Learned Helplessness

What can dogs teach us about mental health? Quite a lot, actually. Consider that it was research conducted with dogs that led to an understanding of learned helplessness, an important concept in understanding clinical depression and its treatment.

Psychologist Martin Seligman and colleagues were using dogs to study negative reinforcement. Before we go further, note that negative reinforcement is different from punishment (though new psychology students often confuse the two). Negative reinforcement is when a response is strengthened by the removal of something unpleasant. Have you ever stopped your alarm clock by hitting the snooze button? If so, your tendency to do this has occurred through negative reinforcement; hitting “snooze” takes away the unpleasant alarm, at least for a while.

Dogs don’t use alarm clocks, of course, so Seligman and colleagues constructed a canine equivalent, called a shuttle box. Picture a box with two dog-sized rooms separated by a wall that the dog can jump over. The floor of the shuttle box is wired to deliver an irritating electric shock that can either be linked to the dog’s behavior – say, to stop temporarily when the dog jumps the wall – or turns on and off at random, irrespective of the dog’s behavior. Will a given dog’s behavior vary according to these different conditions?

Yes, it will. In the first condition, most any dog quickly learns that jumping the wall allows it to escape the shock. It learns, in effect, that it can exert at least some control over its environment. Not so in the second condition. Dogs who receive shocks that start and stop at random may jump the wall at first, but when this fails to bring any relief, they soon stop trying to escape the shock at all. They become listless, passive, and do not even respond to rewards, such as a piece of meat, offered by the researchers. Most interesting of all is that, if these dogs are later exposed to the first condition, in which they could now escape the shock if they only tried, they rarely if ever learn that they now do have some control over their environment. This state – the failure to even try – is learned helplessness. The dog’s previous experience has taught it – incorrectly – that there is no use in even trying to improve its situation.

Subsequent research, both in the laboratory and in the real world, has shown that learned helplessness also occurs in humans, and may be an especially important factor to understand in depression. Learned helplessness can lead to clinical depression, and persons in the midst of a depression may not even attempt to help themselves if some previous experience has caused them to believe that what they do won’t make a difference. The upside to this is that anything learned can also be unlearned. In cognitive-behavioral therapy, one of the most consistently effective treatments for clinical depression, a therapist helps a depressed patient to identify and then change overly pessimistic thoughts that interfere with a person’s mental health.

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