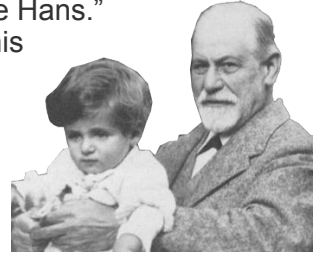


CLASSICAL CONDITIONING: Phobias

In 1909, Sigmund Freud published a case study about a four-year-old boy known as, "Little Hans." Hans was deathly afraid of horses. Hans was so afraid of horses that he would not leave his family's house. Herbert's father described the boy's problems in a letter he sent to Freud:

during the last few days [Little Hans] has developed a nervous disorder, which has made my wife and me most uneasy, because we have not been able to find any means of dissipating it. ... He is afraid that a horse will bite him in the street." (Spitzer, 1994).



According to his parents, Hans' fear first began while walking down a city street with his mother. He saw a large horse fall down and kick violently. Hans developed a **phobia**, which is persistent fear of an object or situation, one that is so severe that it causes significant difficulties in daily functioning. Typically the fear is disproportional to the actual danger posed. For example, a man who refuses to go into basements because there are spiders down there, might be suffering from a phobia unless there was actually large numbers of highly poisonous spiders in the basement. Hans fear seemed irrational and it definitely interfered with his daily functioning: he refused to leave the house.

Freud blamed Hans' phobia on the unconscious, however the laws of classical conditioning could explain Hans' fear as well.

1. In your own words, define a phobia.

2. List three examples of phobias that you know about?

How can the development of Hans' horse phobia be explained by classical conditioning? Label the following:

3. unconditioned stimulus(UCS) _____
4. conditioned stimulus(CS) _____
5. unconditioned response(UCR) _____
6. conditioned response(CR) _____

According to the principles of classical conditioning, one can develop a phobia by just watching someone else with a phobia react fearfully of a stimulus. For example, Margot's mother has arachnophobia; she is horribly afraid of spiders. When Margot was a little girl, she used to observe her mother scream and run every time she saw a spider. Now as an adult, Margot herself is horribly afraid of spiders. Using the rules of classical conditioning, label the following:

7. unconditioned stimulus(UCS) _____
8. conditioned stimulus(CS) _____
9. unconditioned response(UCR) _____
10. conditioned response(CR) _____

Stimulus generalization is the transfer of a response from a *conditioned stimulus* to similar stimulus. Pavlov's dog was conditioned to salivate at the sight of a circle, but because of stimulus generalization, the dog salivated at the sight of an oval.

11. What else would elicit a fearful response from Margot because of stimulus generalization? _____

CLASSICAL CONDITIONING: Practice

12. Imagine and write a scenario or example of how someone has formed a phobia?

Extinction When the CS occurs repeatedly without the CR, the association between the CS and UCS weakens, the CR gradually disappears.

EXAMPLE: After Pavlov had conditioned his dog to salivate at the sound of a bell, he found that with repeated ringing of the bell without meat, the salivation stopped. The CR has been extinguished.

13. Imagine and write a scenario or example where learning has become extinct. _____

Reconditioning When a CR that has been extinguished can be reconditioned by presenting further reinforced trials. Reconditioning usually requires fewer trials than the original conditioning.

EXAMPLE: After Pavlov extinguished his dog's behavior of salivating at the sound of a bell. It took just two pairings with the CS (bell) to reignite the CR (salivation).

14. Imagine and write a scenario or example where reconditioning takes place (It can be a continuation from your answer before)

Spontaneous Recovery Following extinction, the CR (salivation) reappears at reduced strength if the CS (bell) is presented again after a rest period. The response however, is not as strong.

EXAMPLE: After the response of salivating at the sound of the bell had been extinguished in Pavlov's dogs, a day or two passed during which the dogs did not hear the bell at all. After this rest period, the bell was rung again. Even though the salivation response had earlier been extinguished, it was now back.

15. Imagine and write a scenario or example where spontaneous recovery takes place. (It can be a continuation from your answers before) _____
