

Cognitive Development in Infants

Piaget's three stages of development:

1. Sensorimotor -- infant to 2 years
2. Preoperational -- 2 through 7 years
3. Concrete -- 7 through 11 years

Jean Piaget was a Swiss psychologist who studied children and observed their cognitive development. He theorized that:

- Cognitive development occurs in three stages (see above).
- All infants and children go through the stages based on the development of the brain and nervous system (as long as they are considered normal).
- Cognitive activities include mental activities—touching, looking, sucking and listening while learning to imitate and use symbols.

Observations of children in the sensorimotor stage:

- Observing simple objects is not functional at birth but emerges in the first several months after the beginning of visual experience; it is obtained by two months in the normal infant.
- Eye movements or reaching were investigated, beeping noises were used for attention.
- 2-month-old infants showed no evidence of recognition but did look reliably longer than the 4-month-olds.
- The turning point in the development process, which is most likely the window of opportunity and a very critical period, is 4 months.
- By 8 months of age, infants are able to look for objects.
- Infants who were exposed to alcohol during the prenatal stage were slower around age 6.5 months; those born premature needed longer studying time.
- Infant eye movements were videotaped and showed that processing time is important to infant cognition.
- Predictable sequences were used to see if infants could correctly identify where stimuli would appear next. Reaction times were observed to be slower from 5 months to 12 months, and there were no crucial changes from 5 to 7 months.

Sources:

- Johnson, S. P., Gavin, B., Slater, A., Uschi, M., Foster, K., & Cheshire, A. (Jan/Feb. 2003). Infants' perception of object trajectories. *Child Development*, 74(1), 94-108.
- Rose, S. A., Feldman, J. F., Jankowski, J. J., & Caro, D. M. (Jan/Feb. 2002). A longitudinal study of visual expectation and reaction time in the first year of life. *Child Development*, 73(1), 47-61.
- Strong, B., DeVault, C., & Sayad, B. W. (1998). *The marriage and family experience* (7th ed.). New York: Wadsworth.