Concepts addressed:
*Cognitive abilities shaped by nature/nurture.*

Students should refer to the text used in this course, *Children by Santrock (8th Ed)* Chapter 7.

Specifically, students should review:

What are some early environmental influences on cognitive development?

Nutrition—although good nutrition provides optimum physical growth, it can also influence cognition. Studies of malnourished children find lower scores on the Bayley test. Other studies on children given protein supplement indicate higher cognitive development.

Poverty—Children born into poverty are more susceptible to conditions that will negatively affect cognitive growth. Intervention programs that educate parents on enriching practices and improving quality of life have important positive effects on cognitive growth.

Brain development research—
What it means for young children and families

- Good prenatal care
- Warm and loving attachments between young children and adults
- Positive stimulation from the time of birth, really do make a difference in children's development for a lifetime.

Human development hinges on the interplay between nature and nurture.

The impact of environmental factors on the young child's brain development is dramatic and specific, not merely influencing the general direction of development, but actually affecting how the intricate circuitry of the human brain is "wired."

How humans develop and learn depends critically and continually on the interplay between an individual's genetic endowment and the nutrition, surroundings, care, stimulation, and teaching that are provided or withheld.

Early care has decisive and long-lasting effects on how people develop and learn, how they cope with stress, and how they regulate their own emotions.

Warm and responsive early care helps babies thrive and plays a vital role in healthy development. A child's capacity to control her own emotional state appears to hinge on...
biological systems shaped by her early experiences and attachments. A strong, secure attachment to a nurturing adult can have a protective biological function, helping a growing child withstand the ordinary stress of daily life.

The human brain has a remarkable capacity to change, but timing is crucial.

The brain itself can be altered—or helped to compensate for problems—with appropriately timed, intensive intervention. In the first decade of life, the brain's ability to change and compensate is especially remarkable.

There are optimal periods of opportunity -- "prime times" during which the brain is particularly efficient at specific types of learning.

The brain's plasticity also means that there are times when negative experiences or the absence of appropriate stimulation are more likely to have serious and sustained effects.

Early exposure to nicotine, alcohol, and drugs may have even more harmful and long lasting effects on young children than was previously suspected.

These risk factors frequently are associated with or exacerbated by poverty. For children growing up in poverty, economic deprivation affects their nutrition, access to medical care, the safety and predictability of their physical environment, the level of family stress, and the quality and continuity of their day-to-day care.

Evidence amassed by neuroscientists and child development experts over the last decade point to the wisdom and efficacy of prevention and early intervention.

Well-designed programs created to promote healthy cognitive, emotional, and social development can improve the prospects - and the quality of life - of many children.

The efficacy of early intervention has been demonstrated and replicated in diverse communities across the nation.

Helpful Websites:


Zero to Three: www.zerotothree.org