

Objectives:

1. *Define developmental psychology.*
2. *Describe the physical and perceptual development of newborns and children.*
3. *Discuss the development of language.*

I. Introduction

- A. The study of changes that occur as an individual matures is called _____.
- B. Developmental psychology studies how a person's _____, _____, _____, _____, and _____ growth and development occur in sequential interrelated stages of the human life cycle.

II. Nature vs. Nurture

- A. Psychologists have long debated what the influences of human behavior are. Some psychologists have argued that much of our development comes to us as a result of our _____ make-up (nature). Others have argued much of our development comes as a result of what we have _____ or _____ (nurture).

III. Newborns

- A. Development begins long before an infant is even born.
1. Expectant mothers can feel strong _____ and kicking—even hiccuping—inside them during the later stages of pregnancy.
 2. It is common for a fetus (an unborn child) to suck its _____, even though it has never suckled at its mother's breast or had a bottle.

IV. Capacities of Newborns

- A. Capacities are NOT learned behaviors. _____ are those things a healthy newborn is capable of doing at birth. The inability to do these things may indicate health problems. Capacities allow newborns to adapt to their _____ and meet essential basic _____.

Examples of Capacities of Newborns

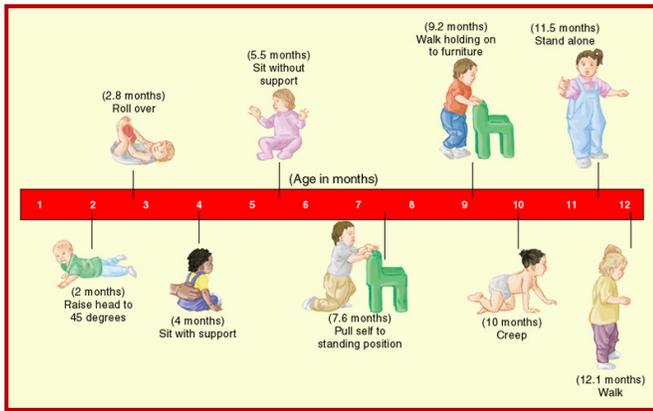
1. Sucking
2. Turning head
3. Looking at/for things
4. Crying
5. Smiling
6. Showing fright or surprise
7. _____: an infant's response to the touch of the palm of its hand
8. _____: when an alert newborn is touched anywhere around the mouth they will turn their head and mouth toward the source of the touch.

V. Physical Development and Maturation of Infants

A. Basic Information:

1. On average, infants weigh _____ pounds at birth.
2. At birth, 95% of infants are between 5.5 and 10 pounds and are _____ - _____ inches in length.
3. Within the span of _____ years, the grasping, rooting, searching infant will develop into a child who can walk, talk, and feed themselves.
4. This transformation is the result of both _____ and _____.

- B. _____ is the internally programmed growth of a child. At various points of maturation the child achieves developmental _____ such as rolling over, raising their head, sitting without support, etc. Maturation works on a _____ (if they are healthy) and no amount of parent coaching will push a child to mature faster than he/she is _____ ready.



The timeline above serves as a guide indicating how long it should take an infant to learn simple skills, such as motor functions, crawling, creeping, walking, etc.

- C. By recording the _____ at which thousands of infants first begin to smile, to sit upright, to crawl, etc. psychologists have been able to develop a _____ for maturation. The development of these timetables have been used by professionals in identifying children who have _____ and who may require assistance and additional _____ from outside agencies.
- D. One of the facts to come out of the development of these timetables is that the maturational plan inside each child is _____. Children will develop and achieve these skills at different times and rates, the timetables merely serve as guides of _____.

VI. Perceptual Development

- A. In addition to grasping and sucking, newborns have mature perception skills. In 1961, _____ showed infants different faces to discover their preferences. His research showed that infants preferred human faces and patterned materials the most. This research showed infants are born with and develop visual patterns.
- B. In another experiment, researchers _____ and _____ (1960) created the visual-cliff experiment to try to determine if depth perception was a _____ skill or if it was _____.
- C. Findings of this experiment showed:
1. While very young infants (under 6 months) showed _____ fear and were willing to crawl over the cliff, older infants (6 months and older) who were experienced at crawling _____ to cross over the cliff. (learned response)
 2. Heart rates _____ in younger infants when they crossed the cliff area. (perceived response)

3. Conclusions were that experienced crawlers had associated drop-offs with danger (learned response). Thus infants _____ through experience, even though depth perception is partially _____.

VII. The Development of Language

- A. Language and thought are closely intertwined; both abilities involve using _____.
 1. We are able to think and talk about _____ that are present and about ideas that are not necessarily true.
 2. A child begins to think, to represent things to himself, before he is able to _____.
 3. The acquisition of language, however, propels the child into further _____ development (Piaget, 1926).
- B. Animals have shown some capabilities of using language.
 1. Psychologists believe that chimpanzees must develop at least as far as 2-year-old humans because, like 2-year-olds, they will look for a toy or a bit of food that has disappeared.
 2. Chimps have learned sign language and how to use special typewriters connected to computers.
 3. The chimps use only aspects of the human language.
- C. Some psychologists argue that language is _____ behavior, while others claim it is _____.
- D. Some people claim there is a “_____,” or a window of opportunity, for learning a language.
- E. There are several steps in learning language:
 1. _____ - to make the signs
 2. giving the signs _____
 3. learning _____
- F. During the _____ year of life, the average child makes many sounds.
- G. Late in the first year, the strings of babbles begin to sound more like the language that the child _____.
- H. The leap to using sounds as _____ occurs sometime in the _____ year.

- I. By the time children are 2 years old, they have a _____ of at least 50 words.
- J. At age 2, though, a child's grammar is still _____ that of an adult.
- K. Infants and toddlers use _____ –sentences with words left out or used incorrectly, but still get the message across to those they are communicating with.

Examples of telegraphic speech:

"Where my apple?"

"Daddy fall down."

"Daddy goed yesterday" instead of "Daddy went yesterday"

- L. By the time children have reached age four or five they have mastered the basics of their language. Their ability to use words will continue to grow with their ability to _____ about and _____ things.

Age	Language Abilities	Example
1 year	Babbling begins and increases; by year's end, infant masters sounds of own language and usually says his first word	baba mama
2 years	Infant will progress to saying dozens of words; begins to speak in paired words; to ask a question, child issues a declaration in a rising tone; to negate something, child uses nouns with a negative word	All gone ball. More ball. Jenny go? No ball.
3 years	Child acquires more grammatical knowledge; says appropriate sentences; uses simple declaratives; produces correct negative sentences; average size of vocabulary is about 400 words	I eating. I'm eating. Don't go.
4 years	Child uses more grammatical rules and future tense; asks questions in adult form; average vocabulary is over 1,000 words	Will Jenny go? I can't go. Why is Jenny crying?
5 years	Child uses more complex clauses; joins two or more ideas in one sentence	I see what you did.

Source: Adapted from *Developmental Psychology* by Howard Gardner 1963.