PSYCH 101 CHAPTER 4 SENSORY ADAPTATION

Sensory adaptation is the idea that we notice a stimulus the most upon our initial encounter with it. After our first encounter with a stimulus, we progressively notice it less and less. This process occurs in the sense receptors and applies to all senses. This is a very useful adaptation because if we maintained a heighten state of awareness for everything in contact with us physically, our senses would become incredibly overwhelmed. By progressively weakening our responses, we are saving energy to put our attention elsewhere. For instance, wearing clothes, something we do daily without thinking about, would be extremely annoying without sensory adaptation. We would be overly aware of almost every part of our body; depending on what outfit we are wearing, of course. For sound, when we enter a crowded space with lots of people, we may feel initially overwhelmed. Eventually, however, we are able to put aside all of the noise and focus our attention on only what is necessary or of significance. Smell works similarly to sound. For example, if you walked into a food court you may be overwhelmed by the scent of various foods. Soon after, though, the aromas become increasingly unnoticeable to the point where the smells are no longer the center of your focus.

This bodily process also has the potential to influence how we experience pain. Sometimes when I wear new shoes, before I break them in, they blister my feet. The blisters and rubbing on my heels are painful at first, but eventually I cannot feel the wound anymore, or as much as before and I can walk without feeling the need to limp. In this case, sensory adaptation prevents me from feeling the initially unpleasant rubbing pain from new shoes. In simpler words, the wound eventually becomes a sort of “background” pain and I am able to focus elsewhere.

PSYCH 101 CHAPTER 3 REFLEX

When we sense a stimulus, we may respond with an automatic, involuntary reaction; this is known as a reflex. Reflex responses are automatic because while “performing” a reflexive action, the information in regards to the stimulus does not actually have to reach the brain - in other words, we do not have to think about our response; we do it automatically. When the skin senses a sensory stimulus, sensory neurons carry the impulse up to the spinal cord where an interneuron intervenes and sends back a physical response via motor neurons. This explains the sensation of reacting before getting a chance to think.

A common reflex phenomenon is when your doctor taps you on the knee (in a specific place) with a small hammer. The tapping sensation on your knee results in skin receptors sending sensory neurons up the spinal cord. From here, interneurons intercept and send motor neurons back down to the knee. As a result, if done correctly, your knee will give a jerky kick forward, without your consent.

Reflexes are an important evolutionary adaptation. They aid us when it comes to making split-second decisions. When danger occurs, more often than not, we do not have time to consider what an appropriate response would be. For example, when a friend jokingly claps in front of your face to make you blink, you blink to prevent damage to your eyes. Despite the clap not being actually dangerous, your response is the same kind of reflex because you would not have time to think about a response.

PSYCH 102 CHAPTER 11 DRIVE REDUCTION THEORY

The drive reduction theory is just one of the many theories that attempts to explain motivation, or the psychological drives that encourage us to pursue particular routes. The drive reduction theory suggests that specific urges or desires motivate us to take action in order to reduce the discomfort we experience from those drives. When we fulfill these impulses, we experience pleasure as a result. Homeostasis, the body's ability to self regulate internal processes, is a key concept within this theory that supports the idea that drive reduction theory is evolutionary and aids us in our survival and reproduction.

An example we can all relate to at one point or another is thirst. Being thirsty is often incredibly uncomfortable; we can feel it physically, but also mentally because usually we cannot stop thinking about quenching our thirsts. We tend to not purposefully forget to drink water, so in the cases where we forget, it is the drive reduction theory’s job to remind us that we risk dehydration. The craving for water is obviously adaptive and very useful because we need water to survive. This drive also demonstrates the process of homeostasis because usually this urge is a signal from our body crying out that we are dehydrated.