Ch 9: Punishment cont.

Effects of Non-contingent Punishment

- Learned helplessness
- Masserman’s experimental neurosis
• Learned helplessness
  –

  – Seligman, Maier & Overmier (1967)
    • Two groups of dogs
    • Group 1:
    • Group 2:
      – Dogs placed in harness (escape/avoidance not possible) and delivered 64 strong shocks
    • All dogs placed in a shuttle-box with barrier in centre
    • 10-s warning light - followed by 50-s electric foot-shock
    • Dogs could avoid (jump when light appears) or escape (jump when shock starts) the foot-shock

  – Results
  •
    • Pre-training group –
      – Laid down on bottom of cage & whimpered until shock terminated (they just ‘gave-up’)
      – No sign of learning over subsequent trials
      – On rare trials they did avoid/escape shock
      – But…on subsequent trials avoid/escape behavior not repeated (naïve group had rapid learning)

  – Interpretation
  •
    • When placed in shuttle-box made no effort to escape
Learned Helplessness cont.

• Similar results in human Ps
  – Dweck & Repucci (1973)
    • Two teachers gave 5\textsuperscript{th}-graders math problems
    • Teacher 1 always gave solvable problems
    • Teacher 2 always gave insolvable problems
    • Test: Teacher 2 gives students solvable problems
    • Results
      –

• Links to depression
  – Individuals who experience sequence of uncontrollable, aversive events (e.g., divorce, job loss)

• Eliminating learned helplessness through \textit{forcing} organism to escape aversive stimulus
  – Drag dog over barrier
  – Encourage depressed person to perform a graded series of tasks (e.g., go out to bar; meet other people; dating)

• Preventing learned helplessness
  –
Effects of Non-contingent punishment

• Experimental neurosis
  – Experimentally induced neurotic-like symptoms

  – Experimental neurosis vs. learned helplessness
    • Learned helplessness –
    • Experimental neurosis –
    • Both consist of uncontrollable events, so considerable overlap in symptoms

• Masseeaman (1943)
  – Employed unpredictable aversive stimuli (rather than appetitive stimuli)
  – Cats receive electric shock or air blasts while eating

• Cats developed

• PTSD more likely to develop if person
Chapter 9 - Summary

- Negative reinforcement is important in development of escape and avoidance behaviors
- Mower’s two-factor theory proposes that fear results from classical conditioning and avoidance of the CS is negatively reinforced by a reduction in fear
- Anxiety conservation hypothesis argues that avoidance is so quick, there is little chance for the response to extinguish
- Stampfl demonstrated phobic-like avoidance in rats was similar to phobic responses in humans
- Avoidance conditioning play a role in OCD
- Positive punishment involves presentation of an aversive stimulus
- Negative punishment involves the removal of a desired stimulus (e.g., response cost; timeout)

Chapter 9 - Summary cont.

- Problems with the use of punishment include avoidance of person administering punishment, suppression of behavior, and emotional responses including aggression
- Punishment is most effective when delivered immediately, consistently, and of sufficient intensity
- Conditioned suppression theory suggests that an emotional response suppresses behavior
- Avoidance theory suggests that any response other than that being punished is strengthened
- Premack views punishment as the opposite of reinforcement
- Learned helplessness is a decrement in learning following exposure to aversive inescapable stimuli
- Experimental neurosis studies produce symptoms similar to PTSD