Infant Learning

- Habituation
- Perceptual Learning
- Visual Expectancy
- Classical Conditioning
- Instrumental Conditioning
- Observational Learning

Habituation

- A decrease in response to repeated stimulation, revealing that learning has occurred.
- Habituation is the simplest form of learning and the one first seen in infants.
- Infants who habituate more rapidly, have short looking time, and have a greater preference for novelty, have higher IQ’s later.
Perceptual Learning

- Learning regularities in the world from the objects and events they perceive.
- **Differentiation**-the ability to extract invariant elements from the constantly changing environment
- **Affordances**- the possibilities for action offered by objects and situations.

Infant Learning

- **Visual expectancy**- Infant’s ability to form expectancies for the future based on past experience.
Classical Conditioning

• An unconditioned stimulus (UCS), say, a nipple inserted into the mouth, elicits a reflexive unlearned response (unconditioned response, UR), sucking.
• The infant can become conditioned to the nipple (now a conditioned stimulus, CS) so that sucking occurs as soon as the baby sees a nipple (now a conditioned response, CR).

Little Albert

• Little Albert was conditioned to be afraid of white rats.

  – Loud noise (UCS) = fear (UCR)
  – Loud noise (UCR) + white rat (CS) = fear
  – White rat (CS) = fear (CR)
Instrumental (Operant) Conditioning

• Learning is based on the relationship between one’s own behavior and reward or punishment.
• **Positive reinforcement** - a reward that follows a behavior and increases the likelihood that the behavior will be repeated.

Observational Learning

• The infant learns by observing others.
• Observational learning seems to be present early in life. At birth?
• By 6 months, infant imitation is indisputable.
• By 18 months, infants can imitate **intended** actions, rather than observed actions.
Observational Learning

- Infants will imitate intention of adults (a) but not intention of machines (b).

(a)

(b)