

BRIEF RESPONSE QUESTIONS / Chapter 4

Question 1:

The textbook describes the developmental processes that occur during infancy. Based on the discussion about critical and sensitive periods that occurred in Chapter 1, do you think infancy is a sensitive period? Explain, using research evidence.

The developmental process of motor skills happens in the first two years, where things like walking happen. In chapter one, Berk states(2013), the critical period is a “limited time during which the child is biologically prepared to acquire certain adaptive behaviors”, whereas the sensitive period is a “time that is only optimal for certain capacities to emerge because the individual is especially responsive to environment influences.” (pg. 23-24) After learning about the periods, I think that infancy is a sensitive period for simple reasons.

The critical period is a time where the learning of new skills is needed to be done at the specific time, whereas the sensitive period, doesn't have these boundaries of when the adaptations need to occur, and so they can develop later. In chapter one there are various points saying that children learn in unique ways, even though it says walking happens at eleven months what happens if they walk at ten or thirteen months?

“Dynamic systems theory shows why motor development cannot be genetically determined. Because it is motivated by exploration and the desire to master new tasks... Rather than being hardwired into the nervous system, behaviors are softly assembled, allowing different paths to the same motor skill.” (Berk, 2013 pg. 149) Humans are not robots, they don't have a switch that turns on at eleven months to start walking. Therefore that is why I think infancy is a sensitive period because it is a beneficial time for development to happen but it doesn't have to.

Question 2:

Provide an example of classical conditioning, of operant conditioning, and of habituation/recovery in young infants. Why is each type of learning useful? Cite differences between operant conditioning and habituation findings on infant memory.

According to Berk (2013), classical conditioning is “the form of learning, a neutral stimulus is paired with a stimulus that leads to a reflexive. Once the baby’s nervous system makes the connection between the two stimuli, the new stimulus produces the behavior itself.” (pg. 140) The example Berk used was when a mother breastfeeds her child and strokes the child’s head, the stimulus is now paired with the reflex of sucking. This type of learning is useful because it can be a method of survival.

Operant conditioning, Berk (2013) states is when “infant acts, or operate, on the environment, and the stimuli that follow their behavior change the probability that the behavior will occur again.” (pg. 141) This can be positive, something that encourages the behavior called a reinforce or negative called a punishment like switching a sour liquid at feeding time causing the reflex of sucking to come to stop.

Lastly, she states habituation “refers to a gradual reduction in the strength of a response due to repetitive stimulation. Once this has occurred, a new stimulus –change in the environment –causes the habituated response to return to a high level, an increase called recovery.” (pg. 142) For example, noticing something different or new in a familiar environment like a new house on your street or a decoration in your house. Therefore the difference between operant conditioning and habituation it makes learning more efficient by focusing on the unfamiliar, what they know least about rather than correcting/encouraging only what they do know.

Word count: 252

Work cited

Laura E. Berk (2013). Ninth edition Child Development.