

The Behavior That Likely Surprises Cat Owners More Than Anything Else

If you allow your cat to do this on occasion, you're probably shocked at how quickly she gets into the 'role,' leaving behind any trace of her life of ease and domestication. Research from Japan suggests what's involved and how she emerges herself fully in this act of pure ancestral bliss.

Reviewed by Dr. Becker

STORY AT-A-GLANCE

- New research from Japan suggests that cats use their keen sense of hearing and a basic understanding of cause and effect to locate hidden prey
- The cats in the study were involved in four experiments, two of which were compatible with the law of physics, and two of which were not
- The cats demonstrated an ability to associate sounds with an anticipated outcome, and showed awareness that the two experiments that were contrary to the law of physics were flawed
- Learning how to bring out the inner hunter in your indoor cat through interactive play can alleviate boredom, increase her confidence, and strengthen the bond you share with her
- Interactive prey play gives you a meaningful minute-by-minute bond with your cat and encourages her to be the feline hunter she was born to be

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It might not be obvious just by looking at her, but little Madam Meow curled up so sweetly on your lap comes from a long line of very accomplished ambush hunters. In fact, **domestic cats** allowed outdoors have been described as "little hunting machines in fur coats."¹

"The results suggest that cats used a causal-logical understanding of auditory stimuli to predict the appearance of invisible objects. The ecology of cats' natural hunting style may favor the ability for inference on the basis of sounds."²

Translation: Cats seem to have the ability to use their keen sense of hearing and a basic understanding of physics to figure out where prey animals are hiding. Felines often hunt after dark and in areas of low visibility, so relying on noise cues makes perfect sense.

Researchers Test Cats' Ability to Understand Cause and Effect

The study was led by Saho Takagi of Japan's Kyoto University. Takagi and her team set out to determine if cats use the principle of cause and effect to predict the presence of hidden prey.

Specifically, the researchers wanted to learn whether kitties use a causal rule (a rule that involves variables that are observed at different times) to determine if a container holds an object, based on whether it is shaken along with a sound or not.

The researchers also wanted to learn whether the cats would expect something to fall out of the container when it was turned over.

The study included 30 domestic cats, 22 of which lived in "cat cafes" (which are very popular in Japan). The other eight cats lived in private homes. The kitties were videotaped during four separate experiments. The first two experiments were consistent with the law of physics, the other two were not:

- The first experiment involved a researcher shaking a cup containing balls. The cup made a rattling sound, and the balls dropped out when it was flipped over.
- The second experiment involved an empty cup that made no sound, and nothing dropped out when it was turned over.
- For the third experiment, the researchers used a cup that contained iron steel on the bottom. It rattled when shaken, but nothing dropped out when it was flipped over.
- In the fourth experiment, the balls inside the cup did not rattle during shaking, but fell out when the cup was turned over.

The Cats Seemed to Know When They Were Being Duped

After the experiments were concluded, Takagi and her colleagues watched the videotapes. They noted the cats appeared more interested in the cups that made rattling noises. This suggests cats used the law of physics to deduce the existence of something in the cups based on the noise they were making.

During the two experiments that were contrary to the law of physics, the kitties stared longer at the cups, suggesting they were aware that what was happening with them made no logical sense. According to study authors:

"Information from the environment is often limited to specific sensory modalities; for instance, a cat may hear but not see a target object. When animals perceive incomplete information, they may have to complete the remaining parts from other available clues."³

In the future, the researchers hope to learn more about what cats visualize when they hear sounds, and whether they can discern the shape, size or quantity of an object based on the noise it makes.

Bringing Out the Inner Hunter in Your Indoor Cat

Hunting is a natural instinct for cats, which is one of the reasons many indoor-only kitties are often bored out of their minds.

According to cat expert Jackson Galaxy, when we learn to walk through the world as our cats do, we understand their needs on a very basic level, and we naturally insure they have outlets for their curiosity, energy, and other innate gifts.

Today's cats are still very much in touch with what Galaxy calls their raw cat. They've retained their drive to awake from a nap to go hunt, catch, kill and eat prey, groom, go back to sleep, and do it all over again in a few hours.

That's the life of a cat living in the wild, and when your indoor kitty isn't given those outlets, she can wind up "hunting" your ankles, your children, or your dog!

Interactive play is also crucial in drawing out the raw cat. Interactive play means we become our cat's prey — the mouse or the bird — moving the way it would, unpredictably, and really drawing out the cat's hunter energy.

Galaxy has seen miraculous results when shy cats find their inner hunter. Their new confidence comes from the thought that "I just killed something," which is 100% raw cat at its core. The toy moves across the floor, the cat pounces on it and "kills" it. He realizes, "This is what I was meant to do, isn't it!"

This is what interactive play is all about. Finding ways to move the toys that energize your cat and bring out the swatting, batting, chasing, pouncing hunter in her. As Galaxy points out, cats are family members with very strong needs. Interactive prey play gives you a meaningful minute-by-minute bond with your cat and encourages her to be the feline hunter she was born to be.

Sources and References

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