

Chapter 5: Seeing, Thinking, and Doing in Infancy▪ **Perception**

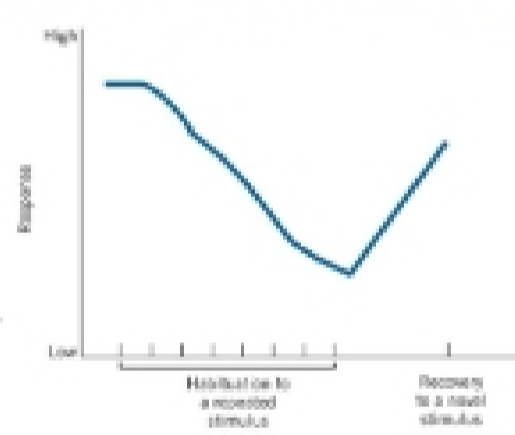
- The process of organizing and interpreting sensory information
 - Vision
 - Auditory Perception
 - Taste
 - Smell
 - Touch
 - Intermodal Perception

Sensation and Perception

- **Sensation**- the processing of basic information from the external world by sensory receptors in the sense organs (eyes, ears, skin) and the brain
- **Perception**- the process of organizing and interpreting sensory info

Studying Visual Perception• **Habituation**

- Repeatedly present infant with one stimulus until response declines
- Then present a novel stimulus
- If the infant's response increases, researchers infer that the baby can discriminate between the old and new stimuli



- **Preferential looking technique** (method for studying visual attention in infants that involves showing infants two patterns or two objects at a time to see if the infants have a preference for one over the other)
 - Infants prefer to look at things that are more interesting

- See difference in how long they look at one thing relative to another
- **Visual Acuity** (sharpness of visual discrimination)
 - Distinguishing high contrast aspects of an image
- **Vision**
 - High contrasts
 - Infants have poor contrast sensitivity (ability to detect differences in light and dark area in a visual pattern)
 - Black/white patterns are easiest to see
 - Newborns also prefer to look at patterns
 - Prefer a “normal face” image and a “scrambled face” over a “no face” image
 - Gave the real face most attention
 - Experience matters
- **Other Developments in vision**
 - Objects segregation
 - Pattern perception
 - Perceptual constancy
 - Depth perception
 - Pictorial representations

10/8/2013

Auditory Perception

- Well developed at birth
 - Approaches adult levels between 5 and 8 years

- Can do auditory localization (perception of the location in space of a sound source)
- Can perceive subtle differences in human speech
- Music perception
 - Sensitive to melody but not pitch shift

Taste

- Discriminate between sweet, bitter, and salty tastes
- Prefer sweet
- Taste-buds become more localized with experience

Smell

- Infants are very sensitive to odors
- Can discriminate familiar odors with experience

Intermodal Perception (the combining of information from two or more sensory systems)

- Present from very early in life
- Very young infants link sight and sound, oral and visual experience, and visual and tactile experience

Sensation/Perception Review

- Newborns are biologically prepared for sensory stimulation but the actual experiences infants have shape the development and refinement of those systems

Motor Development

- Reflexes
- Motor Milestones
- Learning from experience
- **Reflexes** (Innate, fixed patterns of action that occur in response to particular stimulation)