

## **Lecture Guide Chapter 5:**

### **Learning What is Learning?**

- Change in behavior due to experience or practice
- Ability to profit from experience
- (V.S. Maturations) change in genetics
- Assumptions- brain physically changed to record what is learned

### **Three kinds of learning:**

#### **Classical Conditioning:**

- Think automatic reflective, involuntary
- Associate stimuli that occur together

#### **Operant Conditioning:**

- Think voluntary
- Associate behavior with consequences (reward/punish)

#### **Observational Learning:**

- Learn by watching
- Work with classical and operant

### **Things to Know About Classical Conditioning Ivan Pavlov –**

- Ivan Pavlov:
  - Russian physiologist
  - Discovered classical conditioning

#### **Classical conditioning -**

- Learn to make a reflex response to a stimulus other than the original, natural stimulus that produces the reflex.

Unconditioned means "Unlearned" " naturally occurring" " automatic".

Unconditioned stimulus (UCS) –

- Thing that leads to involuntary response naturally ( puff of air to the eye makes you blink)

Unconditioned response (UCR) -

- Involuntary (automatic) response to the UCS.

Conditioned means "learned"

- Conditioned stimulus (CS) –
  - Stimulus (once neutral) that triggers reflex after paired with UCS ( Bell)
- Conditioned response (CR) –
  - learned response to a CS
  - CR vs UCR
- CHEAT SHEET
  - UCS-Natural trigger (automatic cause)
  - CS- Learned trigger (used to be neutral)
  - UCR- Natural (automatic) effect (emotions or bio)
  - CR- learned effect.

UCS(thunder)(car crash) (kiss) ---> UCR( startle)(racing heart)(racing heart)

CS(lightning) ---> UCS (thunder) ----> UCR (startle/ brace)

CS (squeaking brakes) ----> CR (racing heart)

How it works: (TRICK)

1.Find the UR (bio or emotions happened automatic)

2.Now Know CR (same as UR)

3.Next find UCS( what causes UR automatically)

4.Now Find CS ( what is used to be neutral , what has to be

rained before get response)

### Classical Conditioning Principles:

1. CS must come before UCS
2. CS and UCS Must come very close together (within seconds)
3. CS (NS) and UCS must be paired several imps (some exceptions)
4. CS Distinctive (stands out) from competing stimuli.

### Additional Vocabulary

- Stimulus generalization
  - when Stimuli similar to CS elicit the CR
  - **GREATER SIMILARITY** stronger too CR
- Extinction
  - Disappearance of learned response
  - Follows: removal of the US in CC ( or removal of a reinforcer in OC)
- Spontaneous recovery
  - Reappearance of learned response after extinctions.

### Conditioned Emotional Response

- Conditioned emotional response (CER) –
  - Feelings triggered by stimulus connected to past experience
  - Ex. Fear of dogs, reaction to songs, smells, etc.
- CERs may lead to phobias-irrational fear response

### Taste Aversion

Conditioned taste aversion –a negative biological response ( like nausea) to a particular taste )after just one pairing)

Biological preparedness – Tendency to

learn certain associations quickly due to potential survival value.