## barkEwhiskers

Dog Tips

## When Your Dog Does This, They're Screaming 'Don't Trust This Person'

You might get fooled by a charming date or new boss, but your dog won't. So introduce new people to your dog and watch how they respond. If your dog reacts like this, it may be time to step back - your canine is an expert at spotting liars.

## Analysis by Dr. Karen Shaw Becker

## STORY AT-A-GLANCE

- Dogs can detect untrustworthy people and will learn to stop following their commands
- Dogs are capable of counting up to five, understanding the meaning of symbolic concepts and learning how to operate simple machines
- Most dog owners believed their dogs were socially intelligent and possessed the ability to learn general cognitive skills


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Dogs may appear to love everyone unconditionally, but this applies primarily to those who treat them well in return. If you wrong a dog too many times, your dog will probably lose trust in you and resist responding to your commands.

In other words, dogs are incredibly good judges of character, which probably stems from their keen observation skills and the fact that they've lived closely with humans for more than 10,000 years.

The ability to pick up on a person's emotional cues and level of trustworthiness may mean the difference between life and death for a dog, and this is one area in which they excel.

## Dogs Can Identify Liars

Research published in the journal Animal Cognition revealed dogs learn when a person is not trustworthy and no longer follow their commands. In a study of 24 dogs led by Akiko Takaoka, Ph.D. of Kyoto University in Japan, all dogs initially went to a container that a researcher pointed to, under which a bit of food was hidden. ${ }^{1}$

The researcher next pointed to an empty container after showing the dogs that food was hidden under a different container. Then, in the final phase, the research again pointed the dogs toward the correct container with the hidden food.

However, by this point the dogs were no longer willing to trust him and only $8 \%$ went in the direction he pointed. According to the study:
"These results suggest that not only [are] dogs ... highly skilled at understanding human pointing gestures, but also they make inferences about the reliability of a human who presents cues and consequently modify their behavior flexibly depending on the inference."

## Dogs Learn Who They Can Trust - And Who They Cannot

The researchers next wanted to find out whether the dogs learned to only mistrust this particular researcher or if they applied to mistrust to other people as well.

The first part of the experiment was repeated, but in the final step the untrustworthy research was replaced with someone new, who pointed to a container with an appropriately hidden treat.

In this case, the dogs gave the person the benefit of the doubt and went to the container to which he pointed, showing they had not lost faith in all of humanity - only in the person who lied to them.

Interestingly, research involving human children has shown they typically don't learn this level of discrimination (learning to accept information from a trustworthy person and not from an unreliable person) until around the age of $5 .{ }^{2}$

Dogs are typically said to have mental abilities similar to a 2 - to 3 -year-old child, but this study suggests a higher degree of mental sophistication.

## Dogs Reject Food From Person Who Snubbed Their Owners

In 2015, research led by Kazuo Fujita, a professor of Comparative Cognition at Kyoto University, showed for the first time that dogs make social and emotional evaluations of people, and act on their judgment independent of their own interests.

For instance, dogs watched as a person either helped their owner open a box, actively refused to help with the task or behaved in a neutral manner. The strangers then offered food to the dog.

The dogs were more likely to choose food being offered by the neutral party and refuse food offered by the uncooperative party. ${ }^{3}$

## Impressive Examples of Dog Intelligence

Dogs appear to process emotional cues and meanings of words in different hemispheres of the brain, similar to humans. Dogs also pay attention to your body language, taking note of your posture and eye contact, for instance.

The average dog also understands about 165 different words, although they may learn more if you take the time to teach them. ${ }^{4}$ So-called "super dogs," which are said to be in the top $20 \%$ of dogs intelligence-wise, may learn $250+$ words. ${ }^{5}$

Intelligence levels of individual dogs varies by breed and other factors. Canine researcher Stanley Coren, Ph.D., of the University of British Columbia, told Science Daily: ${ }^{6}$
"There are three types of dog intelligence: instinctive (what the dog is bred to do), adaptive (how well the dog learns from its environment to solve problems) and working and obedience (the equivalent of 'school learning')."

Coren suggested most dogs' mental abilities are similar to a 2 - to 2.5 -year-old child, however they have shown some impressive capabilities, including: ${ }^{7}$

- Fast-track learning, which was once thought to be found only in humans and apes
- Counting up to four or five
- Basic understanding of arithmetic, including noticing errors in computations such as $1+1=1$
- Understanding the meaning of symbolic concepts
- Deliberately deceiving other dogs or people to get rewards
- Learning how to operate simple machines


## How Smart Is Your Dog?

According to Coren, the seven smartest dog breeds are as follows: ${ }^{8}$

1. Border collie
2. Poodle
3. German shepherd
4. Golden retriever
5. Doberman
6. Shetland sheepdogs
7. Labrador retriever

That being said, how smart your dog really is may depend on how much you work with your dog to develop their cognitive capacity, as well as who you ask. As you might suspect, dog owners consistently believe their own dogs are at the top of the pack. According to a study in the Journal of Veterinary Behavior, most dog owners believed their dogs were socially intelligent and possessed the ability to learn general cognitive skills. ${ }^{9}$

The closer an owner was to their dog, the smarter they believed him to be. Close to half (46\%) also believed their dog's mental ability was equal to that of a 3.5 -year-old human child, and $25 \%$ believed their dogs were smarter than most people - a sentiment that is certainly debatable!

## Sources and References

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Psychology Today February 24,2015
1 Anim Cogn. 2015 Mar;18(2):475-83
2 Child Dev. 2011 Sep; 82(5): 1372-1380
3}\mathrm{ Discovery News June 13, }201
4}\mathrm{ Animal Planet, Can Dogs Understand What We Say?
5,6,7,8 Science Daily August 9,2009
9 Journal of Veterinary Behavior November-December 2013, Volume 8, Issue 6, Pages 418-424
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