

How Dogs Show Empathy and Comfort Each Other

You already know that dogs are in tune to human emotions, but how about among their canine partners? What happens when they perceive their buddy is distressed? Their reactions are just more proof of how loving, sensitive, and intelligent dogs truly are.

Reviewed by Dr. Becker

STORY AT-A-GLANCE

- Past studies have shown that dogs are capable of emotional contagion, and are empathetic to human feelings
- A study by a team of researchers at the University of Vienna evaluated dogs' empathy for other dogs
- Study results suggest that not only do dogs empathize with the distress of other dogs, but they also show sympathetic concern
- The dogs showed even greater stress indicators when they heard the recordings of their housemates
- Dogs responded to the cries and whines of canine housemates by offering comfort and distractions

Editor's Note: This article is a reprint. It was originally published September 8, 2017.

If you have a pair of dogs at home who are BFFs or who at least tolerate each other, you've probably noticed that when one is distressed, the other responds in some manner. Some dogs will simply nose around a stressed housemate, while others will more actively engage with their friend, as if to distract him.

In the first-ever study of its kind, a team of researchers at the University of Vienna set out to discover whether dogs feel empathy for other dogs — especially dogs they know.¹ Previous studies have shown that a form of empathy called emotional contagion exists in a wide variety of species, including dogs.

Emotional contagion, which is considered the most primitive or lowest level of empathy, means dogs are affected by and share the emotional states of others, including, for example, crying babies.² Now that it's been established that dogs can show empathy toward humans (and most of us with canine companions already knew that!), the Vienna researchers decided to study dog-to-dog empathy.

16 Pairs of Canine Housemates Participate in Multi-Week Empathy Study

For the study, the research team recruited 16 pairs of dogs of various breeds. Each pair had lived under the same roof for a least one year. In order to get recordings of actual distress, the owners brought one of their dogs into an unfamiliar room and left them there. When they began to whine and cry they were recorded.

There was also an additional group of dogs unfamiliar to the 16 pairs of dogs who were recorded making similar sounds of distress. Finally, the researchers recorded a computer-generated control sound with the same frequencies and timing of distressed dog sounds.

In the next phase of the experiment, which occurred over a six-week timespan, the owners brought their second dog (the one who hadn't been recorded) into an unfamiliar room. The owner then sat in a chair facing away from the dog and put on a pair of headphones so he or she couldn't hear any sounds in the room (to avoid sending any sort of signal to the dog).

The dog was given time to get acclimated, and then one of three sets of sounds was played through speakers hidden behind a screen: the whining of the dog's housemate, the whining of an unfamiliar dog or the control sound. As the dogs reacted to the recorded sounds, the researchers videotaped them.

At subsequent two-week intervals, the same dogs were brought back to listen to the other two recordings. The dogs' heart rates, salivary **cortisol levels** and behavioral responses were measured before and after listening to the recordings. Immediately after each recording ended, the dog's housemate was brought into the room so the two could reunite.

Dogs Not Only React to the Distress of Familiar Dogs, but Also Try to Comfort Them

Predictably, the dogs reacted much more strongly to the recordings of other dogs in distress than to the computer-generated control sounds. The body language the dogs displayed while listening to the sounds of other dogs included lip licking, yawning, whining, a lowered body posture, tail tucked between the legs and shaking.

Also not surprising was that the dogs showed even greater stress indicators when they heard the recordings of their housemates. This indicates they were correctly interpreting and reacting to the sounds other dogs make when they're unhappy — especially when it was their friend who was distressed.

“When their housemate was brought into the room, the dogs tended to show many concern-related behaviors directed toward this dog,” writes dog behavior expert Stanley Coren, Ph.D., about the study results.

“This included staying close to them, licking their faces, tail wagging, rubbing their body alongside the other dog, showing greeting behaviors, and trying to initiate play. These behaviors were more likely to occur when the sounds they had listened to earlier came from the dog they lived with.”³

Not only does the dogs' behavior look a whole lot like empathy, but it also rises to the level of sympathetic concern, which is a step above emotional contagion. The dogs not only felt the emotions of the distressed dogs, but also tried to alleviate their friends' sadness by offering physical comfort and distractions.

The researchers also observed that the level of cortisol, a stress hormone, in the dogs' saliva spiked when they listened to the recordings of the dogs, and it stayed up much longer when it was their housemate making sounds of distress.

The results of this study, like many others on the mental and emotional lives of dogs, just confirm for those of us who adore them that our canine companions are intelligent, sensitive, incredibly loving creatures. But it's always nice to have documented research to validate what we already know!

Sources and References

[The New York Times June 4, 2017](#)

[The Science Dog July 12, 2016 \(Archived\)](#).

¹ [Quervel-Chaumette, et al. Investigating Empathy-Like Responding to Conspecifics' Distress in Pet Dogs. PLoS One, April 28, 2016](#)

² [Behavioral Processes, Volume 108, October 2014, Pages 155-165](#)

³ [Psychology Today, November 2, 2016](#)
