



Classical Conditioning Paradigm Also Called Pavlovian Conditioning

Psychology 390
Psychology of Learning
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Observers of CC before Pavlov

- Whytt (1763)
 - Was a Scott
 - Noted that the sight or even the recalled idea of food causes an uncommon flow of spittle into the mouth of a hungry person.
- Bernard (1872)
 - Noted salivation in horses rather than dogs.

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Pavlov

- Was a Russian Physiologist.
- Before working on CC he already had won a Nobel prize for his work on digestion.
- Primarily worked with dogs.
- Would surgically make a hole in the dog's stomach and monitor digestive fluids.

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Design

- Put food in the dog's mouth and monitor the amount of salivation and digestive juices.
- Ran into a problem.
- Dogs began to salivate when it saw Pavlov and before food was placed in the mouth.
- Had to figure out what was going on before going back to work on digestion.

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Results

- It you take an arbitrary stimulus (one that does not evoke an innate or automatic response).
 - A BELL
- AND
- Pair it with a non-arbitrary stimulus, (one that causes an automatic response).
 - FOOD
- The pairing will evoke a response to the arbitrary stimulus (Bell) that the organism has not made before

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Pavlov gave the Arbitrary and Non-Arbitrary Stimuli Names.

- Called the arbitrary stimulus (Bell) the Conditioned Stimulus.
- Called the non-arbitrary stimulus (Food) the Unconditioned Stimulus.

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Example

- UCS → UCR
Food → Salivation
- CS UCS → UCR
Bell Food → Salivation
- CS → CR
Bell → Salivation

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Other Examples of CC

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Other Examples of CC

- Air puff → Blink
- Tone Air puff → Blink
- Tone → Blink

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Other Examples of CC

- Spanking → Pain
- Parent Spanking → Pain
- Parent → Pain

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Other Examples of CC

- Emetine → Nausea/Vomiting
- Alcohol Emetine → N/V
- Alcohol → Nausea/Vomiting

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Bechterev (1857-1927)

- Developed a method motor conditioning where the CR was muscular rather than glandular.
- Became more popular because you did not have to do surgery.

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Bechterev (1857-1927)

- Like others, argued that mentalistic interpretations of psychological events were not necessary.
- Argued that high level psychological processes such as thinking consisted of lower level sensory-motor reflexes.
- Had less influence than Pavlov but advocated many principles later proposed by the behaviorists.

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General Points to Note About CC

- 1. CS must precede the UCS

When UCS precedes the CS is called backward conditioning – doesn't work well.

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2. CR Does Not Equal the UCR

- Pavlov found the CR was not always the same as UCR.

Dogs salivate but the content is different.

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3. Is General Across Organisms.

- Occurs in:
Dogs, rats, human fetuses, neurons

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4. Can Appear in Many Environments.

- Classrooms
- Restaurants
- Woods

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Is a S - S paradigm

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