One-Trial Learning & Taste Aversion

• A taste aversion is a conditioned response that results from a person or animal establishing an association between a particular food and being or feeling ill after having consumed it at some time in the past.

• The association is usually the result of a single experience, and the particular food will be avoided in the future.

• One trial learning is like classical conditioning but is not classical conditioning nor a type of classical conditioning.
Taste Aversion & One Trial Learning

- A classically conditioned response - acquired after a number of associations
- A conditioned response (taste aversion) occurring through one-trial learning - acquired extremely quickly.
- Importantly, in classical conditioning, the CS and the UCS occur closest together.
- In one-trial learning however, the CR (the feeling of illness) that becomes mentally associated with food could occur as much as a day or so after the food (CS) was consumed.
- Generalization is rare in one-trial learning, and it is more resistant to extinction.
Example of taste aversion with a positive outcome
J. B. Watson believed in “nurture” and accepted the proclamation of John Locke “which presented the mind as a blank slate upon which experience writes its message” In what many have said was his most widely quoted and longest sentence, Watson stated:

**Give me a dozen healthy infants well-formed, and my own specified world to bring them up in and I'll guarantee to take any one at random and train him to become any type of specialist I might select—doctor, lawyer, artist, merchant-chief and yes, even beggar-man and thief, regardless of his talents, penchants, tendencies, abilities, vocations, and race of his ancestors (Watson, 1930, p. 104, as cited in LeFrancois, 2000).**
Who was “Little Albert”?

“Albert B.” was the subject of John B. Watson’s famous study in which Watson wanted to show how fears could be conditioned.

Instead of having to refer to unconscious forces to explain fears (i.e., psychoanalysis), Watson wanted to show that fears and phobias could be explained much more simply by applying the conditioning principles established by Pavlov to humans. Psychology should measure what is observable and measurable. - behaviorist principle.

“...remains one of the most frequently cited articles in textbook psychology.” - Beck, Levinson, and Irons (2009)
Watson and Little Albert

Learning = Behavior + Consequences
Classical Conditioning in Humans

• Little Albert
  – John Watson and Rosalie Raynor (1920)

White Rat ➔ Frightening, loud noise ➔ Fear

– After many pairings:

White Rat ➔ Fear
Douglas is buried in Locust Grove Cemetery, in Mt. Airy, MD.

Q7: Whatever Became of Douglas Merritte?
Watson’s Contributions

- One of the First American Psychologist to apply Pavlov’s work to humans (emotions)

- Brought the study of behavior (Psych) into a more “scientific” and observable discipline

- Little Albert in every Psych Textbook

- Convinced other Psychologist that there was an alternative to Freudian Psychoanalysis

- Neurotic symptoms (Phobias could be controlled via CC)...Major applied significance
Applications of Classical Conditioning

Watson used classical conditioning procedures to develop advertising campaigns for a number of organizations, including Maxwell House, making the “coffee break” an American custom.

John B. Watson
Explain the message this cartoon is trying to convey. Be sure to include the following in your answer:

1. Who Pavlov was and what theory/concept he is known for.
2. The explicit and implied meaning of the cartoon.
3. Why it would be considered humorous by people who are familiar with Pavlov.

I DON'T ALWAYS SCARE BABIES

BUT, WHEN I DO IT'S FOR PSYCHOLOGY
Operant Conditioning

The Learner is NOT passive. Learning based on consequence!!

A type of learning in which behavior is strengthened if followed by a reinforcer or diminished if followed by a punisher.
1. Classical conditioning forms associations between stimuli (CS and US). Operant conditioning, on the other hand, forms an association between behaviors and the resulting events.
Classical v. Operant

- They both use acquisition, discrimination, SR, generalization and extinction.
- Classical Conditioning is automatic (respondent behavior). Dogs automatically salivate over meat, then bell- no thinking involved.
- Operant Conditioning involves behavior where one can influence their environment with behaviors which have consequences (operant behavior).
Is the organism learning associations between events that it doesn’t control?

**Classical Conditioning**

Is the organism learning associations between its behavior and resulting events?

**Operant Conditioning**
The Law of Effect

• Edward Thorndike
• Locked cats in a cage
• Behavior changes because of its consequences.
• Rewards strengthen behavior.
• If consequences are unpleasant, the Stimulus-Reward connection will weaken.
• Called the whole process instrumental learning.

Learning = Behavior + Consequences
Thorndike - The Law of Effect