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<u>Dog Tips</u>

Why Your Dog Often Acts Like a Human

Intriguing results from the past few years show dogs are very distinct from us genetically. Yet they're more like us than the primates we're often compared to. Even Business Insider is onto this, revealing five great ways to form a bond with your dog that sticks like glue.

Reviewed by <u>Dr. Becker</u>

STORY AT-A-GLANCE

- If you're a dog parent, you probably sense that your pet is quite a bit like you, even though he's covered with fur and pees on trees
- The fact is, the more scientists discover about the brains of domesticated dogs, the more we understand about how similar they are to us
- Scientific discoveries prove that our dogs feel empathy just as we do, and unlike all other non-primates, they make eye contact with us
- Dogs are also the only domesticated animals that interact with their humans in the same way babies interact with their parents. If your dog is anxious or frightened, he'll look to you for help and comfort, just as a small child will run to his parents
- Also, your dogs loves the way you smell, she's able to follow your finger when you point at something and she reacts similar to voices and the emotion in voices similar to the way you do

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If you're like many dog parents, you know in your heart you and your furry BFF are on the same wavelength, even though he's a different species and communicates in his own doggy language.

"What really has happened in the last 10 years is that we've learned more about how dogs think than in the previous 100 years," says Brian Hare, Ph.D., professor of cognitive neuroscience at Duke University and author of the book "The Genius of Dogs." As Hare explains in an interview with Business Insider:

"There have been a lot of big discoveries ... Dogs are very distinctly different from us genetically, but psychologically, they are more like us than some of our more closely related, more genetically related primate relatives."¹

Business Insider lists several discoveries researchers and scientists have made in recent years about our wonderful canine companions.

Five Ways Dogs Are Simpatico with Humans

1. **Dogs feel empathy** — Believe it or not, one of the ways we know dogs feel empathy is because they catch our yawns, which is called "emotional contagion" and is a form of empathy. Studies also show that your dog's brain reacts to voices and sounds like crying or laughter in the same way yours does. Many dogs respond to human crying with submissive body language (tucking their tails, bowing their heads), which is consistent with empathy.

"A lot of people think that domesticated animals, when compared to wilder animals, aren't as smart," says Marc Bekoff, Ph.D., a dog behavior researcher at the University of Colorado in Boulder. "It shows that species adapt to the social niche in which they live. And the social niche for a dog would be its human companions.

I think part of the reason there is this strong bond between dogs and humans is because we are empathetic to them and they show empathy to us. We can never know for sure. But I've done a lot of work on animals' emotions. Animals and humans share a lot of the same neurological structures and the same neurochemistry. I think it's really dog empathy."²

2. **Dogs make eye contact** — Interestingly, dogs are the only non-primate animals who look us in the eyes. Researchers discovered this about a dozen years ago while studying the domestication of wolves. During an experiment in which wolves were raised like dogs, they learned that wolves do not share this trait.

They found that eye contact is a unique behavior dogs only display with humans. It doesn't even occur between dogs and their biological (canine) parents. That's why it's so incredibly important for dogs to bond with their humans.

3. **Dogs love our personal scent and consider us part of their family** — In a 2014 fMRI study led by Dr. Gregory Berns of Emory University, he and his colleagues discovered that an area of the canine brain related to positive expectations, the caudate nucleus, is most triggered by the scent of a familiar person.³ These findings indicate that dogs are not only able to pick out the scent of their owners when presented with a number of different scents, and have a positive response, but also that a familiar human scent remains in a dog's mind.

"It's one thing when you come home and your dog sees you and jumps on you and licks you and knows that good things are about to happen," says Berns. "In our experiment, however, the scent donors were not physically present. That means the canine brain responses were being triggered by something distant in space and time."⁴

Dogs are also the only domesticated animals that interact with their humans in the same way babies interact with their parents. If your dog is anxious or frightened, he'll look to you for help and comfort, just as a small child will run to his parents.

4. **Dogs understand gestures like pointing** — Like young children, dogs are able to understand what it means when we point at something. They typically will at least look in the direction we're pointing, and if we're pointing at something they recognize or want, will go get it. This is an ability even chimpanzees don't display.⁵

Another skill dogs have that chimps don't is the ability to follow even more subtle forms of human body language, such as the direction of our gaze.

5. **Dog brains react to human voices** — Researchers in Hungary have discovered that canine brains react to voices the same way human brains do. And they even respond as we do to crying, laughter and other sounds that are emotional in nature.⁶ The temporal pole, which is the forward-most part of the temporal lobe, is activated in both humans and dogs when they hear human voices.

When emotional sounds like crying and laughter were played for both human and dog study participants, the dogs' response showed a very similar pattern of activity to that of the humans, with an area near the primary auditory cortex "lighting up" in both groups.

And interestingly, when emotional-sounding dog vocalizations were played, for example, whimpering or fierce barking, once again the humans and dogs had a similar reaction.

"We know very well that dogs are very good at tuning into the feelings of their owners," says Attila Andics, Ph.D., lead study author from the Comparative Ethology Research Group at the Hungarian Academy of Sciences, "and we know a good dog owner can detect emotional changes in his dog — but we now begin to understand why this can be."⁷

Sources and References

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- ⁵ PLoS One, February 8, 2012
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