What's the dog thinking? Yale tries to find out

By Hartford Courant, adapted by Newsela staff Apr. 02, 2014 4:00 AM



At the Canine Cognition Center at Yale, Porter, a 4-year-old chocolate Labrador mix, is one of the dogs recruited to be studied at the center, Feb. 6, 2014, in New Haven, Conn. Kristi Leimgruber, a grad student in the psychology department, is also Porter's owner.

HARTFORD, Conn.—Porter the dog is trying to figure something out: Why has his owner placed a toy bone under a bucket? The way he acts may tell us something about how humans learn.

That's the hope of Laurie Santos, who runs the Canine Cognition Center at Yale University. She pointed to the 4-year-old chocolate Labrador mix. Porter is growing up in the same kind of setting as human children, Santos said. For that reason, comparing how he learns with the way people learn can tell us a lot about how humans develop.

So much more than monkeys, dogs are tuned into "what we care about and what we know," Santos said. And because of this, "they might have been shaped in a way that's very different from any other animal." They behave much more like a human child than, say, a chimpanzee does.

For all that we ask of dogs—loyalty, companionship, slipper-fetching—rarely have we asked how dogs think. That's now starting to change.

Reacting To Human Signals

The Canine Cognition Center is the latest example of the growing interest in dogs. Santos and other scientists there study the way dogs make decisions. They also look at how dogs react to cues, or signals, from the humans around them. Often these cues are signals humans themselves don't know they're giving.

Santos is a professor of psychology—the study of the human mind. She is well known for her studies of monkey behavior. Monkeys have long been considered good subjects for psychologists because of they are so close to humans.

Santos still studies monkeys, but dogs, she said, offer her something monkeys can't.

Monkeys are "closely related to us," she said. However, they way they live and "the way they're raised is completely different." It would be very helpful, she said, to look at animals that grow up in a human setting.

That is where dogs come in.

Yale's Dog Studies

Dogs, Santos said, have a lot to tell us. For centuries, dogs have had to get along with humans to get food. So they've become in tune with us emotionally.

"They grow up in exactly the same" setting as children, she said. They "rely on some of the same kinds of cues," she added.

"So the question is this," Santos said: Given that dogs live in the same setting as children, what does that tell us about the way they learn and understand?

It also is just plain easier to study dogs than monkeys. Monkeys have to be housed somewhere. At the Canine Cognition Center, however, people bring in their dogs for tests and then bring them home.

Studies typically last 30 to 45 minutes. Owners can watch their dogs take part in the studies. Usually, the dogs play simple problem-solving games.

Santos said they have about 300 dogs signed up. Right now, 40 dogs are taking part in the studies.

Dogs have been studied in the past, but only recently have scientists become curious about how dogs' minds work.

Relating To Humans

"I think recently, that animals—dogs and cats—are seen more as persons in our home," said scientist Erica Feuerbacher. And only now are we beginning to recognize something about dogs: They are remarkably good at adjusting to human lifestyles.

That's not by accident, said Brian Hare, who studies how dogs have related to humans though history.

Dogs are good at adjusting to our lives because they have been trained by humans over many centuries, he said. "Dogs have been selected not to be smarter in the way we normally think about it; they've been selected to be emotionally smarter. They like humans and they want to be with humans more than they want to be with other dogs. They really see us emotionally as partners."

And, said Hare, learning more about ourselves is not the only reason to study dogs. There are practical reasons as well.

Dogs have "all sorts of jobs in the real world," he said. These include serving as guide dogs and detecting bombs and drugs. Dogs are even used to sniff out diseases like cancer in people.

"They're busy people," Hare said of dogs. "Everything we learn about them helps us identify the best dogs for those jobs."

Quiz

- 1. Why is dog behavior being studied to find out about how humans develop?
 - (a) Dogs are loyal to humans.
 - (b) Dogs make decisions like humans.
 - (c) Dogs grow up in a similar environment as humans.
 - (d) Dogs are emotionally connected to humans.
- 2. Select the paragraph from the section "Yale's Dog Studies" that shows the advantage of studying dogs for research purposes.
- 3. Which of the following BEST supports the main idea of the article?
 - (a) The Canine Cognition Center is the latest example of the growing interest in dogs.
 - (b) Dogs have been studied in the past, but only recently have scientists become curious about how dogs' minds work.
 - (c) They like humans and they want to be with humans more than they want to be with other dogs.
 - (d) Dogs have "all sorts of jobs in the real world," he said.
- 4. Which of the following qualities of dogs is helpful in research about human development?
 - (a) They are good at adjusting to humans and their lifestyle.
 - (b) They can help humans understand different signals.
 - (c) They can be easily trained to sniff bombs.
 - (d) They are good at problem-solving skills.