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Dog Tips

# Think Your Dog Can't Learn Alone? Think Again!

Meet the extraordinary canines who are setting new records in the animal kingdom by learning hundreds of toy names on their own.

Analysis by <u>Dr. Karen Shaw Becker</u>

## **STORY AT-A-GLANCE**

- A recent study published by Family Dog Project researchers at ELTE Eötvös Loránd University, Budapest has shed additional light on super-smart Gifted Word Learner dogs a rarity in the world of canines
- The researchers spent five years just finding enough GWLs for a decent-sized study; over half were Border Collies, but there were some non-working dogs in the group of 41 as well
- One of several common characteristics revealed about the dogs is that their owners didn't intentionally teach them toy names. The dogs appeared to spontaneously pick up the names during daily unstructured play sessions
- In an earlier study, the same group of researchers discovered that Gifted Word Learner Border Collies are "extremely" playful — more playful than typical Border Collies

If you have a dog in the family, chances are you think he or she is pretty smart. Maybe not a genius, but smart in their own way. However, science has now confirmed that some rare dogs are super-smart by any standard, as evidenced by their ability to learn hundreds of names of dog toys.

These canine Einsteins, dubbed Gifted Word Learner (GWL) dogs, are so uncommon that they haven't really been studied until recently. But now, a new report by researchers from the Family Dog Project at ELTE Eötvös Loránd University, Budapest is shedding more light on additional characteristics of these remarkable dogs.<sup>1</sup>

The researchers wanted to find more GWL dogs to study, which turned out to be a difficult challenge resulting in a tireless, five-year, worldwide search. In 2020, they even developed a social media campaign and showcased their experiments with GWL dogs, hoping to find more.

"This was a citizen science project," explained lead researcher Dr. Claudia Fugazza. "When a dog owner told us they thought their dog knew toy names, we gave them instructions on how to self-test their dog and asked them to send us the video of the test."<sup>2</sup>

The next step was an online meeting with the owner to test the dog's vocabulary under controlled conditions. If the dog demonstrated he knew the names of his toys, the owner was asked to complete a questionnaire about their pet's life experience, their own experience in raising and training dogs, and the process involved in teaching their dog the names of his toys.

### **Common Characteristics of Gifted Word Learner Dogs**

Eventually, the research team found 41 dogs from 9 different countries, including the U.S., the U.K., Canada, Norway, Netherlands, Brazil, Spain, Portugal, and Hungary. Not surprisingly given their innate intelligence, over half the dogs (56%) were **Border Collies**. However, a few of the 41 were from non-working breeds, including two Pomeranians, a Pekingese, a Shih Tzu, a Corgi, a Poodle, and a few mixed breeds.

"Surprisingly, most owners reported that they did not intentionally teach their dogs toy names, but rather that the dogs just seemed to spontaneously pick up the toy names during unstructured play sessions," said Shany Dror, lead researcher.<sup>3</sup>

Most of the pet parents in the study reported no professional background in dog training, and the researchers found no link between the owners' experience in handling and training dogs, and the dogs' ability to pick the correct toys upon hearing their names.

"In our previous studies we have shown that GWL dogs learn new object names very fast," explained Dror. "So, it is not surprising that when we conducted the test with the dogs, the average number of toys known by the dogs was 29, but when we published the results, more than 50% of the owners reported that their dogs had already acquired a vocabulary of over 100 toy names."

According to study co-author Prof. Adam Miklósi, Head of the Ethology Department at ELTE:

"Because GWL dogs are so rare, until now there were only anecdotes about their background. The rare ability to learn object names is the first documented case of talent in a non-human species. The relatively large sample of dogs documented in this study, helps us to identify the common characteristics that are shared among these dogs, and brings us one step closer in the quest of understanding their unique ability."<sup>4</sup>

A full list of the common characteristics of the study dogs can be found in this **table**.

This study is part of the **Genius Dog Challenge** research project involving Gifted Word Learner dogs. The researchers invite dog parents who believe their canine companions know multiple toy names to contact them through the Genius Dog Challenge website.

### **GWL Dogs Also Show Extremely High Levels of Playfulness**

A 2022 study by some of the same Family Dog Project researchers revealed that Gifted Word Learner dogs — in this

case a small number of super smart Border Collies — are not just more intelligent than "typical" dogs, but also more playful.<sup>5</sup>

"We restricted our investigation to Border Collies because most of the Gifted Word Learners belong to this breed," explained Fugazza, leading researcher of the study. "However, it is important to point out that the vast majority of Border Collies do not show this talent," says Dr. Andrea Sommers, co-author of the study. "And also that there are some Gifted Word Learners that do not belong to this breed," adds Dror.<sup>6</sup> The researchers found that the only difference between the gifted and typical Border Collies, according to their owners, was that the gifted dogs were more playful. It's important to note that **working dogs** like this breed are generally more playful than dogs of non-working breeds.

Since Border Collies are intentionally bred to be working dogs, typical Border Collies are naturally very playful, and the gifted among them are more playful still.

"However, it is important to note that this does not necessarily imply that playfulness is what makes this talent emerge," he continues. "We do not exclude it, but it could also be that the extreme playfulness in the gifted individuals is driven or perceived by the owners as a result of frequent playful interactions with their dogs, with named toys."

The ability to learn the names of many different objects is very rare among canines. By studying these exceptionally gifted dogs, the researchers believe we can not only better understand dogs but also ourselves.

#### **Sources and References**

<sup>1</sup> Dror, S. et al. Scientific Reports, Volume 13, Article number: 21747, published December 14, 2023

<sup>2,3,4</sup> Phys.org, December 14, 2023

<sup>5</sup> Fugazza, C. et al. Animal Cognition, August 5, 2022

6,7 Phys.org, August 15, 2022