

DISCUSSION

A number of topics that relate to classical conditioning can be tied to the demonstration:

1. Acquisition is demonstrated. At first, the word *can* by itself causes no special response. After repeated pairings of the word and the water, the word by itself gradually becomes more likely to cause a CR.
2. The unconditioned stimulus (UCS) is the water squirted at the volunteer's face.
3. An unconditioned response (UCR) is usually a flinch, squint, or distinct facial expression. Often there are multiple UCRs.
4. The conditioned stimulus (CS) is the sound of the word *can*.
5. A CR is a flinch, squint, or facial expression emitted when a word is read without an accompanying squirt.
6. Stimulus generalization occurs when words that sound like *can* (e.g., *ban*, *ran*, *cap*, *cast*) lead to a CR.
7. Stimulus discrimination occurs when different stimulus words produce differences in the CRs. In the demonstration, CRs are strongest and most likely to occur after the word *can*. They are weakest and least likely to occur after stimulus words that do not sound at all like *can* (e.g., *dish*, *board*, *smoke*).
8. Extinction occurs when the CRs disappear or become less pronounced when the word *can* is uttered several times unaccompanied by a squirt.
9. Spontaneous recovery occurs if the word *can* again causes a CR after extinction and a long string of words where *can* is not included. Such a string occurs near the end of the demonstration.
10. Reconditioning savings is demonstrated at the end of the list where the word *can* and a squirt are again paired. At this point, fewer trials are needed to achieve strong, reliable CRs compared to the original acquisition at the beginning of the list.

This demonstration serves several useful purposes. First, it provides vivid and concrete instances of many classical conditioning phenomena. When confronted with new material relevant to classical conditioning, students can draw from their memory of the specifics of this demonstration to again piece together the components of classical conditioning. Having such vivid and concrete examples of