

The Wondrous Ways Cats Communicate With Humans

Adding further proof to the theory that cats and their owners bond through their own unique form of communication, these two studies also confirm prior research suggesting domestication has allowed cats to communicate better with humans. Here's the secret to getting your cat's attention.

Analysis by Dr. Karen Shaw Becker

STORY AT-A-GLANCE

- A recent small study of cats in the U.K. indicates that like dogs and certain other domestic animals, feline family members have the ability to follow human pointing gestures
- The study involved just 9 cats once the original field of 200 was carefully evaluated to identify only kitties who weren't fearful or anxious and were interested in taking part in the study
- These results may suggest that domestication has resulted in cats with social-cognitive abilities that allow them to communicate better with humans
- The results of an earlier study suggest that indoor-only cats react to their owner's "kitty voices" (high-pitched voices), but not necessarily their normal voices; the same cats showed little to no response to the voices of strangers, even their "kitty voices"
- Previous research on feline communication with humans suggests that cats try to communicate with us to solicit our help when needed; however, how attentive the person is to the cat at the time determines the cat's communication strategy

Pointing at or toward something is a uniquely human form of communication. Human babies are able to understand pointing gestures by the time they're 9 to 12 months old. In the non-human animal realm research shows that a range of domestic animals, including horses, goats, pigs, and certainly dogs, can also follow our pointing gestures. But, what about cats?

200 Cat Sample Is Narrowed to 9 Study Participants

If you're a cat fan, you may be aware that our feline friends don't get the same level of research attention dogs do, especially when it comes to their social-cognitive abilities. But lucky for us, a researcher at Anglia Ruskin University in the U.K. named Claudia Wascher decided to find out if cats, too, have the ability to understand pointing gestures.

"This study came about because a student, Margaret Mäses, approached me and said she would like to test cats," says Wascher. "I was absolutely up for it because cats are an interesting and understudied species."¹

For their study, Wascher and Mäses decided to duplicate and expand on 20-year-old research that showed kitties may be able to follow human pointing gestures. Mäses carefully screened approximately 200 rescue cats living in a shelter in Lithuania and identified those who seemed comfortable being isolated in a testing room with an unfamiliar human.

According to Wascher, Mäsés "was absolutely brilliant in being able to identify individuals who were not fearful or anxious and were interested in taking part in the study." Cats being cats, of the 200 evaluated, only 9 made the cut!

"One of the problems was that so many of the cats were not interested in the test or in being isolated in the room or in whatever this strange human wanted from them," says Wascher. "In cognitive tests like these, it is important that the subject know what question is being asked of them and they are motivated to take part in the experiment."

Cats Understand Pointing Gestures at Least 75% of the Time

For the test, Mäsés presented the cats with two cups, each one holding a small bit of food. Next, she pointed directly at one of the cups, then pointed across her body at one of the cups.

Overall, the experiment showed that the cats were able to follow human pointing gestures. As a group, their success rate was about 75%, and they performed significantly above chance (i.e., coincidence) for both pointing gestures.

The results, published in the *Journal of Comparative Psychology*,² add to the previous research 20 years ago, but the study coauthors make clear that further exploration is necessary to understand the underlying mechanisms of the cats' behavior.

One interesting aspect of studies like this one, from an evolutionary perspective,³ is that neither domestic cats nor their wild ancestors use pointing gestures to communicate. So, could this mean that the process of domestication has resulted in cats with social-cognitive abilities that allow them to communicate better with humans? Inquiring minds want to know!

Cats Also Respond to Human Voices

The results of a study published at the end of 2022 suggest that cats react to their owner's voices — especially when we speak in a high-pitched "kitty voice" — but not to the voices of strangers.³

Whereas dogs respond when both their owners and strangers speak directly to them, cats seem to put everyone but their human on ignore. According to lead study author Charlotte de Mouzon at the University Paris Nanterre in France, this suggests that cats and their owners bond through their own unique form of communication.⁴

For their study, de Mouzon and her colleagues recruited 16 cats (9 males and 7 females) who lived in studio apartments as either the only pet with a female owner, or in pairs with a heterosexual couple. All the humans in the study were veterinary students at the National Veterinary School in Alfort, near Paris; the kitties ranged in age from 8 months to 2 years old.

The owners were asked to use a high-pitched voice to call their cats by name, and also to say phrases (in French) such as, "Do you want to play?", "Do you want to eat?", "See you later!", and "How are you?" The pet owners then repeated the same phrases to humans using their normal voice.

The researchers recorded all this, along with the voices of 16 women not known to the cats, saying the same 4 phrases to humans, and to the cats via video in de Mouzon's laboratory.

The recordings were then played to the cats in their own homes, with their humans present but not interacting with them. Interestingly, when the cats heard their owners' "kitty voices," they tended to stop what they were doing and begin doing something else, for example, looking around, moving their ears and tails, or becoming very still. They were noticeably less responsive when their owners used their normal voices.

However, when they heard the strangers speak to them in their "kitty voices," calling them by name and enticing them to play or eat, the cats pretty much ignored them. According to de Mouzon, that could be because all 16 were exclusively indoor cats with little to no interaction with strangers. She believes the findings are further evidence that cats have considerable social cognitive skills and are "sensitive and communicative individuals."

*"We know that they react to this kind of speech and it's a good way for cats to know that we're addressing them," says de Mouzon. "So, we should feel confident about speaking to our cats with this kind of 'baby talk'."*⁵

The Secret to Getting Your Cat's Attention

According to a 2021 study,⁶ cats may be better at "reading the room" than was previously thought, by scrutinizing the behavior of their humans. While feline family members obviously don't bark or paw at us to get our attention like dogs often do, they seem to have their own methods for soliciting human help.

Interestingly, the researchers found that how cats go about asking for help depends on the behavior of the humans involved. Said another way, cats adjust the way they ask for attention based on the attentional state of the person they're asking. This discredits the long-held assumption that cats have neither much interest in nor the ability to communicate with their humans.

For the study, the cats were given a puzzle they could solve (an easy-to-reach treat in a container with a loose lid), and an unsolvable puzzle (a treat in a closed container). Also present in the room was either an attentive or inattentive caregiver.

The researchers observed that when the cats were able to easily obtain the treat in the solvable task, they didn't involve the human. However, when presented with the treat in the closed container, they performed certain behaviors to communicate their conundrum to the human. For example, they would repeatedly look at the treat and then at the person in a bid to get their attention and help.

Even more interesting is that the cats would change up their behaviors depending on how available they perceived the caregiver to be. When the person was looking at them and paying attention, the cats were also more engaged — for example, they looked to the person sooner and approached the treat container more often. When the caregiver wasn't paying attention, the cats adjusted their behavior accordingly.

These cognitive abilities are considered by scientists to be sophisticated and were thought to be used by dogs, but not cats.

*"A key part of any relationship is communication, and this study shows that cats are perhaps better communicators than we've given them credit for," said project leader François Martin, MA, PhD. "The more attentive a cat owner is, the more engaged their cat will be in return, making their relationship stronger."*⁷

This may be an important distinction. Whereas many dogs will do "whatever it takes" to get their human's attention and help if they need it, cats naturally tend to be less assertive. This means that as often as possible, we need to reassure our kitties that we're present and available to them if they need us.

Having said that, it's also important to recognize that, cats being cats, your feline BFF may choose to ignore you, regardless of how present and reassuring you are!

Sources and References

¹ [Psychology Today, April 24, 2023](#)

² [Mases, M. and Wascher, C.A. \(2023\) Journal of Comparative Psychology, 137\(1\), 38-44](#)

³ [de Mouzon, C. et al. Animal Cognition, October 25, 2022](#)

^{4, 5} [NewScientist, October 25, 2022](#)

⁶ [Zhang, L. et al. Animal Cognition, Volume 24, pages 1109-1119 \(2021\)](#)

⁷ [PetfoodIndustry.com, November 19, 2021](#)
