

CHILD AND BRAIN BOTH ARE FIVE MEN ARMY TO NURTURE THE NATURE

¹*Kushal Nandi, ¹Amrita Chakraborty, ¹Dr. Dhrubo Jyoti Sen, ²Dr. Dhananjoy Saha and ³Angshul Saha

¹Department of Pharmaceutical Chemistry, School of Pharmacy, Techno India University, Salt Lake City, Sector-V, EM-4, Kolkata-700091, West Bengal, India.

²Deputy Director, Directorate of Technical Education, Bikash Bhavan, Salt Lake City, Kolkata-700091, West Bengal, India.

³Kendriya Vidyalaya, EB Block, Laboni, Sector-1, Salt Lake, Kolkata-700064, West Bengal, India.

Corresponding Author: Kushal Nandi

Department of Pharmaceutical Chemistry, School of Pharmacy, Techno India University, Salt Lake City, Sector-V, EM-4, Kolkata-700091, West Bengal, India.

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ABSTRACT

Developmental psychology is the scientific study of how and why human beings change over the course of their life. Originally concerned with infants and children, the field has expanded to include adolescence, adult development, aging, and the entire lifespan. Developmental psychologists aim to explain how thinking, feeling, and behaviors change throughout life. This field examines change across three major dimensions: physical development, cognitive development, and social emotional development. Within these three dimensions are a broad range of topics including motor skills, executive functions, moral understanding, language acquisition, social change, personality, emotional development, self-concept, and identity formation. Developmental psychology examines the influences of nature and nurture on the process of human development, and processes of change in context across time. Many researchers are interested in the interactions among personal characteristics, the individual's behavior, and environmental factors, including the social context and the built environment. Ongoing debates in regards to developmental psychology include biological essentialism vs. neuroplasticity and stages of development vs. dynamic systems of development. Developmental psychology involves a range of fields, such as educational psychology, child psychopathology, forensic developmental psychology, child development, cognitive psychology, ecological psychology, and cultural psychology. Every day kids are bombarded with messages, information, and images. Whether they are at school, online, or talking to their friends, they need to know how to evaluate what they are hearing and seeing in order to form their own opinions and beliefs. Critical thinking skills are the foundation of education as well as an important life skill. Without the ability to think critically, kids will struggle academically, especially as they get older. In fact, no matter what your child plans to do professionally someday, they will need to know how to think critically, solve problems, and make decisions. As a parent, it's important that you ensure that your kids can think for themselves and have developed a healthy critical mindset before they leave the nest. Doing so will help them succeed both academically and professionally as well as benefit their future relationships. Here is what you need to know about critical thinking, including how to teach your kids to be critical thinkers.

KEYWORDS: Brain, Psychology, Critical Thinking, Psychosexual, Cognitive Development.

Psychosexual development



Figure-1: Mature Brain and Child Brain.

Sigmund Freud believed that everyone has a conscious, preconscious, and unconscious level of awareness. In the conscious, one is aware of their mental process. The preconscious involves information that, though not

currently in our thoughts, can be brought into consciousness. Lastly, the unconscious includes mental processes that a person is unaware of.

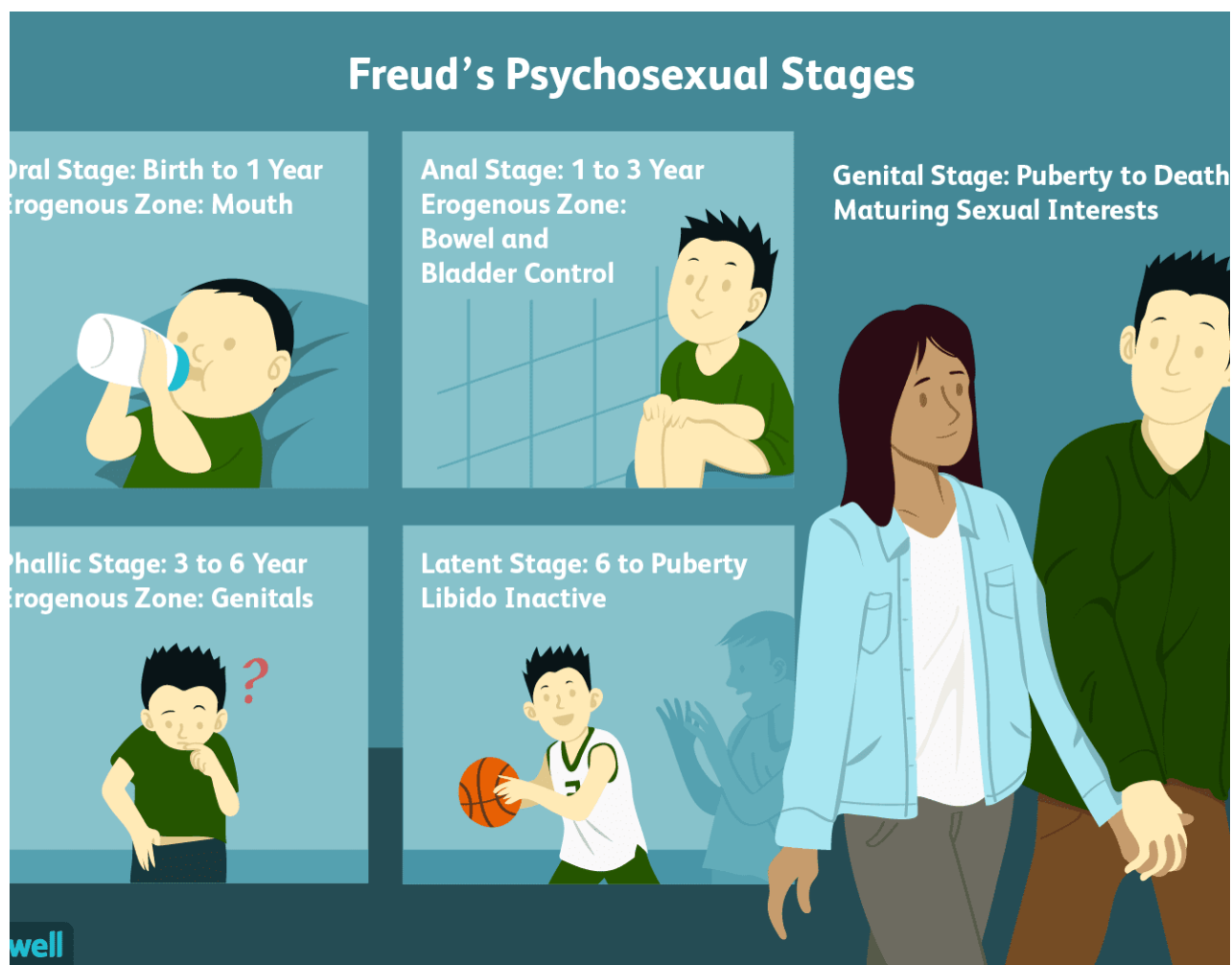


Figure-2: Freud's Psychosexual Stages.

He believed there is tension between the conscious and unconscious because the conscious tries to hold back what the unconscious tries to express. To explain this, he developed three personality structures: the id, ego, and superego. The id, the most primitive of the three, functions according to the pleasure principle: seek pleasure and avoid pain. The superego plays the critical and moralizing role; and the ego is the organized, realistic part that mediates between the desires of the id and the superego.

Based on this, he proposed five universal stages of development, that each is characterized by the erogenous zone that is the source of the child's psychosexual energy. The first is the *oral stage*, which occurs from birth to 12 months of age. During the oral stage, "the libido is centered in a baby's mouth." The baby can suck. The second is the *anal stage*, from one to three years of age. During the anal stage, the child defecates from the anus and is often fascinated with their defecation. The

third is the *phallic stage*, which occurs from three to five years of age (most of a person's personality forms by this age). During the phallic stage, the child is aware of their sexual organs. The fourth is the *latency stage*, which occurs from age five until puberty. During the latency stage, the child's sexual interests are repressed. Stage five is the *genital stage*, which takes place from puberty until adulthood. During the genital stage, puberty starts happening.

Theories of cognitive development

Jean Piaget, a Swiss theorist, posited that children learn by actively constructing knowledge through hands-on experience. He suggested that the adult's role in helping the child learn was to provide appropriate materials that the child can interact with and use to construct. He used Socratic questioning to get children to reflect on what they were doing, and he tried to get them to see contradictions in their explanations.

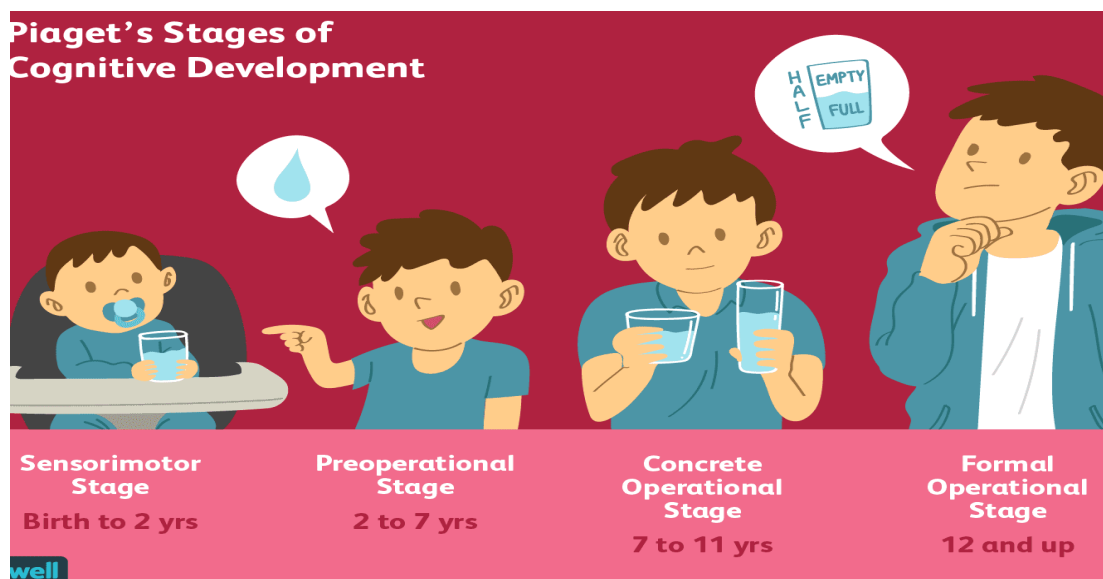


Figure-3: Theories of Cognitive Development.

Piaget believed that intellectual development takes place through a series of stages, which he described in his theory on cognitive development. Each stage consists of steps the child must master before moving to the next step. He believed that these stages are not separate from one another, but rather that each stage builds on the previous one in a continuous learning process. He proposed four stages: *sensorimotor*, *pre-operational*, *concrete operational* and *formal operational*. Though he did not believe these stages occurred at any given age, many studies have determined when these cognitive abilities should take place.

Stages of moral development

Piaget claimed that logic and morality develop through constructive stages. Expanding on Piaget's work, Lawrence Kohlberg determined that the process of

moral development was principally concerned with justice, and that it continued throughout the individual's lifetime.

He suggested three levels of moral reasoning; pre-conventional moral reasoning, conventional moral reasoning, and post-conventional moral reasoning. The pre-conventional moral reasoning is typical of children and is characterized by reasoning that is based on rewards and punishments associated with different courses of action. Conventional moral reason occurs during late childhood and early adolescence and is characterized by reasoning based on rules and conventions of society. Lastly, post-conventional moral reasoning is a stage during which the individual sees society's rules and conventions as relative and subjective, rather than as authoritative.



Figure-4: Stages of Moral Development.

Kohlberg used the Heinz Dilemma to apply to his stages of moral development. The Heinz Dilemma involves Heinz's wife dying from cancer and Heinz having the

dilemma to save his wife by stealing a drug. Preconventional morality, conventional morality, and post-conventional morality applies to Heinz's situation.

Stages of psychosocial development

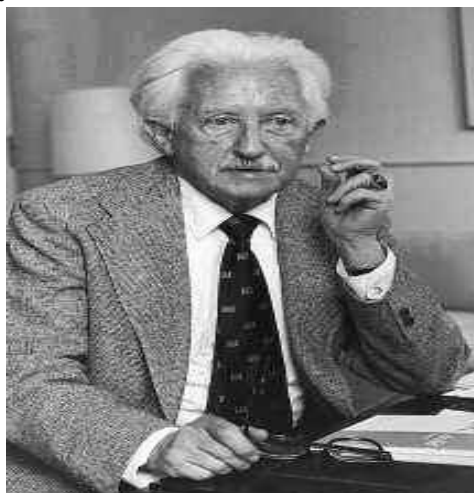


Figure-5: Erik Erikson.

German-American psychologist Erik Erikson and his collaborator and wife, Joan Erikson, conceptualized eight stages of psychosocial development that they theorized healthy individuals pass through as they develop from infancy to adulthood. At each stage the person must resolve a challenge, or an existential dilemma. Successful resolution of the dilemma results in the person ingraining a positive virtue, but failure to resolve the fundamental challenge of that stage reinforces negative perceptions of the person or the world around them and the person's personal development is unable to progress. The first stage, "Trust vs. Mistrust", takes place in infancy. The positive virtue for the first stage is hope, in the infant learning whom to trust and having hope for a supportive group of people to be there for him/her. The second stage is "Autonomy vs. Shame and Doubt" with the positive virtue being will. This takes place in early childhood when the child learns to become more independent by discovering what they are capable of whereas if the child is overly controlled, feelings of inadequacy are reinforced, which can lead to low self-esteem and doubt. The third stage is "Initiative vs. Guilt." The virtue of being gained is a sense of purpose. This takes place primarily via play. This is the stage where the child will be curious and have many interactions with other kids. They will ask many questions as their curiosity grows. If too much guilt is present, the child may have a slower and harder time interacting with their world and other children in it. The fourth stage is "Industry (competence) vs. Inferiority". The virtue for this stage is competency and is the result of the child's early experiences in school. This stage is when the child will try to win the approval of others and understand the value of their accomplishments. The fifth stage is "Identity vs. Role Confusion". The virtue gained is fidelity and it takes place in adolescence. This is when the child ideally starts to identify their place in society,

particularly in terms of their gender role. The sixth stage is "Intimacy vs. Isolation", which happens in young adults and the virtue gained is love. This is when the person starts to share his/her life with someone else intimately and emotionally. Not doing so can reinforce feelings of isolation. The seventh stage is "Generativity vs. Stagnation". This happens in adulthood and the virtue gained is care. A person becomes stable and starts to give back by raising a family and becoming involved in the community. The eighth stage is "Ego Integrity vs. Despair". When one grows old, they look back on their life and contemplate their successes and failures. If they resolve this positively, the virtue of wisdom is gained. This is also the stage when one can gain a sense of closure and accept death without regret or fear.

Stages based on the model of hierarchical complexity

Michael Commons enhanced and simplified Bärbel Inhelder and Piaget's developmental theory and offers a standard method of examining the universal pattern of development. The Model of Hierarchical Complexity (MHC) is not based on the assessment of domain-specific information; it divides the Order of Hierarchical Complexity of tasks to be addressed from the Stage performance on those tasks. A stage is the order hierarchical complexity of the tasks the participant's successfully addresses. He expanded Piaget's original eight stage (counting the half stages) to fifteen stages. The stages are : 0 Calculatory; 1 Sensory & Motor; 2 Circular sensory-motor; 3 Sensory-motor; 4 Nominal; 5 Sentential; 6 Preoperational; 7 Primary; 8 Concrete; 9 Abstract; 10 Formal; 11 Systematic; 12 Metasystematic; 13 Paradigmatic; 14 Cross-paradigmatic; 15 Meta-Cross-paradigmatic. The order of hierarchical complexity of tasks predicts how difficult the performance is with an R ranging from 0.9 to 0.98.

Stage no.	Stage name	Stage definition
0	Computational	Computes using Boolean logic, 0's and 1's
1	Automatic	Automatic responses to stimuli
2	Sensory or Motor	Reflexes and respondent conditioning
3	Circular Sensory & Motor	Operant conditioning
4	Sensory-Motor	Understands simple commands and simple concepts
5	Nominal	Words, Ejaculatives & Exclamations, Verbs, Nouns
6	Sentential	Sentences, Pronouns, ordered numbers & letters
7	Preoperational	Stories, counting material properly laid out
8	Primary	Stories coordinated carefully with reality
9	Concrete	Things, Incidents, Events, Actors, Actions, Places
10	Abstract	Variables, Quantification
11	Formal	Relations among Variables
12	Systematic	Systems of Relations
13	Metasystematic	Supersystems of systems
14	Paradigmatic	System of Metasystems making new paradigms
15	Cross-Paradigmatic	System of Paradigms
16	Meta-Crossparadigmatic	Reflections on the properties of Cross-paradigms

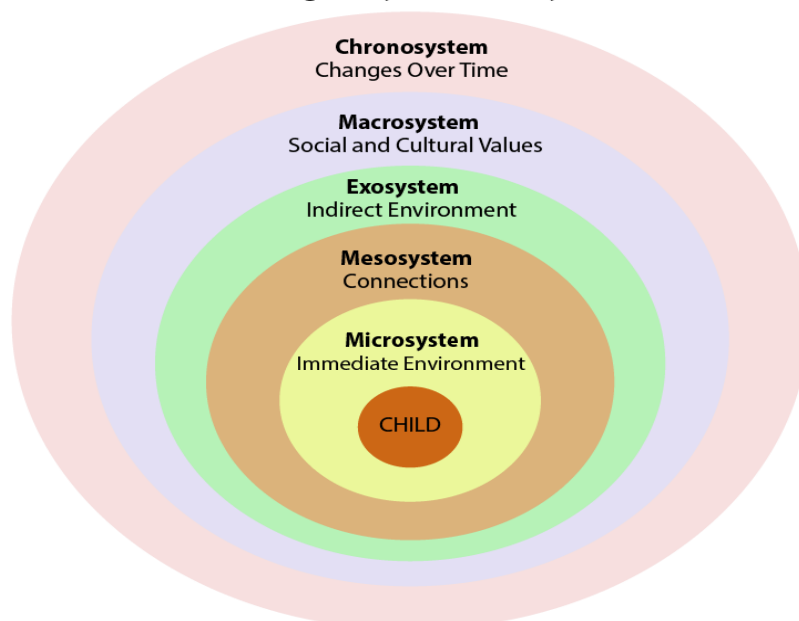
Figure-6: Hierarchical complexity.

In the MHC, there are three main axioms for an order to meet in order for the higher order task to coordinate the next lower order task. Axioms are rules that are followed to determine how the MHC orders actions to form a hierarchy. These axioms are: a) defined in terms of tasks at the next lower order of hierarchical complexity task

action; b) defined as the higher order task action that organizes two or more less complex actions; that is, the more complex action specifies the way in which the less complex actions combine; c) defined as the lower order task actions have to be carried out non-arbitrarily.

Ecological systems theory

Bronfenbrenner's Ecological Systems Theory



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Figure-7: Bronfenbrenner's ecological systems theory.

Ecological systems theory, originally formulated by Urie Bronfenbrenner, specifies four types of nested environmental systems, with bi-directional influences within and between the systems. The four systems are microsystem, mesosystem, exosystem, and macrosystem. Each system contains roles, norms and rules that can powerfully shape development. The microsystem is the direct environment in our lives such as our home and

school. Mesosystem is how relationships connect to the microsystem. Exosystem is a larger social system where the child plays no role. Macrosystem refers to the cultural values, customs and laws of society.

The microsystem is the immediate environment surrounding and influencing the individual (example: school or the home setting). The mesosystem is the

combination of two microsystems and how they influence each other (example: sibling relationships at home vs. peer relationships at school). The exosystem is the interaction among two or more settings that are indirectly linked (example: a father's job requiring more overtime ends up influencing his daughter's performance in school because he can no longer help with her homework). The macrosystem is broader taking into account social economic status, culture, beliefs, customs and morals (example: a child from a wealthier family sees a peer from a less wealthy family as inferior for that reason). Lastly, the chronosystem refers to the chronological nature of life events and how they interact and change the individual and their circumstances through transition (example: a mother losing her own mother to illness and no longer having that support in her life).

Since its publication in 1979, Bronfenbrenner's major statement of this theory, *The Ecology of Human Development*, has had widespread influence on the way psychologists and others approach the study of human

beings and their environments. As a result of this conceptualization of development, these environments—from the family to economic and political structures—have come to be viewed as part of the life course from childhood through to adulthood.

Zone of proximal development

Lev Vygotsky was a Russian theorist from the Soviet era, who posited that children learn through hands-on experience and social interactions with members of their culture. Unlike Piaget, he claimed that timely and sensitive intervention by adults when a child is on the edge of learning a new task (called the "zone of proximal development") could help children learn new tasks. This adult role is often referred to as the skilled "master", whereas the child is considered the learning apprentice through an educational process often termed "cognitive apprenticeship". Martin Hill stated that "The world of reality does not apply to the mind of a child." This technique is called "scaffolding", because it builds upon knowledge children already have with new knowledge that adults can help the child learn.

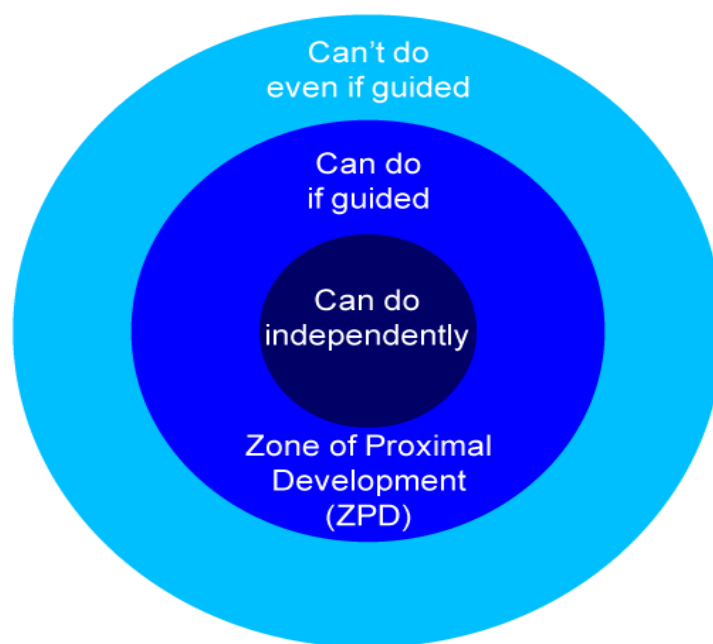


Figure-8: Zone of Proximal Development.

Vygotsky was strongly focused on the role of culture in determining the child's pattern of development, arguing that development moves from the social level to the individual level. In other words, Vygotsky claimed that psychology should focus on the progress of human consciousness through the relationship of an individual and their environment. He felt that if scholars continued to disregard this connection, then this disregard would inhibit the full comprehension of the human consciousness.

Constructivism

Constructivism is a paradigm in psychology that characterizes learning as a process of actively

constructing knowledge. Individuals create meaning for themselves or make sense of new information by selecting, organizing, and integrating information with other knowledge, often in the context of social interactions. Constructivism can occur in two ways: individual and social. Individual constructivism is when a person constructs knowledge through cognitive processes of their own experiences rather than by memorizing facts provided by others. Social constructivism is when individuals construct knowledge through an interaction between the knowledge they bring to a situation and social or cultural exchanges within that content.

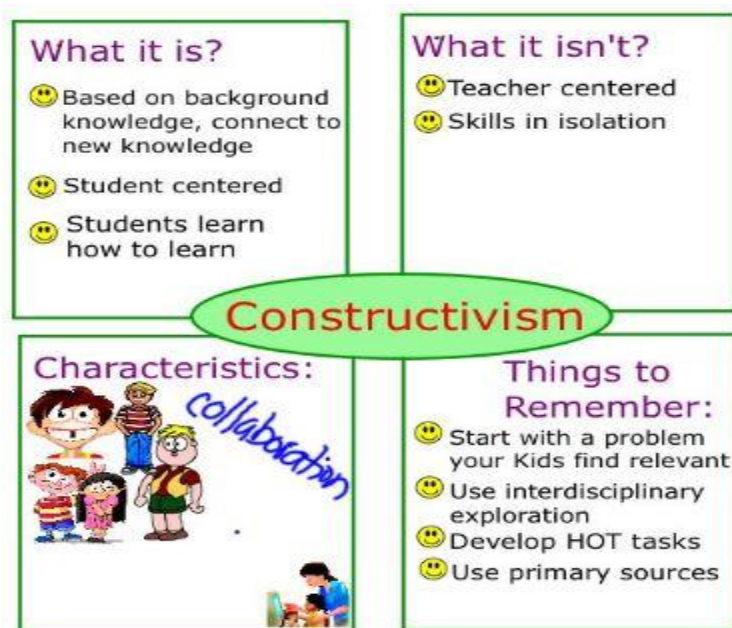


Figure-9: Constructivism.

Jean Piaget, a Swiss developmental psychologist, proposed that learning is an active process because children learn through experience and make mistakes and solve problems. Piaget proposed that learning should be whole by helping students understand that meaning is constructed.

Evolutionary developmental psychology

Evolutionary developmental psychology is a research paradigm that applies the basic principles of

Darwinian evolution, particularly natural selection, to understand the development of human behavior and cognition. It involves the study of both the genetic and environmental mechanisms that underlie the development of social and cognitive competencies, as well as the epigenetic (gene-environment interactions) processes that adapt these competencies to local conditions.

Evolutionary Psychology

- Evolutionary Biology + Cognitive Psychology
- Goal is to understand the human mind/brain from an **evolutionary perspective**
- The design of the mind must have been shaped by **natural selection** (including sexual selection)
- Our mental lives and behavior reflect the evolutionary history of our species, particularly the **adaptive problems** that had to be solved
- The Pleistocene period: the “**environment of evolutionary adaptedness**” or **EEA (2 million – 10,000 years ago)**.

Figure-10: Evolutionary Psychology.

EDP considers both the reliably developing, species-typical features of ontogeny (developmental adaptations), as well as individual differences in behavior, from an evolutionary perspective. While evolutionary views tend to regard most individual differences as the result of either random genetic noise (evolutionary byproducts) and/or idiosyncrasies (for example, peer groups, education, neighbourhoods, and chance encounters) rather than products of natural selection, EDP asserts that natural selection can favor the emergence of individual differences via "adaptive developmental plasticity". From this perspective, human development follows alternative life-history strategies in response to environmental variability, rather than following one species-typical pattern of development.

EDP is closely linked to the theoretical framework of evolutionary psychology (EP), but is also distinct from EP in several domains, including research emphasis (EDP focuses on adaptations of ontogeny, as opposed to adaptations of adulthood) and consideration of proximate ontogenetic and environmental factors (i.e., how development happens) in addition to more ultimate factors (i.e., why development happens), which are the focus of mainstream evolutionary psychology.

Attachment theory

Attachment theory, originally developed by John Bowlby, focuses on the importance of open, intimate, emotionally meaningful relationships. Attachment is described as a biological system or powerful survival impulse that evolved to ensure the survival of the infant. A threatened or stressed child will move toward caregivers who create a sense of physical, emotional, and psychological safety for the individual. Attachment feeds on body contact and familiarity. Later Mary Ainsworth developed the Strange Situation protocol and the concept of the secure base. This tool has been found to help understand and surveillance attachment, such as the Strange Situation Test and the Adult Attachment Interview. Both of which help determine factors to certain attachment styles. The Strange Situation Test help finds "disturbances in attachment" and whether certain attributes are found to contribute to a certain attachment issue. The Adult Attachment Interview is a tool that is similar to the Strange Situation Test but instead focuses attachment issues found in adults. Both tests have helped many researchers gain more information on the risks and how to identify them. Theorists have proposed four types of attachment styles: secure, anxious-avoidant, anxious-resistant, and disorganized. Secure attachment is a healthy attachment between the infant and the caregiver. It is characterized by trust. Anxious-avoidant is an insecure attachment between an infant and a caregiver. This is characterized by the infant's indifference toward the caregiver. Anxious-resistant is an insecure attachment between the infant and the caregiver characterized by distress from the infant when separated and anger when

reunited. Disorganized is an attachment style without a consistent pattern of responses upon return of the parent.

A child can be hindered in its natural tendency to form attachments. Some babies are raised without the stimulation and attention of a regular caregiver or locked away under conditions of abuse or extreme neglect. The possible short-term effects of this deprivation are anger, despair, detachment, and temporary delay in intellectual development. Long-term effects include increased aggression, clinging behavior, detachment, psychosomatic disorders, and an increased risk of depression as an adult.

Attachment is established in early childhood and attachment continues into adulthood. When involved in intimate relationships the way adults are able to handle relationship issues depends on their attachment styles that were formed during their childhood. An example of secure attachment continuing in adulthood would be when the person feels confident and is able to meet their own needs. Having a secure attachment allows the adult to have a healthy trusting relationship. An example of anxious attachment during adulthood is when the adult chooses a partner with anxious-avoidant attachment. Having an anxious/ ambivalent attachment style can affect an adult's trust issues in a committed relationship. By understanding what attachment style an individual formed with their caregiver when they were children, we can better understand their interpersonal relationships as adults.

Nature vs. nurture

A significant issue in developmental psychology is the relationship between innateness and environmental influence in regard to any particular aspect of development. This is often referred to as "nature and nurture" or nativism versus empiricism. A nativist account of development would argue that the processes in question are innate, that is, they are specified by the organism's genes.

An empiricist perspective would argue that those processes are acquired in interaction with the environment. Today developmental psychologists rarely take such polarised positions with regard to most aspects of development; rather they investigate, among many other things, the relationship between innate and environmental influences. One of the ways this relationship has been explored in recent years is through the emerging field of evolutionary developmental psychology.

One area where this innateness debate has been prominently portrayed is in research on language acquisition. A major question in this area is whether or not certain properties of human language are specified genetically or can be acquired through learning. The empiricist position on the issue of language acquisition suggests that the language input provides the necessary

information required for learning the structure of language and that infants acquire language through a process of statistical learning. From this perspective,

language can be acquired via general learning methods that also apply to other aspects of development, such as perceptual learning.

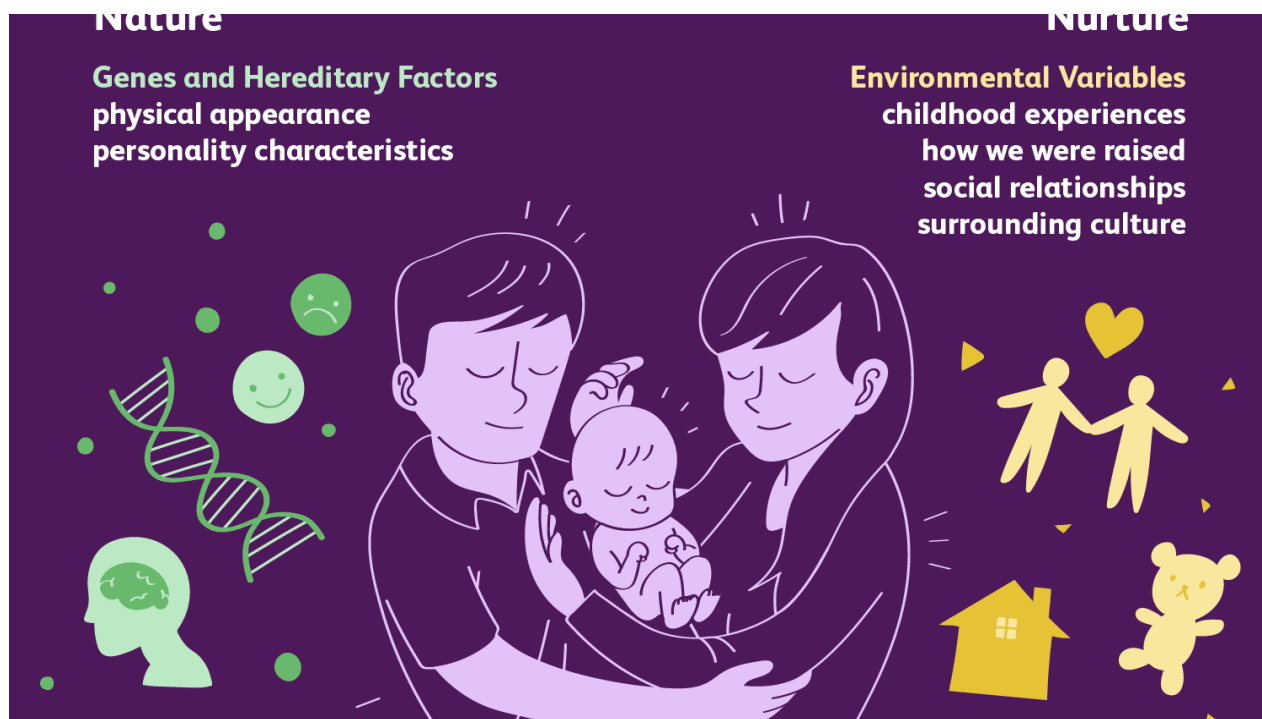


Figure-11: Nature vs. Nurture.

The nativist position argues that the input from language is too impoverished for infants and children to acquire the structure of language. Linguist Noam Chomsky asserts that, evidenced by the lack of sufficient information in the language input, there is a universal grammar that applies to all human languages and is pre-specified. This has led to the idea that there is a special cognitive module suited for learning language, often called the language acquisition device. Chomsky's critique of the behaviorist model of language acquisition is regarded by many as a key turning point in the decline in the prominence of the theory of behaviorism generally. But Skinner's conception of "Verbal Behavior" has not died, perhaps in part because it has generated successful practical applications.

Continuity vs. discontinuity

One of the major discussions in developmental psychology includes whether development is discontinuous or continuous.

Continuous development is quantifiable and quantitative, whereas discontinuous development is qualitative. Quantitative estimations of development can be measuring the stature of a child, and measuring their memory or consideration span. "Particularly dramatic examples of qualitative changes are metamorphoses, such as the emergence of a caterpillar into a butterfly."

Those psychologists who bolster the continuous view of improvement propose that improvement includes slow

and progressing changes all through the life span, with behavior within the prior stages of advancement giving the premise of abilities and capacities required for the other stages. "To many, the concept of continuous, quantifiable measurement seems to be the essence of science".

Not all psychologists, be that as it may, concur that advancement could be a continuous process. A few see advancement as a discontinuous process. They accept advancement includes unmistakable and partitioned stages with diverse sorts of behavior happening in each organize. This proposes that the development of certain capacities in each arrange, such as particular feelings or ways of considering, have a definite beginning and finishing point. Be that as it may, there's no correct time at which a capacity abruptly shows up or disappears. Although some sorts of considering, feeling or carrying on could seem to seem abruptly, it is more than likely that this has been developing gradually for some time.

Stage theories of development rest on the suspicion that development may be a discontinuous process, including particular stages which are characterized by subjective contrasts in behavior. They moreover assume that the structure of the stages isn't variable concurring to each person, in any case the time of each arrange may shift separately. Stage theories can be differentiated with ceaseless hypotheses, which set that development is an incremental process.

Stability vs. change

This issue involves the degree to which one becomes older renditions of their early experience or whether they develop into something different from who they were at an earlier point in development. It considers the extent to which early experiences (especially infancy) or later experiences are the key determinants of a person's development.

Most lifespan development mentalists recognize that extreme positions are unwise. Therefore, the key to a comprehensive understanding of development at any stage requires the interaction of different factors and not only one.

What Is Critical Thinking?

Critical thinking skills are the ability to imagine, analyze, and evaluate information in order to determine its integrity and validity, such as what is factual and what isn't. These skills help people form opinions and ideas as well as help them know who is being a good friend and who isn't. "Critical thinking also can involve taking a complex problem and developing clear solutions," says Amy Morin, LCSW, a psychotherapist and author of the best-selling books "13 Things Mentally Strong People Don't Do" and "13 Things Mentally Strong Parents Don't Do." In fact, critical thinking is an essential part of problem-solving, decision-making, and goal-setting. It also is the basis of education, especially when combined with reading comprehension. These two skills together allow kids to master information.

Why Critical Thinking Skills Are Important

According to the Programme for International Student Assessment (PISA), which evaluated 15-year-old children in 44 different countries, more than one in six students in the United States are unable to solve critical thinking problems. What's more, research indicates that kids who lack critical thinking skills face a higher risk of behavioural problems. If kids are not being critical thinkers, then they are not thinking carefully, say Amanda Pickerill, Ph.D. Pickerill is licensed with the Ohio Department of Education and the Ohio Board of Psychology and is in practice at the Ohio State School for the Blind in Columbus, Ohio. "Not thinking carefully [and critically] can lead to information being misconstrued; [and] misconstrued information can lead to problems in school, work, and relationships," she says. Critical thinking also allows kids to gain a deeper understanding of the world including how they see themselves in that world. Additionally, kids who learn to think critically tend to be observant and open-minded.

Critical thinking skills can help someone better understand themselves, other people, and the world around them. [They] can assist in everyday problem-solving, creativity, and productivity.

— AMY MORIN, LCSW

Benefits of Critical Thinking Skills

There are many ways critical thinking skills can benefit your child, Dr. Pickerill says. From being able to solve complex problems in school and determining how they feel about particular issues to building relationships and dealing with peer pressure, critical thinking skills equip your child to deal with life's challenges and obstacles.

"Critical thinking skills [are beneficial] in solving a math problem, in comparing and contrasting [things], and when forming an argument," Dr. Pickerill says. "As a psychologist, I find critical thinking skills also to be helpful in self-reflection. When an individual is struggling to reach a personal goal or to maintain a satisfactory relationship it is very helpful to apply critical thinking."

Critical thinking also fosters independence, enhances creativity, and encourages curiosity. Kids who are taught to use critical thinking skills ask a lot of questions and never just take things at face value—they want to know the "why" behind things.

"Good critical thinking skills also can lead to better relationships, reduced distress, and improved life satisfaction," says Morin. "Someone who can solve everyday problems is likely to feel more confident in their ability to handle whatever challenges life throws their way."

How to Teach Kids to Be Critical Thinkers

Teaching kids to think critically is an important part of parenting. In fact, when we teach kids to be critical thinkers, we are also teaching them to be independent. They learn to form their own opinions and come to their own conclusions without a lot of outside influence. Here are some ways that you can teach your kids to become critical thinkers.

Be a Good Role Model

Sometimes the best way to teach your kids an important life skill is to model it in your own life. After all, kids tend to copy the behaviors they see in their parents. Be sure you are modeling critical thinking in your own life by researching things that sound untrue and challenging statements that seem unethical or unfair.

"Parents, being the critical thinkers that they are, can begin modeling critical thinking from day one by verbalizing their thinking skills," Dr. Pickerill says. "It's great for children to hear how parents critically think things through. This modeling of critical thinking allows children to observe their parents' thought processes and that modeling lends itself to the child imitating what [they have] observed."

How to Be a Good Role Model**Play With Them**

Children are constantly learning by trial and error and play is a great trial and error activity, says Dr. Pickerill.

In fact, regularly playing with your child at a very young age is setting the foundation for critical thinking and the depth of their critical thinking skills will advance as they develop, she says.

"You will find your child's thinking will be more on a concrete level in the earlier years and as they advance in age it will become more abstract," Dr. Pickerill says. "Peer play is also helpful in developing critical thinking skills but parents need to be available to assist when conflicts arise or when bantering takes a turn for the worse."

Helping In problem solve

Morin says one way to teach kids to think critically is to teach them how to solve problems. For instance, ask them to brainstorm at least five different ways to solve a particular problem, "she says. "At first, they might think it's impossible. But with a little support from you, they might see there are dozens of solutions (like using their feet or putting on gloves). Help them brainstorm a

variety of solutions to the same problem and then pick one to see if it works."

Over time, you can help your kids see that there are many ways to view and solve the same problem, Morin says.

Encourage Them to Ask Questions

As exhausting as it can be at times to answer a constant barrage of questions, it's important that you encourage your child to question things. Asking questions is the basis of critical thinking and the time you invest in answering your child's questions—or finding the answers together—will pay off in the end.

Your child will learn not only learn how to articulate themselves, but they also will get better and better at identifying untrue or misleading information or statements from others. You also can model this type of questioning behavior by allowing your child to see you question things as well.



Figure-12: Learn Well Think Well.

CONCLUSION

Like everything in life, your child will often learn through trial and error. And, part of learning to be a critical thinker involves making decisions. One way that you can get your child thinking about and making choices is to give them a say in how they want to spend their time. Allow them to say no thank-you to play dates or party invitations if they want. You also can give them an allowance and allow them to make some choices about what to do with the money. Either of these scenarios requires your child to think critically about

their choices and the potential consequences before they make a decision. As they get older, talk to them about how to deal with issues like bullying and peer pressure. And coach them on how to make healthy choices regarding social media use. All of these situations require critical thinking on your child's part. Although teaching open-mindedness can be a challenging concept to teach at times, it is an important one. Part of becoming a critical thinker is the ability to be objective and evaluate ideas without bias. Teach your kids that in order to look at things with an open mind, they need leave their own

judgments and assumptions aside. Some concepts you should be talking about that encourage open-mindedness include diversity, inclusiveness, and fairness. Developing a critical mindset is one of the most important life skills you can impart to your kids. In fact, in today's information-saturated world, they need these skills in order to thrive and survive. These skills will help them make better decisions, form healthy relationships, and determine what they value and believe. Plus, when you teach your kids to critically examine the world around them, you are giving them an advantage that will serve them for years to come—one that will benefit them academically, professionally, and relationally. In the end, they will not only be able to think for themselves, but they also will become more capable adults someday.

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