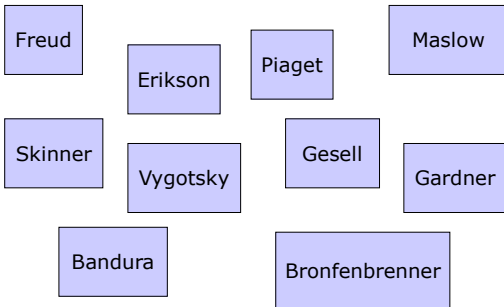




Developmental and Learning Theories



Questions Asked

- Questions asked by educators include:
 - How do children develop?
 - What do children learn and in what order?
 - What affects learning?
 - Do all children develop in the same ways?
 - What are the similarities and differences in growth and development?
- Early Childhood Education draws from several fields of study in order to answer these questions.
- Educators then apply the finding from research to their classroom practices.



The Nature of Development

- The child is a blend of many parts that interrelate in different ways and change with growth over time. Biological processes describe changes in the body.
- Cognitive processes are those changes in one's thought, intelligences and language.
- Socioemotional processes reflect changes in an individual's relationships with other people, emotions and personality.
- (Gordon and Browne, pages 130-131).

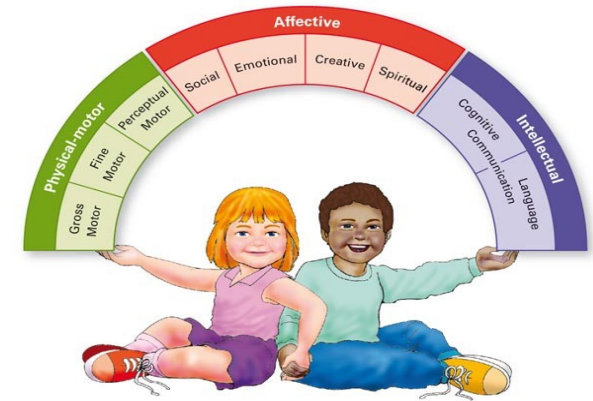


FIGURE 4-1 We use images, such as this rainbow, to developmental areas, to capture the concept of the whole child as a sum of many parts.



Nature vs Nurture

- Is a child's development due more to maturation or experience?
 - *Heredity versus environment*
- Rousseau
 - *Child is born with natural, or innate goodness*
- Locke
 - *Tabula rasa*
 - *Children entered the world with a clean slate on which all experiences and learning is written*
 - *Asserted that it was nurture that mattered*
- Educators continue to ask:
 - *Is growth smooth and continuous or more stage-like?*

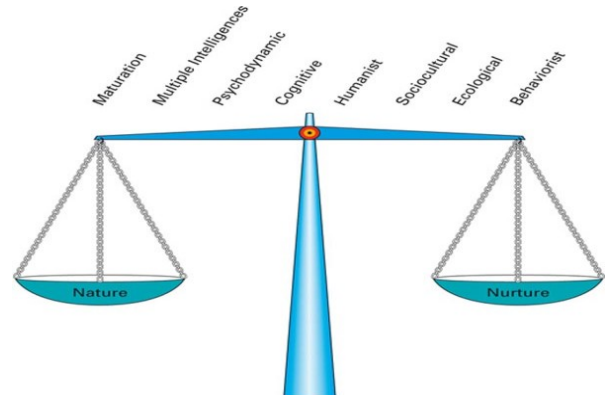


FIGURE 4-2 Development is a combination of the forces of nature (heredity and prenatal conditions) and nurture (environmental and life experiences). Every theory focuses on various areas of development and emphasizes a different proportion of these two forces.



Developmental and Learning Theories



- **Psychodynamic Theory**
 - Sigmund Freud
- **Psychosocial**
 - Erik Erikson
- **Behaviorist Theory**
 - B.F. Skinner
- **Cognitive Theory**
 - Jean Jacques Piaget
- **Sociocultural Theory**
 - Lev Vygotsky
- **Ecological Theory**
 - Urie Bronfenbrenner
- **Multiple Intelligences**
 - Howard Gardner
- **Maturation Theory**
 - Arnold Gesell
- **Humanistic Theory**
 - Abraham Maslow



Freud Erikson Skinner Bandura Piaget Vygotsky Bronfenbrenner Gardner Gesell Maslow

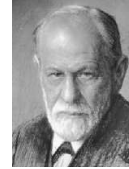


Sigmund Freud (1856-1939)



Main points

Experiences in early childhood influence later development. Assumes sexual factors are major factors, even in early childhood.



Key words

Psychodynamic; psychosexual; libido; oral stage; anal stage; phallic stage; latency stage; genital stage; id; ego; super-ego; Electra complex; Oedipal complex; conscious; unconscious; psychoanalysis

[Home](#)



Nature



Nurture

Freud Erikson Skinner Bandura Piaget Vygotsky Bronfenbrenner Gardner Gesell Maslow



Psychodynamic Theory



Personality Structures

- **Id**
 - Basic instincts
- **Ego**
 - Mediator
 - Rational part
- **Superego**
 - Ideas about moral acceptable behavior



Psychodynamic Theory



- Sigmund Freud believed that the human psyche is made of two basic drives--self-preservation and the libido.
- The libido was the psychic energy that drives individuals to experience sensual pleasure.
- This is not limited to sexual pleasure.
- He believed that humans went through five stages in childhood.
- If you made it through these stages smoothly you would become a well developed adult.
- If you dwell to much or too little in any one stage, you might become fixated.



Stages of Development



1. The Oral Stage is first, lasting from birth to about 1 year. Babies get pleasure from sucking. If you become fixated at this stage you might take up thumb sucking, fingernail biting, and pencil chewing (and maybe drug usage, overeating, verbal fluency).
2. The Anal Stage is next, from 1-3 years. Young children enjoy holding in and releasing urine and feces. Your toilet training is a major issue here--if your parents push you to fast or too slow you might become anal retentive. A fixation here will show up either as extreme orderliness and cleanliness, or as extreme messiness and disorder.
3. The Phallic Stage lasts from 3-6 years of age. The id impulses focus on the genitals, and the child finds pleasure from genital stimulation. This is about the time you have to worry about Oedipal conflict for boys and Electra conflict for girls. If these are not resolved, you might identify with the 'wrong' sex, and have anger towards the parent of your own sex.
4. The Latency Stage lasts from 6-11 years. Not much happens. The child develops the superego.
5. The Genital Stage takes place during adolescence. The (ex-)child get pleasure from sex (or at least wants to). With any luck, you pull through this one and settle down into a healthy relationship (marriage, and children of your own).



Psychodynamic Theory



Freud's work was heavily criticized for lack of substantial evidence.

He regarded basic sexual instincts as being the driving force behind virtually all behaviour.

He regarded the development of personality as being the balance between the Id, the Ego and the SuperEgo.

The Id strives for unrealistic gratification of basic desires, the SuperEgo strives for unrealistic moral responsibility and conscience while the Ego acts to compromise these two opposing forces.

There are many unproven aspects to Freud's work, for example Freud theorized that characteristics like generosity or possessiveness were related to childhood factors like parental attitudes to toilet training.

[Home](#)



Freud Erikson Skinner Bandura Piaget Vygotsky Bronfenbrenner Gardner Gesell Maslow



Erik Erikson - 1902-1994



Main points

Develops beyond Freud's ideas. More stages (8) and more influence of environmental factors.



Key words

Psychodynamic; psychosexual; psychosocial; 8 development stages; identity; crises/dilemmas



Home



- Freud
- Erikson
- Skinner
- Bandura
- Piaget
- Vygotsky
- Bronfenbrenner
- Gardner
- Gesell
- Maslow

Erikson's stages of personality development

Stage	1	2	3	4	5	6	7	8
Oral	Basic trust vs. mistrust							
Anal		Autonomy vs. shame, doubt						
Phallic			Initiative vs. guilt					
Latency				Industry vs. inferiority				
Genital					Identity vs. role confusion			
Young adulthood						Intimacy vs. isolation		
Adulthood							Generativity vs. stagnation	
Maturity								Ego integrity vs. despair

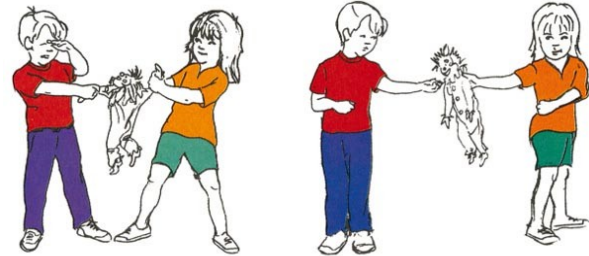


FIGURE 4-4 An Eriksonian crisis in a young child's life. The child who has successfully mastered the first of Erikson's psychosocial conflicts will then be able to cope with future challenges. In this instance, the child who takes initiative (grabbing a toy) can also feel guilt (returning it).



In Erikson's theory the adult serves as a social mediator for the child.



Behaviorist Theory



- Behaviorism is America's contribution to psychology.
- "Behaviorism begins with the notion that a child is born with a "clean slate," a *tubula rasa* in John Locke's work, on which event are written throughout life." (Gordon and Browne page 138)
- Behaviorism is based on observable changes in behavior. Behaviorists insist that only what can actually be observed can be accepted as fact and that only behavior can be treated.
- Behaviorism focuses on a response to some type of stimulus.
- The primary theorists involved with behaviorism are John Watson, Edward Thorndike, B.F. Skinner and Pavlov and Albert Bandura.



Home

- Freud
- Erikson
- Skinner
- Bandura
- Piaget
- Vygotsky
- Bronfenbrenner
- Gardner
- Gesell
- Maslow



Ivan Pavlov (1849-1936) Russian Physiologist



- Known for classical conditioning.
- "The association of involuntary reflexes with other environmental conditions became known as classical conditioning." (Gordon and Browne page 138)
 - Prior to conditioning, he would ring a bell.
 - No response from dog.
 - Placed food in front of dog to initiate salivation.
 - During conditioning, bell was rung several seconds prior to presenting dog with food.
 - After conditioning, ringing of the bell alone produced salivation in the dog.
- A spontaneous reaction that occurs automatically to a particular stimulus.
- To alter the "natural" relationship between a stimulus and a reaction was viewed as a major breakthrough in the study of behavior.





John B. Watson (1878-1958) American Psychologist and Theorist

- Studied the animal experiments of Ivan Pavlov.
- Applied the concepts of classical conditioning to emotional reactions.
- Believed that the human personality developed through the conditioning of various reflexes.
- Experimented with infants using a rat to provoke a response.
 - Initially, infant was not afraid of the rat.
 - When the infant touched the rat, Watson created a sudden loud noise.
 - Infant became afraid of noise, which at the same time, he became afraid of the rat.
 - Child remained afraid of rat, even after noise was eliminated from activity.



John B. Watson (1878-1958) American Psychologist and Theorist

- Believed that behaviorism was the mechanism that could provide a foundation for living.
- *“He gave scientific validity to the idea that teachers should set conditions for learning and reward proper responses.” (Gordon and Browne page 138)*
- One of Watson's most famous quotes goes as follows:
 - *“Give me a dozen healthy infants, well-formed, and my own specified world to bring them up in and I'll guarantee to take any one at random and train him to become any type of specialist I might select - doctor, lawyer, artist, merchant-chief, and, yes, even beggar-man and thief, regardless of his talents, penchants, tendencies, abilities, vocations, and race of his ancestors.”*



Edward Thorndike (1874-1949) American Psychologist “godfather” of standardized testing

- Connectionism establishes a connection between certain stimuli and voluntary behaviors.
- Invented the puzzle box to investigate how animals such as cats and dogs solve problems.
- Experimented using baby chicks, dogs, fish, cats, and monkeys.
 - Animal must escape from a confined space to reach food. A latch must be tripped to escape.
 - Animals elicited variety of behaviors prior to tripping latch.
 - Decrease in behaviors and quicker escape time occurred.
- Association theory was derived from this study.
- *“Stimulus-response technique-a stimulus will recall a response if a person; this forms learned habits.” (Gordon and Browne page 138)*
- Escape response gradually became associated with the stimulus situation in trial-and-error learning.



B.F. Skinner - 1904-1990

Main points

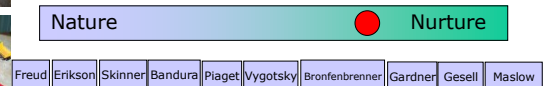
Reinforcement and punishment moulds behaviour. Children are conditioned by their experiences.

Key words

Operant conditioning; positive/negative reinforcement; consequence; reward; punishment; respondents; operants; social learning theory; behavioural learning theory



[Home](#)



Burrhus Frederic Skinner (1904-1990) American Psychologist

- *“He took the idea of “tabula rasa” one step further to create the doctrine of the “empty organism.” (Gordon and Browne page 138)*
- *“A person is like a vessel to be filled by carefully designed experiences.” (Gordon and Browne page 139)*
- Known for operant conditioning
 - A stimulus is provided
 - A response is generated.
 - Consequence to the response is present.
 - Type of consequence is present.
 - Reinforcement is provided which could be positive or negative.



More on Skinner

Skinner maintained that learning occurred as a result of the organism responding to, or operating on, its environment, and coined the term operant conditioning to describe this phenomenon.

He did extensive research with animals, notably rats and pigeons, and invented the famous Skinner box, in which a rat learns to press a lever in order to obtain food.

Alfred Bandura - 1925-current

Main points

Learning takes place by imitation. This differs from Skinner's "conditioning" because there is more emphasis on inner motivational factors.

<http://www.muskingum.edu/~psych/psycweb/history/bandura.htm>

Key words

Imitation; copying; modelling; role models; reinforcement; social learning theory; observational theory (social cognitive theory); Bobo doll experiment.

Home

Nature ● Nurture

Freud Erikson Skinner Bandura Piaget Vygotsky Bronfenbrenner Gardner Gesell Maslow



More on Bandura

- Bandura's theory known as "Social Learning Theory" has been renamed "Social Cognitive Theory" to accommodate later developments of the theory.
- Bandura is seen by many as a cognitive psychologist because of his focus on motivational factors and self-regulatory mechanisms that contribute to a person's behavior, rather than just environmental factors.
- This focus on cognition is what differentiates social cognitive theory from Skinner's purely behavioristic viewpoint.

Jean Piaget - 1896-1980

Main points

Development takes place in distinct stages of cognitive development. Adults influence but the child is building their own thinking systems.

Key words

Cognitive learning theory; assimilate; symbolism; accommodate; egocentric; decentre; conservatism; active learners; schemata; sensory-motor; stages; pre-operational; animism; moral realism; concrete operations; formal operations

Home

Nature ● Nurture

Freud Erikson Skinner Bandura Piaget Vygotsky Bronfenbrenner Gardner Gesell Maslow



Cognitive Theory

- Jean Piaget is known for his research in developmental psychology.
- He studied under C. G. Jung and Eugen Bleuler.
- He was involved in the administration of intelligence tests to children and became interested in the types of mistakes children of various ages were likely to make.
- Piaget began to study the reasoning processes of children at various ages.
- Piaget theorized that cognitive development proceeds in four genetically determined stages that always follow the same sequential order.

Piaget's Stages of Cognitive Development

- **Dependent on both maturational and environmental factors**
- **Thinking and learning are a process of interaction of the child and the environment**
- **Children construct knowledge based on innate cognitive structure and experiences**

Cognitive Theories of Piaget

- **Schemas**
 - Mental concepts
- **Assimilation**
 - Making information fit
- **Accommodation**
 - Changing information to fit
- **Equilibrium**
 - Mental balance of information
- **Stages**
 - Sensorimotor, zero to one-and-a-half to two years
 - Preoperational, two to six or seven years
 - Concrete operations, six to 12 years
 - Formal operations, 12 years to adulthood



FIGURE 4-9 In cognitive theory, children's thinking develops in stages, with critical learning occurring at each stage (see Chapters 12 and 13). The former period is not a part of early childhood.



Piaget's Stages in Early Childhood

- **Preoperational: two to six or seven**
 - Gradual acquisition of language
 - Symbolic play
 - Egocentric
 - Physical attributes of an object only
 - Ability to conserve is developing slowly
 - Quantity and size relationships
 - Inability to understand the whole and relationship to its parts



Piaget's Stages in Primary Years

- **Concrete operational**
 - Begins to conserve
 - Can understand several attributes of an object
 - Understands rules
 - Can understand other points of view but is reality based
 - Mental representations of objects



Constructivist Theory

- Based on ideas from Dewey and Piaget
- Theory of learning is a transactional model where child is actively involved in his/her own learning
- Teacher's role is to build environment that is stimulating and conducive to process of constructing meaning and knowledge
- Emergent curriculum, Reggio model



Lev Vygotsky - 1896-1934

Main points

Development is primarily driven by language, social context and adult guidance.

Key words

Zone of proximal development; zone of actual development; social constructivist; social constructivism; social interaction; language; internalisation; play; social context; cognition; constructivism



[Home](#)

Nature



Nurture

Freud Erikson Skinner Bandura Piaget Vygotsky Bronfenbrenner Gardner Gesell Maslow



In Vygotsky's sociocultural theory, the child's development is inseparable from social and cultural activities.

More on Vygotsky

- Lev Vygotski was a Russian psychologist who died prematurely.
- His most productive years were at the Institute of Psychology in Moscow (1924–34), where he developed ideas on cognitive development, particularly the relationship between language and thinking.
- His writings emphasised the roles of historical, cultural, and social factors in cognition and argued that language was the most important symbolic tool provided by society.

Sociocultural Theory

- **Zone of proximal development**
 - Asking the right questions
 - Planning for experiences
- **Scaffolding**
 - Social collaboration interaction
 - Fantasy play
- **Piaget and Vygotsky**
 - Constructivist

Urie Bronfenbrenner 1917-2005

- Born in Moscow, moved with his family to the United States when he was 6.
- Widely regarded as one of the world's leading scholars in developmental psychology, child-rearing and human ecology.
- Longtime Cornell University professor.
- A co-founder of the national Head Start program.
- Developed the Ecological Systems Theory also called "Development in Context" or "Human Ecology" theory.



Home

Freud Erikson Skinner Bandura Piaget Vygotsky Bronfenbrenner Gardner Gesell Maslow

Ecological Theory

- Based on the idea that the environment greatly influences a child's development
- The Ecological model seeks to explain individual knowledge, development, and competencies in terms of the guidance, support, and structure provided by society and to explain social change over time in terms of the cumulative effect of individual choices.
- According to Urie Bronfenbrenner, each person is significantly affected by interactions among a number of overlapping ecosystems.
- The four systems of Bronfenbrenner's model
 - Exosystem (community)
 - Macrosystem (social conditions)
 - Microsystem (individual family or program)
 - Chronosystem (when the child lives)

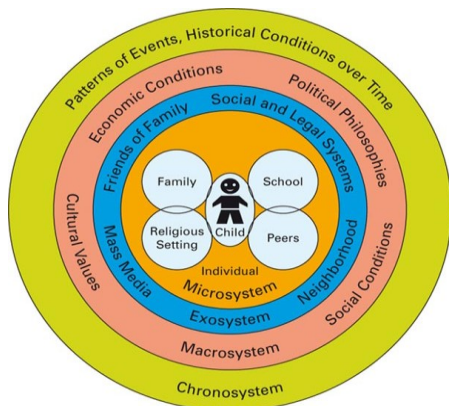


FIGURE 4-11 Ecological theory shows how many influences in a child's life can affect development.

Multiple Intelligences

- Howard Gardner (1943 -)
- *Frames of Mind: The Theory of Multiple Intelligences* (1983).
- Proposes a revolutionary revision of our thinking about intelligences.
- Eight Intelligences



Home

Freud Erikson Skinner Bandura Piaget Vygotsky Bronfenbrenner Gardner Gesell Maslow



Howard Garner

I want my children to understand the world, but not just because the world is fascinating and the human mind is curious. I want them to understand it so that they will be positioned to make it a better place. Knowledge is not the same as morality, but we need to understand if we are to avoid past mistakes and move in productive directions. An important part of that understanding is knowing who we are and what we can do... Ultimately, we must synthesize our understandings for ourselves. The performance of understanding that try matters are the ones we carry out as human beings in an imperfect world which we can affect for good or for ill. (Howard Gardner 1999: 180-181)

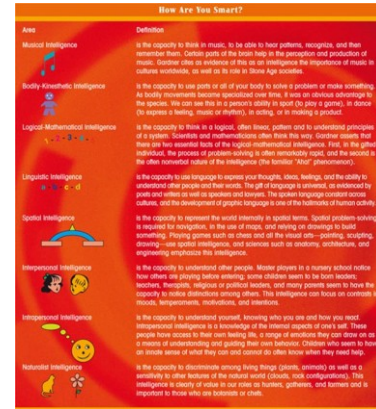


FIGURE 4-12 Gardner's multiple intelligences theory describes a new way of looking at intelligence that has serious implications for teaching.



MI Resources

- **Multiple Intelligences: The Complete MI Book** by Spencer Kafan and Miguel Kagan (1998) Kagan Cooperative Learning. CA. ISBN: 1-879097-45-1
- **Teaching and Learning Through Multiple Intelligences** by Linda Campbell (1996) Allyn & Bacon. MA. ISBN: 0-205-16337.
- **Howard Gardner, Multiple Intelligences and Education**
– <http://www.infed.org/thinkers/gardner.htm>
- **Tapping into Multiple Intelligences**
– <http://www.thirteen.org/edonline/concept2class/mi/index.html>
- **Multiple Intelligence Inventory**
– <http://www.ldrc.ca/projects/miinventory/mitest.html>
- **MI Theory**
– http://www.chariho.k12.ri.us/curriculum/MISmart/mi_smart.htm
- **Theory of Multiple Intelligence**
– http://en.wikipedia.org/wiki/Theory_of_multiple_intelligences



Arnold Gesell - 1880-1961

Main points

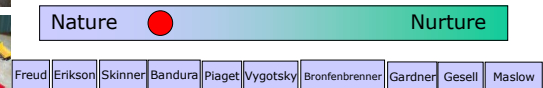
Development genetically determined by universal "maturation patterns" which occur in a predictable sequence.



Key words

Biological maturation; milestones; normative development; cephalo-caudal; proximo-distal; nativist (nature) language development; biological/genetic determinism.

Home



Maturation Theory

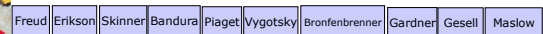
- Gesell's classic study involved twin girls, both given training for motor skills but one given training for longer than the other.
- There was no measurable difference in the age at which either child acquired the skills, suggesting that development had happened in a genetically programmed way, irrespective of the training given.
- A child learns to whether or not an adult teaches him/her, suggesting physical development at least is largely pre-programmed.
- By studying thousands of children over many years, Gesell came up with "milestones of development" - stages by which normal children can accomplish different tasks. These are still used today.



Humanistic Theory

- **Humanists do not believe that human beings are pushed and pulled by mechanical forces, either of stimuli and reinforcements (behaviorism) or of unconscious instinctual impulses (psychoanalysis).**
- **Humanists focus upon potentials.**
- **They believe that humans strive for an upper level of capabilities.**
- **Humans seek the frontiers of creativity, the highest reaches of consciousness and wisdom.**
- **This has been labeled "fully functioning person", "healthy personality", or as Maslow calls this level, "self-actualizing person."**

Home





Abraham Maslow 1908-1970



- Maslow is a humanistic psychologist.
- Developed the theory of self-actualization.
- This theory has to do with what people need to become and stay healthy.



- Maslow maintained that all persons, regardless of age, race, gender, culture, or geographic location had the same basic needs.
- These needs form a theory of human motivation.



- The needs are interrelated in such a way that they form a hierarchy, or pyramid, each one building on the next.



- The most basic needs must be met before the other needs can be met.
- The basic needs, seen on the first tier of the pyramid, are sometimes called deficiency needs because they are critical for a person's survival, and a deficiency can cause the person to die.
- Until these needs are met, no other significant growth can occur.

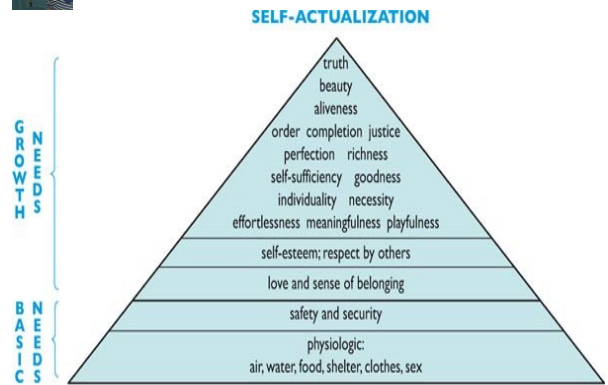


FIGURE 4-13 Abraham Maslow studied healthy personalities and theorized that what people need for growth is a hierarchy of basic and growth needs. (Adapted from Abraham Maslow, 1954.)