Operant Conditioning vs. Classical Conditioning

When my son was in the second grade he was constantly being disruptive and bringing home "bad" notes from his teacher. In order to change his behavior, I offered to buy him a WWF wrestling figure for every five days in a row that he did not bring home a bad note from school. These toys were plastic and each had a signature action move. After my son's first five days in a row without a bad note, he picked out Hulk Hogan. Five more perfect days awarded him the "Big Bossman" who wore sunglasses and used his night stick to perform a "Hard Time Slam." Soon followed Jake "The Snake" Roberts, with a snake around his neck doling out the famous "Python Punch," and last, but definitely not least was Andre the Giant.

My son then begged me for a blue wrestling ring with black turnbuckles. He explained that if his wrestling men were going to fight each other they had to have a wrestling ring. We agreed when he had 10 consecutive good days, I would buy the ring for him. He performed his part of the deal and soon had a ring for this WWF figures. For six weeks my son did not bring home a single bad note, and I knew I had completely and permanently changed my son's behavior for the better. I just knew that **B. F. Skinner** was so proud of me, because I had demonstrated a classic example of his **Operant Conditioning**. Just like the seal that will hold a ball on his nose to get a fish, my son would act appropriately in his 2nd grade classroom five days in a row to receive a WWF wrestling figure. His **response** was to act well. The **consequence** was to receive an action figure which strengthened his behavior in such a way that he continued to be good to get more action figures.

My daughter's dog, Miko, loves doggie treats. When Jenny first started giving them to her, the sight and smell of the doggie treat made Miko twirl around enthusiastically and quickly gobble down the treat. Then Jenny bought some treats that came in a bag that made a rustling sound. Miko soon came running and twirling enthusiastically every time she heard the rustle of a bag, any bag, expecting a treat. This represents what we call **Ivan Pavlov's Classical Conditioning**. The **Unconditioned Stimulus** or **US** was the sight and smell of the doggie treats which made Miko make an **Unconditioned Response** or **UR** of twirling enthusiastically. The rustling of the bag soon became the **Conditioned Stimulus** or **CS**, which alone, with no treats, brought about the **Conditioned Response** or **CR** of twirling enthusiastically.

Operant Conditioning is a form of learning that brings about **voluntary** responses that are controlled by consequences. My son chose to be good to receive the consequences of his behavior. **Classical Conditioning** is a form of learning that is **reflexive**, elicited, and brought under the control of **stimulus** events. If Miko is hiding from my daughter, all my daughter has to do is rustle a bag and Miko runs to Jenny twirling enthusiastically expecting a treat.

With my son I used **Positive Reinforcement**, but **Negative Reinforcement** can also be used to change behavior. For example, in many of the classes I teach I allow students who have not missed a single day of class to skip the comprehensive final. The students view taking the final as negative so they will come to every class meeting to avoid that negative consequence of taking the final. Since I implemented that policy, the percentage of students in my classes who have perfect attendance has drastically risen.

Punishment is anything that **reduces** the probability of the response that it follows. A **reinforcer** is anything that **increases** the probability of the response that it follows.

Now let's see how well you can distinguish between **Operant** and **Classical Conditioning**. I will give you a scenario, and you try to figure out which one it is.

Example 1

When my brother is in the room with his dog, she never gets on the furniture.

Answer: Operant Conditioning – Since he probably punishes his dog when she gets on the furniture, she has learned to know the difference between when my brother is around and when he's not. When he's around she doesn't get on the furniture, but she probably gets on the furniture when she thinks my brother is gone.

Example 2

If you're taking a shower and someone in your apartment building flushes the toilet, a few seconds later the water in the shower gets very hot and burns you. This hot water makes you jump back. After a few times of getting burned, you will start to jump back from the water as soon as you hear a toilet flush.

Answer: Classical Conditioning – The hot water is the US, the jumping back is the UR. The toilet flush is the CS, and the jumping back to the flush alone is the CR.

Example 3

There is a horrible beeping sound when you crank your new car without having your seatbelt fastened. After a few weeks, you make sure you fasten the seatbelt before you crank the car to avoid hearing the horrible sound.

Answer: Operant Conditioning – Fastening the seatbelt is voluntary.

Example 4

A boy named Albert participates in an experiment where every time he sees a white rat, there is a loud and startling sound. After a few days, Albert is startled by any white rat he sees.

Answer: Classical Conditioning – The startle response is an automatic behavior. The loud noise is the US. The startle is the UR. The white rat is the CS, and the startle response to a white rat is the CR. Other Classical Conditioning examples would be having sweaty palms when you hear the dentist's drill from another room and the sound of a can opener making your cat run into the kitchen expecting to be fed.

I leave you with a question – how effective do you think Skinner's Operant Conditioning is in permanently changing behavior? The reason I ask this is because the next day after I bought my son his wrestling ring for his wrestling figures to wrestle in, he brought home a bad note. For the rest of his 2nd grade school year, he was more disruptive than he had been before I gave him all that positive reinforcement. I asked him why he had started being disruptive again and he said, "Momma, Don't you understand? I don't want NO MORE wrestling men."

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