



# Celebrating Greyhounds

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No Mud!**

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# Seeing Feelings

Study provides evidence that dogs can natively recognize human emotions.

By Nancy Beach

Those of us who have the privilege of living with Greyhounds have always believed that our companions recognize how we are feeling.

Humans have a native ability to recognize feelings amongst each other, and scientific research shows non-human primates also do it with members of their own species. Humans and primates use multiple cues, such as facial expression, body positioning, and tone of voice, to quickly figure out the emotional state of others. But evidence of cross-species recognition of emotions using multiple cues hasn't been uncovered — until now. And the two species involved are *Homo sapiens* and *Canis lupus familiaris* – humans and dogs.

In the article “[Dogs recognize dog and human emotions](#)” in the January 2016 issue of *Biology Letters*, researchers at the University of Lincoln in the United Kingdom and the University of Sao Paulo in Brazil describe their study, in which they conclude that dogs have the ability to integrate two different sources of sensory information — visual and auditory — into an accurate perception of emotion in both humans and other dogs, and that this behavior is intrinsic and not learned.

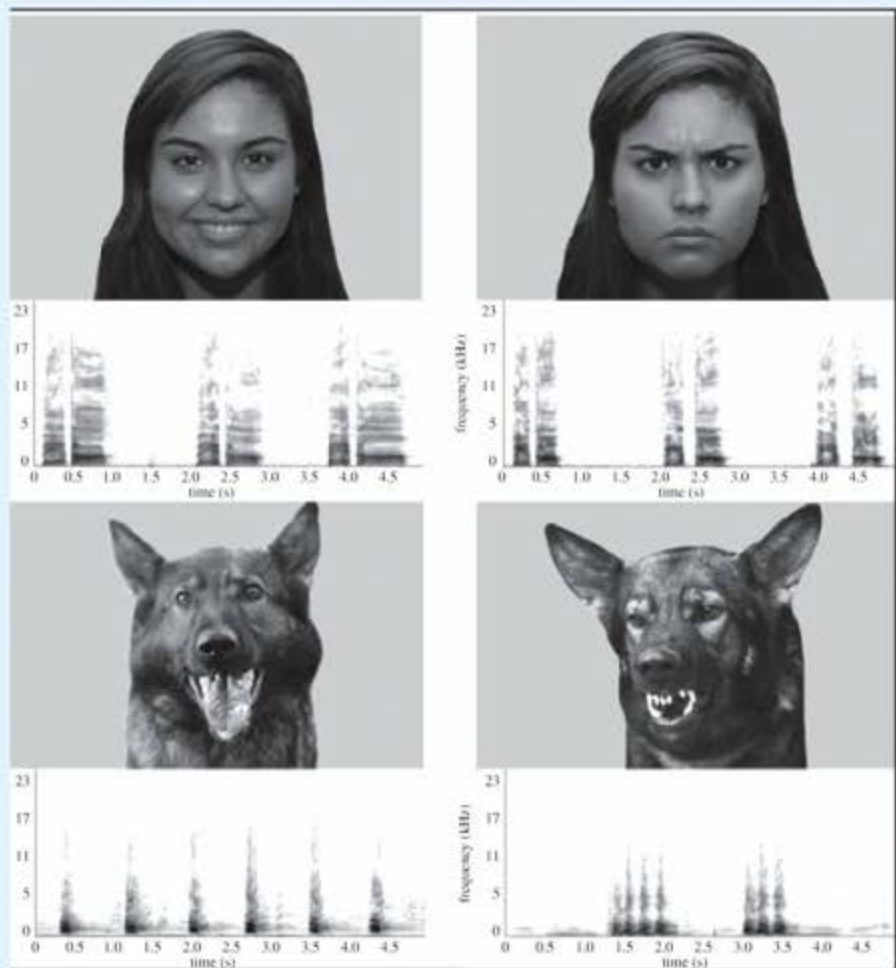
The study took a small sample of 17 well-socialized, adult pet dogs from an array of breeds. Sighthound breeds included a Deerhound, Silken Windhound, and

Staffordshire Terrier/Whippet cross.

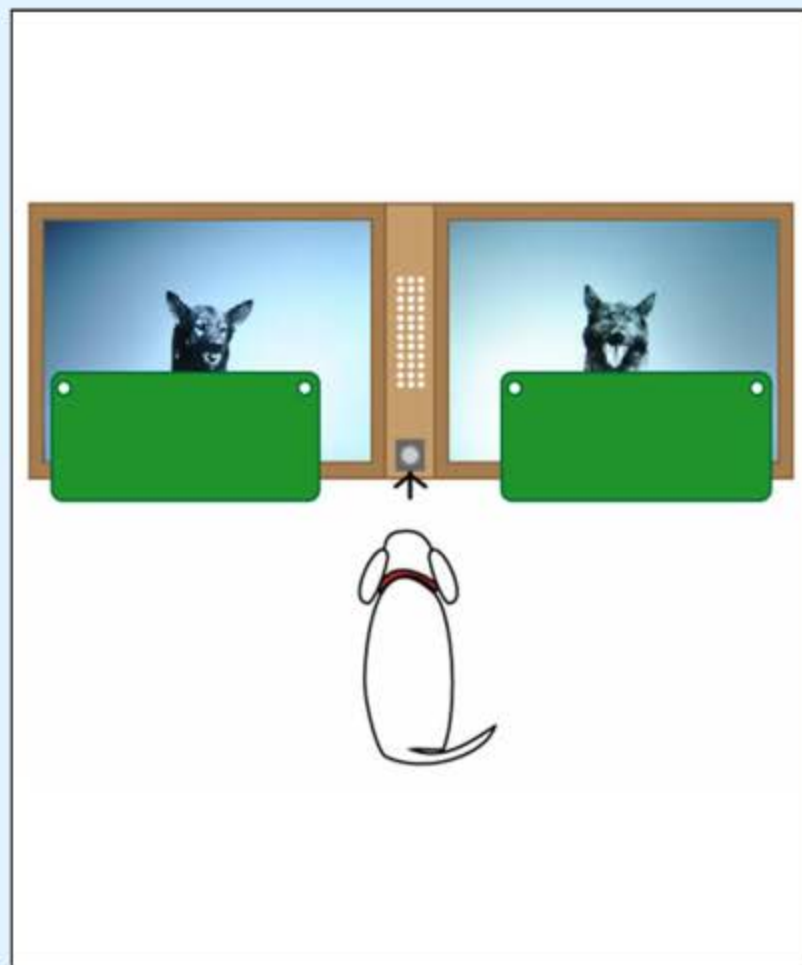
A quiet test room was set up with two screens, a speaker, and a camera, which recorded where each dog looked during the testing. Photos of two humans and two dogs, one male and one female of each species, were used in the testing.

Each dog stood in front of the screens and was presented with a pair of images. One photo depicted a happy/playful facial image and the other an angry/aggressive image of the same human or dog, neither of which the test subjects had seen before.

An audio clip was played during the display of each set of images. Both human



*Examples of images used in the study. The spectrogram below each image represents the matching happy/playful or angry/aggressive vocalization. Courtesy of Biology Letters and Royal Society Publishing*



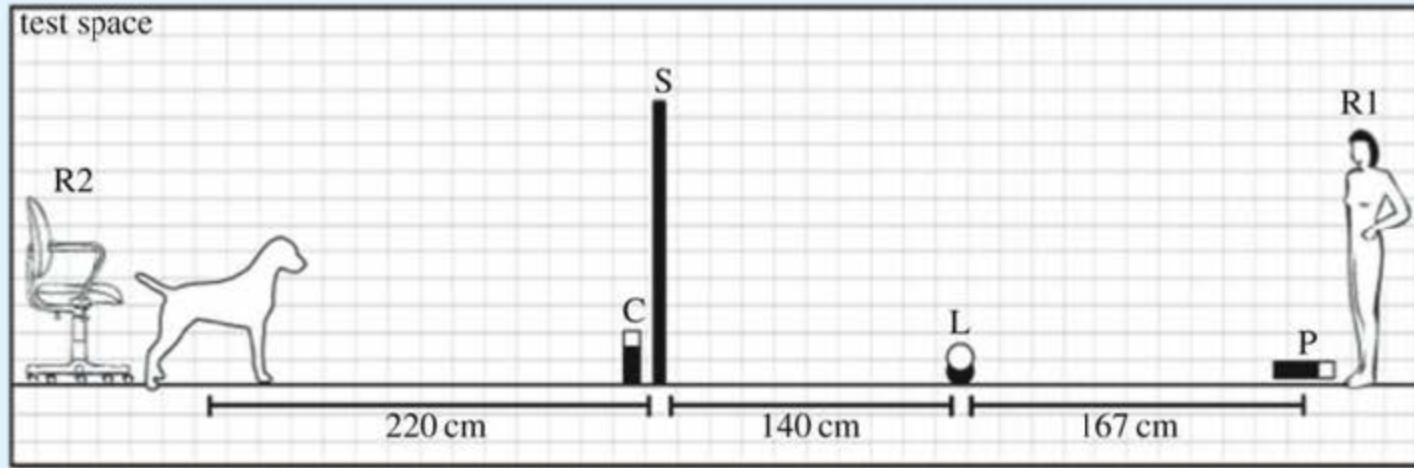
*A front view of the experimental set up. Courtesy of Biology Letters and Royal Society Publishing*

and canine audio clips also used happy/playful intonations, or angry/aggressive ones. The human voices belonged to the people in the photos, and used a language (Brazilian Portuguese) unfamiliar to the canine test subjects. Likewise, the dog barks used belonged to the dogs in the photos. Additionally, a neutral sound similar to rushing water was sometimes played instead of a voice or dog bark.

Photos and sounds were presented to each dog for five seconds. Each dog undertook a total of 20 trials, split into two, 10-trial sessions held two weeks apart. This allowed each dog to be exposed to every combination of images and sounds included in the experiment.

As the dogs viewed the screens, the camera recorded which one they looked





A side view of the experimental set up. The chair and human figure represent where the researchers were positioned during testing. Item C was the location of the camera, item S was the location of the screens, and item L was the location of the speaker. Courtesy of *Biology Letters* and Royal Society Publishing

at longest. Two-thirds of the dogs looked longer at the image that matched the sound they were hearing. While the behavior was most pronounced when the test subjects were looking at the dog photos, it was also strongly noted while looking at humans as well.

“For the first time, researchers have shown that dogs must form abstract

mental representations of positive and negative emotional states, and are not simply displaying learned behaviors when responding to the expressions of people and other dogs,” wrote Cerri Evans, public relations officer of the [University of Lincoln](#) in a news release published about the newly released study. ■



Rydell (Gable Rydell), adopted by Heidi Peditto of Boardman, Ohio, became certified as a therapy dog in June 2015 through Therapy Dogs International.

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About the author: Nancy Beach is a university technical support analyst and recovering journalist with an interest in human and Greyhound medical issues. A longtime retired racing Greyhound owner, she lives in Hillsborough, North Carolina, with her husband, Martin Roper, and 11-year-old Greyhound Tough.