn child enters the world, the environment in which the child exists begins to influence the child's development. According to Levinson, the life cycle consists of four 25 year eras. The main developmental periods are child and adolescence, early adulthood, middle adulthood and late adulthood. Each era's transition involves a necessary change in the character of the individual's life and sometimes takes up to six years to complete the change (Smith, 2009). The study of human development began with Darwin and other evolutionists. Darwin thought if he studied human development he could further prove his theory of evolution (Boyd & Bee, 2006). Rutter and Rutter (1992) used the following as a working definition of development in relation to humans. They stated that life span development is a systematic, organised, intra-individual change that is clearly associated with generally expected age related progressions and which is carried forward in some way that has implications for a person's pattern or level of functioning at some later time.



7.4 FACTORS INFLUENCING DEVELOPMENT

According to developmental psychologists, a number of factors can affect human growth and development. Some of the major factors are as follows:

- 1) **Heredity:** The genes that we inherent from our parents and ancestors certainly plays important role in development. Not just physical attributes but social attributes are also transmitted from parents to off-springs through these genes. Colour of your eyes, height, hair, intelligence and aptitude everything depends significantly on your genes.
- 2) **Sex:** Sex is a very important factor which influences human growth and development. Difference in sex leads to difference in growth pattern and development pattern. Studies have suggested that teenage girls' physical growth is faster than boys.
- 3) **Socioeconomic:** Socioeconomic factors have been found to influence at multiple levels. Children from better socioeconomic level were found to have better intelligence level, better height and better mental health. The most important reasons behind this are better nutrition, better facilities, regular meals, sleep, and exercise.
- 4) **Hormones:** Our body is regulated by a number of hormonal activities. One of such important group of hormones is known as endocrine glands. These glands secrete hormones directly into our bloodstream and thus regulate the process of growth and development. Undersecretion or oversecretion of any hormone can lead to abnormal developmental growth.
- 5) **Nutrition:** Our body requires a good amount of calories and nutrition for optimal growth. Since, growth is directly related to nutrition, poor nutrition or malnutrition may lead to many problems such as being underweight, shorter height, and of low height for age, known as stunting. Further, malnourished may also slows down overall growth process.
- 6) **Race:** Every race has its unique physical characteristics. Therefore, depending on your race, height, weight and colour your skin varies.
- 7) **Culture:** Every culture have their unique values, customs, code of conduct, expectations and appropriate rearing methods. These differences in culture significantly affect developmental processes.

7.5 ISSUES OF HUMAN DEVELOPMENT

A number of major issues have emerged in the study of human development. These issues include the following: Is development due more to genetics or environment? Does development occur slowly and smoothly, or do changes happen in stages? Do early childhood experiences have the greatest impact on development, or are later events equally important?

Continuity and Discontinuity: The question of whether development is solely and evenly continuous, or whether it is marked by age-specific periods. Developmental Psychologists who advocate the continuous model describe development as a relatively smooth process, without sharp or distinct stages, through which an individual must pass. That is, development is conceived of as

Nature and Principle of Human Development

a process of the gradual accumulation of a behaviour, skill, or knowledge. In contrast, those who hold to the second view would suggest that developmental change is best characterised as discontinuous in nature. They describe development as a series of discrete stages, each of which is characterised by what had gone on in the past and how well the child was able to master the developmental tasks of that period etc. These theorists suggest that behaviours or skills often change qualitatively across time, and that new organisations of behaviours, skills, or knowledge emerge in a rather abrupt or discrete fashion.

Stability and Change: Another issue which is of importance to developmental psychologists is the issue of stability versus change. Whether development is best characterised by stability, for example, does a behaviour or trait such as shyness stay stable in its expression over time or change example: Could a person's degree of shyness fluctuate across the life span?

Nature vs. Nurture: Whether the behaviour ultimately developed by the child is due to hereditary factors or environmental factors. This issue is of great importance to psychologists. The debate over the relative contributions of inheritance and the environment is one of the oldest issues in both philosophy and psychology. This debate concerns the relative degree to which heredity and learning affect the behaviour of the individual. Both genetic traits and environmental circumstances are involved in an individual's development, although the amount of influence the two has is not clearly evident. In fact it may be stated that the individual and his or her circumstances decide how much of the behaviour is influenced by heredity factors and how much by environmental factors. 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 such as diet and nutrition.

7.6 PERIODS OF DEVELOPMENT

Human development periods span the lifetime from conception to the end of life. These periods are as follows, prenatal, early, middle and late childhood, puberty, adolescence, hyhoung adulthood, early, middle and later adulthood old age. As the child grows and approaches adulthood the periods are adolescence, early, middle and late adulthood. Numerous theories have been put forward about the periods of development and the movement from one period to the next stage

of development. Various theories attempt to define how movement from one level to the next level of development occurs (Boyd & Bee, 2006). The periods of development are given below. Each period has certain important tasks to accomplish by the individual and depending on the success or completion of the tasks, the movement to the next stage of development take place. These periods are given below:

Table 7.1: Major Periods of Human Development

Period	Approximate Age Range	Brief Description
Prenatal	Conception to birth	The one-celled organism transforms into a human baby with remarkable capacity to adjust to the life outside the womb.
Infancy and toddlerhood	Birth-2 years	Dramatic changes in the body and brain support the emergence of a wide array of motor, perceptual, and intellectual capacities and first intimate ties to others.
Early childhood	2-6 years	During the "play years," motor skills are refined, thought and language expand at an astounding pace, a sense of morality is evident, and children begin to establish ties to peers.
Middle childhood	6-11 years	The school years are marked by advances in athletic abilities; logical thought processes; basic literacy skills; understanding of self, morality, and friendship; and peer-group membership.
Adolescence	11-18 years	Puberty leads to an adult-sized body and sexual maturity. Thought becomes abstract and idealistic and school achievement more serious. Adolescents focuson defining personal values and goals and establishing autonomy from the family.
Early adulthood	18-40 years	Most young people leave home, complete their education, and begin full-time work. Major concerns are developing a career; forming an intimate partnership; and marrying, rearing children, or establishing other lifestyles.
Middle adulthood	40-65 years	Many people are at the height of their careers and attain leadership positions. They must also help their children begin independent lives and their parentsadapt to aging. They become more aware of their own mortality.
Late adulthood	65-death	People adjust to retirement, to decreased physical strength and health, and often to the death of a spouse. They reflect on the meaning of their lives.

Source: Berk, L.E. (2007)

7.7 LIFE-SPAN PERSPECTIVE ON DEVELOPMENT

Life-span perspective, proposed by Paul Baltes (1987) considers development is the result of multiple factors in different frameworks. Theorists who support the view of lifespan perspective on development view development as a lifelong process and give all age period equal importance. Paul Baltes and his colleagues have identified four underlying principles of the lifespan perspective:

- Development is lifelong
- Development is multidimensional
- Development is multidirectional
- Development is highly plastic
- Development is influenced by multiple interacting factors
- 1) **Development is Lifelong:** This assumption or principle states that all age period play equally important role in development and no single age period or developmental stage is supreme in its impact on life course than other. Therefore, development takes place throughout one's life instead of taking place in parts or stages only, proposed by other theorists.
- 2) **Development is Multidimensional:** Multidimensionality refers to the fact that development cannot take place in one dimension rather it is a result of development in all dimensions (physical, personality, cognitive, and social).
- 3) **Development is Multidirectional:** This assumption states that there is no single and fixed path of development. Development does not mean that there will always be a growth, rather, at any point of time development may be a joint expression of growth and decline.
- 4) **Development is Highly Plastic:** Plasticity means that we have the ability to adapt and modify. This means one can develop skills and abilities throughout one's life span. Plasticity may vary across individual.
- 5) **Development is influenced by Multiple Interacting Factors:** There is no single factor that can influence developmental trajectory rather there are multiple interacting factors influencing developmental process. According to Baltes, three such factors include age-graded influences, history-graded influences, and non-normative influences.

Age-graded influences: Age-grade refers to specific age group such as infants, adolescence, adult etc. People belonging to same age-grade, share similar experiences due to similar biological changes. However, their experiences can be similar due to shared social customs and values such as, starting school around 5 years or getting driving license at age 18.

History-graded influences: The time period in which you are born influence your experiences. Examples include war, any natural calamity, economic prosperity or depression or any technological advances (such as introduction of computers, internet or mobile phones). Due to these history-graded influences people born and brought-up around same time period carry tend to be alike in many ways.

Non-normative influences: The above discussed influences (age-graded and history-graded) are normative i.e., shared by a large number of people. Whereas, there are certain events that can be experienced only by one person or a few people such as death of parents, divorce or getting affected by some disease.

7.8 CONTEXTUAL INFLUENCE ON DEVELOPMENT

Urie Bronfenbrenner (1979) has proposed one of the most influential theories explaining the role of context in our development. His theory is known as "Ecological System Theory". Now we will discuss this theory in detail:

Ecological Systems Theory

The ecological system theory proposed that human development is influenced by many socio-cultural or environmental forces. He has envisioned the environment consisting of five structures namely, microsystem, mesosystem, exosystem, macrosystem and chronosystem.

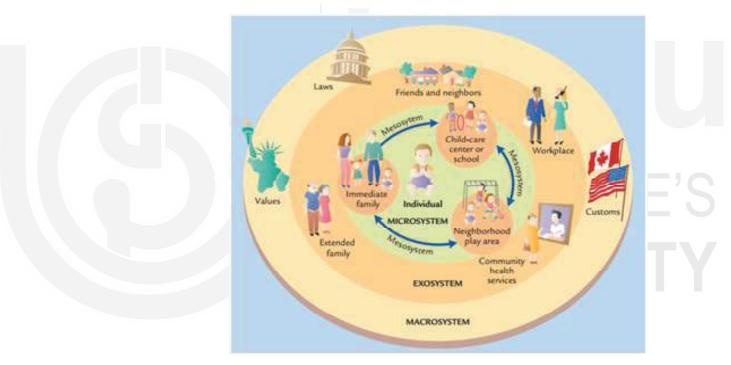


Fig. 7.2: Structure of the environment in ecological systems theory. Please note *chronosystem* is not pictured here.

Source: Berk, L. E. (2007)

Microsystem: This is the immediate environmental structure where an individual have direct interaction with their significant others such as partents, sibling, teachers, and peers. According to Bronfenbrenner, in this system the relationship between individual and significant others is bidirectional i.e., if parents are exerting any influence on a child's behaviour then child's behaviour or characteristic will also affect his parents' behaviour.

Mesosystem: This is the second level structure of this model. This level is comprised of connections between microsystems. For example, how parents of a child relate to the teachers or how parents treat their child's friends affect child's behaviour.

Exosystem: It includes those social contexts on which a developing individual have no control. Events occurring in this social context can affect mesosystem and the experiences of developing person such as, parent's transfer, work schedule, availability of maternity, paternity leave or availability of hospital.

Macrosystem: It includes cultural values, customs and laws. It is the outermost level and does not have specific context.

Chronosystem: The term 'chrono' refers to time. According to Bronfenbrenner, it is a temporary level; it changes quickly and refers to any socio-historical events such as war or economic condition of the country.

Thus, in a nutshell, the ecological model of development suggests that there is no single factor that affects the development of the individual significantly rather it is result of interacting factors. Recently Bronfenbrenner have characterized his perspective as a *bioecological model* (Bronfenbrenner & Evans, 2000).

7.9 CRITICAL PERIOD HYPOTHESIS

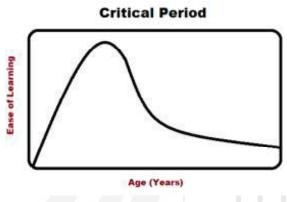


Fig.7.3: Critical Period

Source: https://en.wikipedia.org

Critical Period Hypothesis (CPH) states that there is a biologically determined time period during which children are more sensitive to external stimuli and environment than at other times. To be more specific, children's nervous system is more sensitive to certain environmental stimuli and if for some reason child does not receive those appropriate stimulus during critical period then the child will not be able to process those environmental stimuli in his or her future also. The hypothesis of critical period is not only limited to human only it is equally applicable on animals also. For instance, newborn mice must experience normal whisker sensation in the first few days of life or they will develop abnormal tactile sensitivity in the face region; cats must be allowed normal visual input during the first three months or their vision will be permanently impaired; and monkeys need consistent social contact during the first six months or they will end up extremely emotionally disturbed. Similarly, in humans also if children won't receive normal visual stimulus or language stimulus or opportunity for waking then the child will not be able to see or acquire language or walk normally like other humans.

Another term similar to 'critical' period is known as 'sensitive' period- extended time period during which some learning is still possible. However, many psychologists consider both terms similar.

Self Assessment Questions (SAQ II)

State whether the following are 'True' or 'False':

- The ecological model of development suggests that there is no single factor that affects the development of the individual significantly. ()
- The ecological system theory proposed that human development is influenced by many socio-cultural or environmental forces.
- Mesosystem is the immediate environmental structure where an individual have direct interaction with their significant others.
- Critical Period Hypothesis (CPH) states that there is a biologically determined time period during which children are more sensitive to external stimuli and environment than at other times.

(

Development is unidirectional and unidimensional.

7.10 LET US SUM UP

In this unit we learned the concept of human development. We started with the meaning of human development and life-span development. Then we moved on to discuss the factors affecting development and basic issues of development. Perspective on life-span development was covered followed by ecological model of development. Lastly, we covered the meaning and importance of critical period in human development in this unit.

7.11 UNIT END QUESTIONS

- 1) What do you understand by life-span development? What are the major areas of studying human development?
- 2) Write any three major issues of human development.
- What is lifespan perspective on development?
- Distinguish among age-graded, history-graded, and nonnormative influences on lifespan development. Cite an example.
- What is ecological system model of development?
- Write a note on the role of critical period in human development with an appropriate example.

7.12 **GLOSSARY**

Life Span Development: The pattern of change that begins at conception and continues through the life cycle.

Multidimensionality

: It refers to the fact that development cannot take place in one dimension rather it is a result of development in all dimensions (physical, personality, cognitive, and social).

Plasticity

: It refers to our ability to adapt and modify. This means one can develop skills and abilities throughout one's life span. Plasticity may vary across individual.

Age-graded Influences

: Age-grade refers to specific age group such as infants, adolescence, adult etc. People belonging to same age-grade, share similar experiences due to similar biological changes.

The Ecological System Theory

: It proposed that human development is influenced by many socio-cultural or environmental forces. And our environment consisting of five structures namely, microsystem, mesosystem, exosystem, macrosystem and chronosystem.

Critical Period Hypothesis (CPH)

: It states that there is a biologically determined time period during which children are more sensitive to external stimuli and environment than at other times.

7.13 ANSWERS TO SELF ASSESSMENT QUESTIONS (SAQ)

Self Assessment Questions I

- 1) Endocrine glands
- 2) Life span development
- 3) Darwin and other evolutionists
- 4) nutrition
- 5) genetic traits and environmental circumstances

Self Assessment Questions II

- 1) True
- 2) True
- 3) False
- 4) True
- 5) False

7.14 REFERENCES AND SUGGESTED READING

Baltes, P. B. (1987). Theoretical propositions of life span developmental psychology: On the dynamics between growth and decline. *Developmental Psychology*, 23, 611-626.

Baltes, P. B., Lindenberger, U., & Staudinger, U. M. (2006). Life span theory in developmental psychology. In W. Damon, & R. M. Lerner (Eds.), *Handbook of Child Psychology*, 6th edition (pp. 569-664). Hoboken, NJ: John Wiley & Sons.

Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments by Nature and Design*. Cambridge, MA: Harvard University Press.



Boyd, D. and Bee, H. (2006). *Lifespan Development* (4th ed.). Upper Saddle River, NJ: Pearson.

Elizabeth B. Hurlock (1980): *Developmental Psychology: A Life-Span Approach*, Mc Graw Hill company.

Rutter, M. and Rutter, M. (1992). *Developing Minds. Challenge and Continuity Across the Life Span*, London: Penguin.

Smith, M. (2009). *Life Span Development and Lifelong Learning*. WGBH Educational Foundation (2001). Life Span Development Our Amazing Capacity for Change.

David R. Shaffer and Katherine Kipp: *Developmental Psychology: Childhood and Adolescence*, Holt, Rurehart and Watson New York.

Elizabeth B. Hurlock(1980) *Developmental Psychology. A Life-Span Approach*, Prentice Hall, New York.

Berk, L. E. (2007). Development through the lifespan, 4/E. *Pearson, Boston, MA, ISBN: 0-205-49125-1, 24, 25.*

John W. Santrock: Life-Span Development. Holt Rinehart, New York

7.15 REFERENCE FOR IMAGES

Sujit Kumar- The Chicken Boy of Fiji. Retrieved October 23, 2018, from http://www.technogypsie.com/faerie/?p=2309

Structure of the environment in ecological systems theory. Retrieved from Berk, L. E. (2007). Development through the lifespan, 4/E. *Pearson, Boston, MA, ISBN:* 0-205-49125-1, 24, 25.

Critical Period. Retrieved October 24, 2018, from https://en.wikipedia.org/wiki/File:Critical Period.png

UNIT 8 STAGES OF DEVELOPMENT*

Structure

- 8.0 Introduction
- 8.1 Objectives
- 8.2 Stages of Development
 - 8.2.1 Sigmund Freud's Theory
 - 8.2.2 Erik Erikson's Psychosocial Theory
- 8.3 Let Us Sum Up
- 8.4 Glossary
- 8.5 Unit End Questions
- 8.6 Answers to Self Assessment Questions (SAQ)
- 8.7 References and Suggested Readings
- 8.8 References for Images

8.0 INTRODUCTION

From the moment the human child is first conceived, to the day the individual dies, they keep changing constantly and developing. While some of the changes humans undergo are as a result of chance incidents and personal choices, the vast majority of life changes and stages the human passes through are due to certain common biological and psychological factors partly inherited and partly environmental and are shared by all people.

Life span development deals with important common developmental stages that human beings pass through: birth, infancy, adolescence, adulthood, old age and finally death. As the humans grow up from stage to stage they learn to make use of their body parts, learn how to express themselves and communicate with others, how to form relationship with others, how to care for others, how to love and how to work. In this unit we will discuss two prominent theories of human development namely, Sigmund Freud's theory of psychosexual development and Erikson's theory of development.

8.1 **OBJECTIVES**

After reading this unit, you will be able to:

- Articulate the importance of stage in human development;
- Know the Freud's contribution in understanding developmental process; and
- Understand the eight stages of Erik Erikson's theory of developmental process.

8.2 STAGES OF DEVELOPMENT

A number of psychologists endorse the view that human development takes place in stages which can be characterised by qualitative differences in behavior. Piaget and Erikson are two most prominent names who supported the stage model of

^{*} Contributed by Dr. Mamta Sharma, Assistant Professor, Department of Psychology, Punjabi University, Patiala & Dr. Arti Singh (IGNOU) (Adapted from BPC- 002, Block 1)

human development. In this section we will see how cognitive and psychosocial development takes place throughout one's life according to both of these theorists.

8.2.1 Sigmund Freud's Theory

Sigmund Freud, physician by profession, was the major contributor of psychoanalytic theory. He developed his theory while doing clinical practice with patients. "Unconscious mental processes" is central to his theory. It refers to those desires, needs and motivations for which we are not aware. Further, according to Freud, darker aspect of human behaviour such as aggression and sexual desires also plays important role in our personality.

In order to explain how our *psyche* (mind) works, Freud proposed;

A topographic model of the psyche (explains how our mind is organised)

A structural model of our personality

Psychosocial Stages of Development

A topographic model of the psyche

In the view of Sigmund Freud, our mind can be divided into three levels; conscious, preconscious and unconscious.

According to him, our *conscious mind* is that part which deals with the current information. That is, all the thoughts, feelings and actions of which you are aware at the very moment are part of conscious mind. *Preconscious mind* deals with all those information for which you are not currently aware but can become only if you pay attention. The last level of mind is *unconscious*. This part of mind stores those socially unacceptable needs, desires, motivations and feelings for which you are unaware of. According to him, this unconscious part of mind plays vital role in influencing our actions.

A structural model of personality

Freud proposed that our personality consist of three elements; id, ego and superego. Before explaining in details, it is important to mention here that id, ego and superego are just concepts and they do not have any physical or physiological basis.

Id: This part of personality operates unconsciously. It deals with basic instincts, biological needs and aggressive impulses. It is the most primitive part of human personality present since birth. From id other parts of the personality (ego and superego) develop. It works on *pleasure principle*-tendency to avoid pain and seek pleasure. The aim of the id is to gratify one's need immediately without considering the moral values of the society and individual. *Eros* and *Thanatos* are the two driving forces of Id. *Eros* was the God of love in Greek mythology. According to Freud, in context of id, Eros is the life force. It is responsible for our life instinct and survival, which includes sexual desire, reproduction desire and pain avoidance. The counterpart of Eros is *Thanatos*-the death force or instinct. It is responsible for violence, aggression and hate like negative feelings. The aim of Thanatos is to balance the drive of Eros by driving us towards death and destruction. When personality is dominated by id, then individual tend to become more impulsive, such people will do what they want irrespective time, place and situation, just like a kid.

Ego: Suppose a 10-year-old child wants to eat a scoop of ice-cream kept in the refrigerator. But he knows that eating ice-cream without seeking permission from parents will be punished. The part of the personality responsible for this reality check is known as Ego. So, ego works on reality principle-delaying id's gratification need will be delayed until an appropriate and more realistic situation is not found. This part of personality emerges from id and its main objective is to strike a balance between id's impulsive needs and reality of this world. It is the decision making component of our psyche and works on logic only. In the words of Freud, "ego is that part of the id which has been modified by the direct influence of the external world" (Freud, 1923). If ego would not be able to resolve the conflict between impulsive demands of the id and realistic demands of this world, then it would lead to the development of anxiety and stress. To ward off this anxiety, individual will be motivated to use unconscious defense mechanisms (we will talk about this in later section).

Superego: It is the moral master or moral guru of our personality. Let us continue the same example referred in the last section. Whether that 10-year-old kid will ask permission from his parents or not for eating a scoop of ice-cream depends on the development of his superego. Since, seeking permission is morally correct behaviour; it will indicate the presence of superego in the child. Role of the superego is to internalise the moral and ethical value of the society through the process of socialisation. It controls the impulsive urges of the id and pursue ego to choose morally appropriate behaviour instead of only realistic behaviour. This part of our psyche develops between the ages of three to five years. Further, according Freud, our superego consists of two systems: (i) conscience and (ii) ideal self. The *conscience*'s role is to punish or reward ego, through the feeling of pride or guilt, depending on its behaviour. For example, if ego gives in id's demand and breaks the moral code of conduct, superego will make you feel guilty about your behaviour. The second system, the ideal self-idealised picture of your own self, also do the job of making you feel guilty or pride, depending on your behaviour.

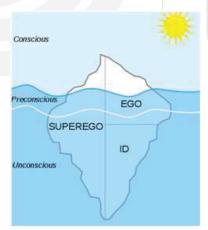


Fig.8.1: Diagram of Freud's Psyche Theory

Source: https://commons.wikimedia.org/wiki/File:Structural-Iceberg.svg

Ego Defence Mechanisms

One of the roles of ego is to protect the person from anxiety and stress. So when the anxiety and stress from the forbidden desires and motives become overwhelming, we tend to use some psychological strategies, known as ego

defence mechanisms. According to Freud, the sole aim of employing these ego defence mechanisms is to protect our psyche from anxiety. A brief description of eight important defence mechanisms has been described below:

Table 8.1: A Summary of Ego-defence Mechanisms

Mechanism	Description
Repression	Excluding from conscious awareness impulses or memories that are too frightening or painful.
Rationalization	Assigning logical or socially desirable motives to what we do so that we seem to have acted rationally.
Reaction formation	Concealing a motive from ourselves by giving strong expression to the opposite motive.
Projection	Assigning our own undesirable qualities to others in exaggerated amounts.
Intellectualization	Attempting to gain detachment from a stressful situation by dealing with it in abstract, intellectual terms.
Denial	Denying that an unpleasant reality exists.
Displacement	Directing a motive that cannot be gratified inone form into another channel.

Source: Atkinson & Hilgard (2009), pp. 469

Freud's Psychosexual Stages of Development

Freud proposed a five stage model of development of personality. According to him, core aspects of one's personality developed by the age of five and remain unchanged throughout. Further, he stated that to move from one stage to another, a child needs to resolve conflicts of each stage successfully. Unless, it will lead to *fixation*- a continuation of an early mode of satisfaction in later life (The Cambridge Dictionary of Psychology, 2009). For example, individual fixated at oral stage may have drinking or smoking habits. In the following section, we will talk about five stages of psychosexual development in brief:

Stage I: Oral Stage (birth to 18 months)

Mouth is the source of pleasure during this stage. Children completely depend on their caregivers especially mother. They drive pleasure and understand the world around them through sucking and swallowing. Over gratification or under gratification may lead to the fixation at this early oral stage resulting into the development of over eating behaviour, drinking or smoking in adulthood. Freud called these people as oral-incorporative or oral-ingestive. Later during this stage, children experience pleasure from chewing and biting. Unable to resolve the psychological conflict of this stage may develop the habit of nail biting and object chewing in adulthood. Freud further pointed out that these people are more critical and sarcastic in nature. He referred such people as oral-aggressive or oral-sadistic.

Stage II: Anal Stage (18 months to three years)

During this stage, children face the demand of their society for the first time; to control and delay the expulsion of urine and faeces. Children experience pleasure in this stage from their bowel and bladder movement. Freud believed that too

harsh or too lenient toilet training may cause fixation at this stage. Resulting into either being messy, lesser self-control but generous (called as anal expulsive characters by Freud) or being tidy, orderly but mean (called as anal retentive characters by Freud).

Stage III: Phallic Stage (three to five years)

Genitals become the erogenous region during this stage. Children knowingly or unknowingly touch their genitals for pleasure. During this stage, they understand the difference between males and females. Freud proposed that male child experience *Oedipus complex*-which involves sexual feeling towards their mother, feeling of rivalry for the father, as well as a threat of getting punished by the father for having a desire for mother. The counterpart of Oedipus complex is *Electra complex*-experienced by female child. It involves the sexual attraction for father, feeling of rivalry for mother and a threat of getting punished by the mother for having this feeling towards father. Successful resolution of this complex develops mature sexual identity. According to Freud, by the end of this stage personality is formed completely.

Stage IV: Latency Stage (six to twelve years)

The sexual energy during this stage is channelised towards educational, sports and social activities. This leads to no or little interest for the opposite gender.

Stage V: Genital Stage (thirteen years to adulthood)

The sexual energy returns again in this stage. Successful completion of previous stages will help in developing a mature intimate relationship with the opposite sex. Whereas, unresolved issues of previous psychosexual stages will start exhibiting during adulthood; leading to difficulty in establishing healthy intimate relationship with the opposite sex.

Self Assessment Questions (SAQ I)

State whether the following are 'True' or 'False':

- 1) Mouth is the source of pleasure during phallic stage.
- 2) Freud proposed a five stage model of development of personality. ()
- 3) Ego has no role in protecting the person from anxiety and stress. ()
- 4) Ego works on *reality principle*-delaying id's gratification need will be delayed until an appropriate and more realistic situation is not found. ()
- 5) In the view of Sigmund Freud, our mind can be divided into three levels; conscious, preconscious and unconscious. ()

8.2.2 Erik Erikson's Psychosocial Theory

Erikson was a psychoanalytic like Freud, but differs from Freud in regard to psycho sexual development. This means that he accepts Freud's ideas as basically correct. Erikson was much more culture-oriented than Freud and his theory is labeled Psychosocial instead of Psychosexual.

The epigenetic principle

Development functions by the **epigenetic principle** which means that our personality develops through a predetermined order i.e., one stage after another

only. In his theory he proposed that this unfolding of personality takes place in eight stages. Our progress through each stage is in part determined by our success, or lack of success, in all the previous stages.

Psychosocial virtues or strengths (positive outcomes)

Each stage involves certain developmental tasks that are psychosocial in nature and has a certain optimal time as well. If a stage is managed well, we carry with us certain virtue or psychosocial strength that will help us through the rest of the stages of our lives.

Psychosocial maladaptations and malignancies (negative outcomes)

If a child is able to pass successful through the different stages and development, one can expect a positive healthy person. However if the person faces more failure than success, his personality will be unhealthy. Maladaptations' and 'Malignancies' represent the negative outcomes arising from an unhelpful experience through each of the crisis stages. If we do not manage the task well, we may develop **maladaptations and malignancies**, which will endanger all our future development. **A malignancy** involves too little of the positive and too much of the negative aspect such as a person who does not trust at all whereas **maladaptation** involves too much of the positive and too little of the negative, such as a person who trusts too much.

The Eight stages of development

Erik Erikson explained eight stages of development through which a healthy developing person would pass. These are:

1) Trust vs. Mistrust (Infants, 0 to 1 year)

In this stage, the role of caregiver is most important. If the behaviour and care provided to the child by the primary caregiver is consistent, predictable and reliable then the child will develop a sense of **trust**. This sense of trust will be carried over by the child throughout his life and make him perceive this world as secure place and other people trustworthy who will always there to help him. On the other hand, inability of parents or primary caregiver in providing secure environment and consistent love then it will lead to **mistrust**. According to Erikson, successful completion of this stage will develop the virtue of **hope** in the growing child.

2) Autonomy vs. Shame & Doubt (Toddlers, 2 to 3 years)

The second stage is the anal-muscular stage of early childhood. This is an important period of "hold and let go". As children gain control over eliminative functions and motor abilities, they begin to explore their surroundings. If parents and caregivers encourage self-sufficient behaviour, toddlers develop a sense of **autonomy** that is a sense of being able to handle many problems on their own. But if caregivers demand too much too soon, refuse to let children perform tasks of which they are capable, children may instead develop **shame and doubt** about their ability to handle problems. If a child gets proper, positive balance of autonomy the person will develop the virtue of willpower, or else, the maladaptive tendency of impulsivity and the malignant tendency of compulsion will develop. Success in this stage will lead to the virtue of **will**.

3) Initiative vs. Guilt (Preschool, 4 to 6 years)

During this stage a child start exerting his assertive abilities. He learns to take **initiatives**- "a positive response to the world's challenges, taking on responsibilities, feeling purposeful and learning new skills" (Tandon, 2002). Play is central to this stage. It gives a child to take initiative and have a control over his or her surroundings. If parents encourage and support children's activities and imagination, then it will make child confident of his abilities. This will help the child in leading others in future and taking decision on its own. On the other hand, if the child's initiative is criticised and controlled by parents then it will develop a sense of **guilt**. Success in this stage will lead to the virtue of **purpose**.

4) Industry vs. Inferiority (Childhood, 7 to 12 years)

At this stage, the child learns to develop various skills such as, reading, writing, doing math etc. Peer group and teachers plays vital role during this stage. If the child's initiative is accepted, encouraged and reinforced then he or she will feel competent and confident i.e., **industrious**. While, on the other hand if the child is continuously criticized and ridiculed of his initiatives then it will make him feel **inferior** of his abilities. The right balance of industry and inferiority will develops the virtue called **competency**. If the child experiences failure then he may develop maladaptive tendency of narrow virtuosity and the malignant tendency of inertia.

5) Identity vs. Role Confusion (Adolescents, 13 to 19 years)

The fifth stage is identity vs. role confusion, and it occurs during adolescence, from about 12-18 years. "This is the crossroad between childhood and maturity" (Shaffer & Kipp, 2010). The goal of this stage is to develop social identity and occupational identity. During this stage children have become more independent and try to become part of the society by developing their social and occupational identity. If society provides clear guideline and rites of passage then it will help the adolescent in achieve clear role identity. If failed to negotiate this stage, the individual may develop maladaptive tendency of fanaticism and the malignant tendency of repudiation. Further, success in this stage will lead to the virtue of **fidelity**.

6) Intimacy vs. Isolation (Young Adults, 20 to 34 years)

This stage takes place in young adulthood i.e. between 18 years to 40 years. In this stage, individual tries to establish stronger friendship and to have an intimate relationship with other individuals. Failure to develop an intimate relationship with another person may lead to loneliness, alienation, social withdrawal, and maladaptive behaviour. Success in this stage will develop the virtue of **love**.

7) Generativity vs. Stagnation (Middle Adulthood, 35 to 65 years)

Generativity vs. stagnation is the seventh stage of Erikson's theory. This stage occurs during the middle adulthood i.e., from 35 years to 65 years. The healthy aim of this stage is to develop an extension of love and care for future generation. During this stage an individual tries to become productive for work and for his or her society by raising family and kids and being sensitive for their needs and requirements. These standards of generativity are defined and shaped by one's culture. On the other hand, if an individual

is unable to be productive w.r.t. work and society, it will lead to stagnation and self-indulgence. Success in this stage will develop the virtue of **care**.

8) Ego Integrity vs. Despair (Seniors, 65 years onwards)

This is the last stage and according to Erikson this is a stage of review in which the older adult looks back at one's life and review it as a whole. If the older adult perceives his life consist of meaning and happy experience then it will lead to integrity- feeling at peace with oneself and world. Whereas, on the other hand if the older adult perceive his life full of disappointments, unaccomplished goals and negative experiences then it will develop despair which will lead to the feeling of depression and hopelessness. Success in this stage will develop the virtue of **wisdom**.

Table 8.2: Stage wise summary of Erikson's psychosocial theory

Stage (age)	Psychoso cialcrisis	Significan- trelations	Psychosoci- almodalities	Psychoso- cialvirtues	Maladaptations & malignancies
I (0-1) – infant	trust vs mistrust	Mother	to get, to give in return	hope, faith	Sensory distortion – withdrawal
II (2-3) – toddler	autonomy vs shame anddoubt	Parents	to hold on, tolet	will,deter- mination	Impulsivity compulsion
III (3-6) – preschooler	initiative vs guilt	Family	to go after, toplay	purpose, courage	ruthlessness –inhibition
IV (7-12 or so) –schoolage child	industry vs inferiority	neighbor- hoodand school	to complete,to make thingstogether	competence	Narrow virtuosity – inertia
V (12-18 or so) – adolescence	ego-identity vs roleconfusion	peer groups, role models	to be oneself,to share oneself	fidelity, loyalty	fanaticism — repudiation
VI (the 20's) – young adult	intimacy vs isolation	partners, friends	to lose andfind oneselfin a another	love	promiscuity –exclusivity
VII (late 20's to 50's) -middle adult	generativity vs selfabsorption	household, workmates	care	to make be,to take careof	overextension -rejectivity
VIII(50's and beyond) –old adult	integrity vs despair	mankind or"my kind"	to be, throughhaving been,to face notbeing	wisdom	presumption —despair

Source: Chart adapted from Erikson's 1959 *Identity and the Life Cycle:* Psychological Issues vol.1, #1)

8.3 LET US SUM UP

We started this unit with the concept of stage model of development. To understand the stage model in more depth, we covered two theories namely, Sigmund Freud's theory and Erik Erikson's theory of development. According to Freud's theory our development takes place in five stages whereas according to Erik Erikson our developmental process consists of eight stages.

Stages of Development

Self Assessment Questions (SAQ II)			
Fill	Fill in the blanks:		
1)	In stage, the role of caregiver is most important.		
2)	is a stage of review in which the older adult looks back at one's life and review it as a whole.		
3)	principle means that our personality develops through a predetermined order i.e., one stage after another only.		
4)	If we do not manage the task well, we may develop and		
5)	Each stage involves certain tasks that are psychosocial in nature.		

8.4 GLOSSARY

Id

: That part of personality which operates unconsciously. It deals with basic instincts, biological needs and aggressive impulses

Pleasure Principle

: Tendency to avoid pain and seek pleasure.

Projection

: Assigning our own undesirable qualities to others in exaggerated amounts

Oedipus complex

: It involves sexual feeling of male child towards his mother, feeling of rivalry for the father, as well as a threat of getting punished by the father for having a desire for mother.

Electra complex

: It is the counterpart of Oedipus complex. It is experienced by female child. It involves the sexual attraction for father, feeling of rivalry for mother and a threat of getting punished by the mother for having this feeling towards father.

Epigenetic principle

: This principle states that our personality develops through a predetermined order i.e., one stage after another only.

8.5 UNIT END QUESTIONS

- 1) What do you mean of stage w.r.t. development? What is the basic assumption of stage theorists?
- 2) Explain psycho-sexual stages of Freud's theory.
- 3) What is epigenetic principle of Erikson's theory? Write any five stages of your choice from his theory.

8.6 ANSWERS TO SELF ASSESSMENT QUESTIONS (SAQ)

Self Assessment Questions I

- 1) False
- 2) True
- 3) False
- 4) True
- 5) True

Self Assessment Questions II

- 1) Ego Integrity vs. Despair
- 2) Trust Vs Mistrust
- 3) Epigenetic
- 4) Maladaptations and malignancies
- 5) Developmental

8.7 REFERENCES AND SUGGESTED READINGS

Bjorklund D. (1997). In search of a meta-theory for cognitive development. Child Development 68(1), 144–148.

Dixon R.A. and Lerner R.M. (1999). History and systems in developmental psychology. Developmental Psychology: An Advanced Textbook (ed. M.H. Bornstein and M.E. Lamb), 4th edn., pp. 1–46. Mahwah, N.J.: Lawrence Erlbaum.

Geary D.C. and Bjorklund D.F. (2000). Evolutionary developmental psychology. Child Development 71(1), 57–65.

Lerner R.M. (1998). Theories of human development: contemporary perspectives. Handbook of Child Psychology. Vol. 1. Theoretical Models of Human Development (ed. R.M. Lerner), 5th edn., pp. 1–24. New York: Wiley.

Lerner R.M., Fisher C.B., and Weinberg R.A. (2000). Toward a science for and of the people: promoting civil society through the application of developmental science. *Child Development* 71(1) 11–20.

Lewis M.D. (2000). The promise of dynamic systems approaches for an integrated account of human development. *Child Development* 71(1), 36–43.

Nelson C.A. and Bloom F.E. (1997). *Child Development and Neuroscience*. Child Development 68(5), 970–987.

Pellegrini A.D. and Bjorklund D.F. (1998). *Applied Child Study: A Developmental Approach*, 3rd edn., 243 pp. Mahwah, N.J.: Lawrence Erlbuam.

Tandon, R. K. (2002). Child Psychology. APH Publishing Corporation.

8.8 REFERENCES FOR IMAGES

Diagram of Freud's psyche theory. Retrieved October 31, 2018, from https://commons.wikimedia.org/wiki/File:Structural-Iceberg.svg

UNIT 9 COGNITIVE AND MORAL DEVELOPMENT*

Structure

- 9.0 Introduction
- 9.1 Objectives
- 9.2 Theories of Cognitive Development
 - 9.2.1 Jean Piaget Theory
 - 9.2.2 Vygotsky's Theory
- 9.3 Moral Development: Kohlberg's Theory
- 9.4 Let Us Sum Up
- 9.5 Unit End Questions
- 9.6 Glossary
- 9.7 Answers to Self Assessment Questions
- 9.8 References and Suggested Readings
- 9.9 References for Images

9.0 INTRODUCTION

In laymen's language, cognition refers to your knowledge about the world. Whereas, cognitive processes are those mental processes through which we acquire information about the world around us. Thus, cognitive development refers to a child's development in terms of information processing, conceptual resources, perceptual skill, language learning etc. This unit deals with two major theories of cognitive development namely, Piaget's cognitive theory of development and Vygotsky's theory of cognitive development. Then, the unit also discusses the moral development with the help of Kohlberg's theory of moral development.

9.1 **OBJECTIVES**

After reading this unit, you will be able to:

- Explain the concept of cognitive development;
- Describe the Jean Piaget's theory of cognitive development;
- Elucidate the Vygotsky's contribution in cognitive development; and
- Explicate the Kohlberg's theory of moral development.

9.2 THEORIES OF COGNITIVE DEVELOPMENT

9.2.1 Jean Piaget's Theory

Piaget's stage theory describes the cognitive development in children. Cognitive development involves changes in cognitive process and abilities. In Piaget's view, early cognitive development involves processes based upon actions and later progresses into changes in mental operations.

^{*} Contributed by Dr. Mamta Sharma, Assistant Professor, Department of Psychology, Punjabi University, Patiala (adapted from BPC-002, Block 1)

Key concepts of Piaget's Theory

- a) *Schemas:* Schemas are categories of knowledge that help us to interpret and understand the world.
- b) *Adaptation:* Piaget saw adaptation as a fundamentally biological process. All living things adapt, even without a nervous system or brain. Assimilation and accommodation are the two sides of adaptation process.
- c) Assimilation: The process of taking in new information into our previously existing schemas is known as assimilation.
- d) *Accommodation:* 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.
- e) *Equilibration:* Piaget believed that all children try to strike a balance between assimilation and accommodation, which is achieved through a mechanism Piaget called equilibration.

Stages of cognitive development

Piaget concerned the cognitive development in terms of stages.

Stage I: Sensory motor stage: The first stage is the sensorimotor stage which lasts from birth to about two years old. The infant uses his or her senses and motor abilities to understand the world, beginning with reflexes and ending with complex combinations of sensorimotor skills. This stage can be divided into six separate sub-stages as given below.

- i) Reflexes (0-1 month): The child understands the environment purely through inborn reflexes such as sucking and looking.
- ii) *Primary Circular Reactions (1-4 months):* Between one and four months, the child works on an action of his own which serves as a stimulus to which it responds with the same action, and around and around we go.
- iii) Secondary Circular Reactions (4-8 months): The child becomes more focused on the world and begins to intentionally repeat an action in order to trigger a response in the environment.
- iv) Coordination of Secondary Reactions (8-12 months): Develop certain focuses on the demand object. Responses become more coordinate and complex.
- v) *Tertiary Circular Reactions (12-24 months):* Children begin a period of trial-and-error experimentation during this sub-stage.
- vi) Early Representational Thought: Children begin to develop symbols to represent events or objects in the world in the final sensory motor sub-stage.

Stage II- Preoperational stage: The preoperational stage lasts from about two to about seven years old. Now that the child has mental representations and is able to pretend, it is a short step to the use of **symbols.** Language development is one of the hallmarks of this period. Piaget noted that children are unable to take the point of view of other people, which he termed **egocentrism**. Egocentrism is when children experience difficulty in experiencing other person's perspective.

Stage III- Concrete operations stage: The concrete operational stage begins around age seven and continues until approximately age twelve. During this

time, children gain a better understanding of mental operations. They begin thinking logically about concrete events, but have difficulty understanding abstract or hypothetical concepts.

Logic

Piaget stated that children in the concrete operational stage were fairly good at the use of inductive logic. Inductive logic involves going from a specific experience to a general principle.

Conservation

It refers to the idea that a quantity remains the same despite changes in appearance. If you show a child four marbles in a row, then spread them out, the preoperational child will focus on the spread, and tend to believe that there are now more marbles than before. The concrete operations child, on the other hand, will know that there are still four marbles.

Reversibility

By seven or eight years of age, children develop conservation of substance: If a ball of clay is taken and roll it into a long thin rod, or even split it into ten little pieces, the child knows that there is still the same amount of clay. And he will know that, if you rolled it all back into a single ball, it would look quite the same as it did — a feature known as *reversibility*. In addition, a child also learns classification and seriation during this stage.

Stage IV- Formal operational stage: The formal operational stage begins at approximately age twelve to and lasts into adulthood. During this time, people develop the ability to think about abstract concepts, deductive reasoning, and systematic planning.

Logic

Piaget believed that deductive logic becomes important during the formal operational stage and this requires the ability to use a general principle to determine a specific outcome. This type of thinking involves hypothetical situations and is often required in science and mathematics.

Abstract Thinking

The ability to think about abstract concepts emerges during this stage. Instead of relying solely on previous experiences, children begin to consider possible outcomes and consequences of actions.

Problem Solving Approach

In earlier stages, children used trial-and-error to solve problems. The ability to systematically solve a problem in a logical and methodical way emerges. Children are often able to quickly plan an organized approach to solve a problem.

9.2.2 Vygotsky's Theory

Lev Vygotsky, a Russian psychologist and a contemporary of Jean Piaget proposed a theory of cognitive development known as 'Socio Cultural Theory'.

Key Principles:

- Society and culture of the children plays a vital role in the development of their cognition.
- Sign system or the language of the society works as a tool in gaining knowledge.
- Inputs from others and especially from more knowledgeable people and adults have the capacity to affect the development of cognition.

Central Concepts

More Knowledgeable Others (MKO): He defined intelligence as "the capacity to learn from instruction". According to him, these are those people, who are more knowledgeable and have better expertise in a particular domain. These MKO can help in improving the skill of the children. MKO need not to be a person in all instances. Sometimes, MKO can be computers also.

Zone of Proximal Development (ZPD): It is the key feature of the Vygotsky's theory. The concept of MKO is closely related to ZPD. According to Vygotsky, ZPD is the difference between the present level of development attained without anyone's assistance and potential level of development which can be attained under the guidance of MKO. However, the level of provided knowledge should be appropriate according to the child's comprehensive ability.

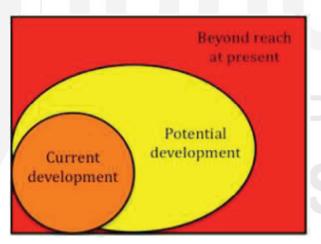


Fig.9.1: Diagram to Demonstrate the ZPD

Source: https://psychohawks.wordpress.com

Scaffolding: Scaffolding is a temporary structure, made up of wooden planks and metal poles, to support the workmen in constructing, maintaining and repairing a building. Vygotsky used this term to describe social and instructional support provided by MKO to students to learn new concepts and skills. Once the skill is learned by student, the instructional support is withdrawn, just like scaffolding after completing the construction.

Self Assessment Questions (SAQ I)

State whether the following are 'True' or 'False':

- 1) Society and culture of the children plays a vital role in the development of their cognition. ()
- 2) Logic refers to the idea that a quantity remains the same despite changes in appearance. ()

Cognitive and Moral Development

- 3) Vygotsky used the term- scaffolding, to describe social and instructional support provided by MKO to students to learn new concepts and skills.
- 4) Assimilation involves altering existing schemas, or ideas, as a result of new information or new experiences. ()
- 5) In earlier stages, children used trial-and-error to solve problems. ()

9.3 MORAL DEVELOPMENT: KOHLBERG'S THEORY

Extending the idea of moral development proposed by Jean Piaget, Lawrence Kohlberg worked throughout his life to develop a complete theory of moral development. Using story telling technique, he conducted many studies on children. The stories of his studies usually revolve around some kind of moral dilemmas. At the end of every story, he used to ask some questions from his participants (children) and analysed their answers for underlining reasoning. Based on his studies, he proposed that moral development consist of six stages and these six stages can be further grouped into three levels. These three levels are as follows:

Level 1: Pre-conventional Morality

It consists of first two levels of moral development. Here morality is judged based on the standards of adults and consequence of an action.

Stage I (Obedience and Punishment Orientation) — An action is immoral if it is punished by the authority.

Stage II (Individualism and Exchange) — This stage is self-interest driven and children understood for the first time that different individual may have different viewpoints. An action is considered morally correct if it is in the best interest of the individual.

Level 2: Conventional Morality

This level consists of stage three and four. During this level, children start internalising the value of the society to judge morality.

Stage III (Good Interpersonal Relationship) — Intention of the actor is more important in terms of judging the moral values. If the intention is to gain the consensus of others or approval of the society then the actor will be judged morally right.

Stage IV (Maintaining the Social Order) — Judgment of morality is based on one's duty, law and social order.

Level 3: Post Conventional Morality

The last level consist of stage five and six of moral development. According to Kohlberg, very few people are able to reach at this level. Here, individual perspective is given more importance over social rule and order. Individual judge morality based on basic human rights and justice.

Stage V (Social Contract and Individual Rights) – In this stage, individual or child understands that different people and community may hold different views and laws. Laws of the society are not rigid edicts and should be change with the change in the time and need of the society.

Stage VI (Universal Principles) – Individual judge morality of the actor based on some universal principles that transcends beyond the society's rules and regulations.

Seli	Self Assessment Questions (SAQ II)		
Fill	in the blanks:		
1)	Judgment of morality is based on one's		
2)	Duringlevel, children start internalising the value of the society to judge morality.		
3)	proposed that moral development consist of six stages and these six stages can be further grouped into three levels.		
4)	stage is self-interest driven and children understood for the first time that different individual may have different viewpoints.		
5)	Intention of the actor is more important in terms of judging thevalues.		

9.4 LET US SUM UP

In this Unit, different thoughts and theories regarding cognitive development were covered. This Unit starts with the meaning, characteristic and of life cognitive development. Then, we discussed Piaget's and Vygotsky's theories of cognitive devlopment. In the last section, we talked about moral development with the help of Kohlberg's theory.

9.5 UNIT END QUESTIONS

- 1) What do you understand by cognitive development?
- 2) Write a note on the stages of cognitive development proposed by Jean Piaget.
- 3) What do you mean by:
 - a) Schema
 - b) Assimilation
 - c) Accommodation
 - d) Adaptation
- 4) What do you understand by 'zone of proximal development'? How this concept is related to the concept of scaffolding?
- 5) Explain different stages of moral development explained by Kohlberg.

9.6 GLOSSARY

Schemas

: Schemas are categories of knowledge that help us to interpret and understand the world.

Adaptation

: Piaget saw adaptation as a fundamentally biological process. All living things adapt, even without a nervous system or brain. Assimilation and accommodation are the two sides of adaptation process.

Assimilation

: The process of taking in new information into our previously existing schemas is known as assimilation.

Conservation

: It refers to the idea that a quantity remains the same despite changes in appearance.

More Knowledgeable Others

: These are those people, who are more knowledgeable and have better expertise in a particular domain than the learner.

Accommodation

: Part of Jean Piaget's theory of cognitive development. It is a cognitive process by which we develop or change a schema in order to deal with new object or situation.

9.7 ANSWERS TO SELF ASSESSMENT QUESTIONS (SAQ)

Self Assessment Questions I

- 1) True
- 2) False
- 3) True
- 4) False
- 5) True

Self Assessment Questions II

- 1) duty, law and social order
- 2) conventional morality
- 3) kohlberg
- 4) Individualism and Exchange
- 5) moral

9.8 REFERENCES AND SUGGESTED READINGS

Ormrod, J. E. (2008). *Educational Psychology: Developing Learners* (6th ed.). Upper Saddle River, NJ: Merrill.

Smith, P., Cowie, H. & Blades, M. (2003) *Understanding Children's Development*. Oxford: Blackwell.



Light, P., Sheldon, S. & Woodhead, M. (1991) *Learning to Think*. London; Routledge.

Keil, F. (2013). *Developmental Psychology: The Growth of Mind and Behavior*. WW Norton & Company.

Berger, K. S. (2009). Invitation to the Life Span. Macmillan.

Bremner, J. G. (2017). *An Introduction to Developmental Psychology*. John Wiley & Sons.

Geary D.C. and Bjorklund D.F. (2000). *Evolutionary Developmental Psychology*. Child Development 71(1), 57–65.

Lerner R.M. (1998). Theories of human development: contemporary perspectives. Handbook of Child Psychology. Vol. 1. Theoretical Models of Human Development (ed. R.M. Lerner), 5th ed., pp. 1–24. New York: Wiley.

Lerner R.M., Fisher C.B., and Weinberg R.A. (2000). Toward a science for and of the people: promoting civil society through the application of developmental science. Child Development 71(1) 11–20.

Lewis M.D. (2000). The promise of dynamic systems approaches for an integrated account of human development. Child Development 71(1), 36–43.

Nelson C.A. and Bloom F.E. (1997). Child Development and Neuroscience. Child Development 68(5), 970–987.

Pellegrini A.D. and Bjorklund D.F. (1998). Applied Child Study: A Developmental Approach, 3rd edn., 243 pp. Mahwah, N.J.: Lawrence Erlbuam.

Tandon, R. K. (2002). Child Psychology. APH Publishing Corporation.

9.9 REFERENCES FOR IMAGES

Diagram to demonstrate the ZPD. Retrieved November 2, 2018, from https://psychohawks.wordpress.com/2010/11/03/theories-of-cognitive-development-lev-vygotsky/