I. Ingestive behaviors:
1.) Bulimia Nervosa
   a.) Recurrent episodes of binge eating (2 per week for at least 3 month)
      ● Feeling of lack of control over eating during binges
      ● Regular use of either: self-induced vomiting, laxative, diuretics, strict
        dieting/fasting or vigorous exercise.
      ● Persistent concern with body shape and weight.
   b.) No correlation with net nutrient intake.
   c.) Possible mechanisms: neurochemical. Deficiency in satiety mechanisms
      (CCK) Imbalance of 5HT and NE.
   d.) Treatments: Cognitive behavior therapy, and manipulation of 5HT levels.

II. Memory Tests:
1.) Remember as many words as you can as they are read from a list. Write them
    down. Reveals evidence of semantic net.
    ● Semantic net: brain creates a web of all possible words that could be
      connected to other words. Basis of false memories!

III. Types of Memory:
1.) Short-Term Memory
   a.) Limited; (7+ -2)
      ● Object dependent- numbers remembered different than words.
      ● State dependent- remember less if stressed.
      ● Short-lived.
   b.) Immediate forms of memory. Not all memory items are necessarily useful.

2.) Working Memory
   a.) Memory for immediate use.

3.) Long-Term Memory
   a.) Declarative (explicit) ‘remembering’
      ● Semantic (facts)
      ● Episodic (when, order of events)
   b.) Non-Declarative (implicit) ‘knowing’
IV. The Memory Process:

1.) Learning
   a.) Perceptual (sensory) learning, modality specific
   b.) Stimulus-response learning:
      ● Classical condition
   c.) Relational learning
   d.) Meta-learning

2.) Perceptual Learning
   a.) Identify and categorize objects using perception
   b.) Learning about objects. No associations with actions
   c.) Example; vision: inferior temporal cortex: faces and objects
   d.) Areas involved in perception are also involved in (perceptual) memory

V. Classical Conditioning of a Reflex:
1.) The Hebb Learning Rule
   a.) If presynaptic and postsynaptic sites are active at the same time, the synapse is strengthened
      ● Basis of Pavlovian conditioning
VI. Classical Conditioning:
1.) Association between two stimuli
   a.) classical conditioning is not just about food
      ● Different kinds of classical conditioning involve different kinds of brain areas
         ○ Classical fear conditioning
   b.) After conditioning, memory can be unconditioned: extinction
      ● Repeated presentations of the conditioned stimulus alone leads to extinction
         ○ PTSD: deficit in extinction?

VII. Instrumental Conditioning:
1.) Learning an association between an action and its consequence
   a.) How we learn from doing
      ● Need a reinforcing or punishing stimulus
         ○ Example in rat: lever pressing

(V Carlson, 300)

b.) Association between a response and stimulus
   ● Instrumental conditioning: Animal has to PERFORM an action

VIII. Basal Ganglia:
1.) Basal Ganglia: Automatic behaviors
   a.) Transcortical: instruction learning
      ● Behaviors initially use the transcortical pathway, then later use the basal ganglia pathway.
   b.) Parkinson’s Disease: Basal ganglia deficit → problem with implicit memory.

Works Cited