

Is Your Dog as Smart as a 2-Year-Old?

Only one way to know—ask the dog.

The bumper sticker on the car in front of me read, “My dog is smarter than your honor student.” I laughed and began to think about the issue of canine intelligence. No research exists on dogs and honor students, but there is a long-standing, mainstream notion that dogs are as smart as human 2-year-olds.

Where did this idea come from?

“Smart” and “intelligent” are terms used interchangeably. Intelligence is the ability to acquire knowledge and skills, and learning language is a key component of intelligence. The intelligence of young children can be determined, in part, by how many words they know as measured by a multitude of language assessments.

According to the Mayo Clinic, most children between ages 2 and 3 know at least 200 and as many as 1,000 words. The variability relates to exposure to new words. With only a few exposures, children can retain knowledge through a process called “fast mapping,” according to researchers Lori Markson, of Washington University in St. Louis, and Paul Bloom, Yale University.

In 1983, psychologist David Premack described studies in which the abilities of children were compared to a language-trained chimpanzee.



Squall, a Border Collie, is participating in the Genius Dog Challenge.

WHAT ABOUT DOGS?

In a 2004 study in *Science Magazine*, Juliane Kaminski, director of England's Dog Cognition Center Portsmouth, and colleagues made the connection between the “word learning” of canines and 2-year-old children. The researchers studied Rico, a Border Collie who could correctly identify the names of 200 items, including children's toys and balls. Rico's retrieval rate was described as comparable to the performance of a 3-year-old.

When it came to naming words, Chaser, another Border Collie, was an extraordinarily high achiever. Chaser

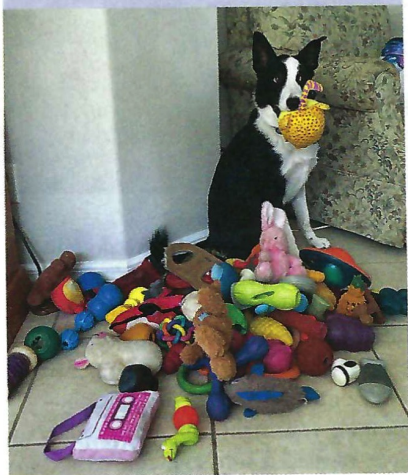
could identify the names of 1,022 objects, according to a 2011 scientific paper by psychologists John W. Pilley and Allison Reid. She could also correctly respond to commands combining nouns and verbs, such as *fetch sock*.

THE PIE TEST

Other studies assessing canine intelligence have not involved learning the names of objects. One author ranked dog breeds according to how well they performed in American Kennel Club (AKC) and Canadian Kennel Club (CKC) obedience. At the top of the list

The Brainiest of Them All?

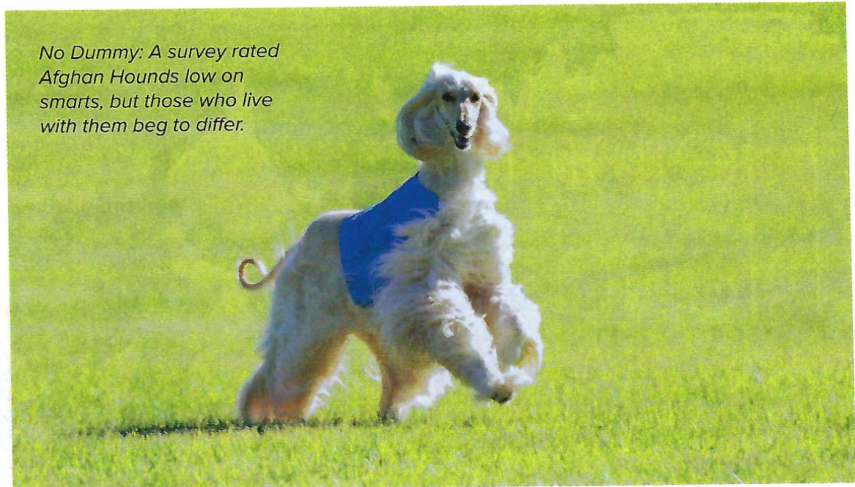
Florida-based dog trainer Bobbie Kurivial and her Border Collie, Squall, are participants in the Genius Dog Challenge (geniusdogchallenge.com) through Budapest's Eotvos Lorand University in Hungary. Six dogs from six countries are taking part in research that assesses their abilities to learn labels for objects. The dogs are Rico (named after the aforementioned Border Collie) from Spain, Whisky (Norway), Max (Hungary), Gaia (Brazil), Nalani (Netherlands), and Squall, who represents the United States. All are Border Collies to ensure consistency in the research. Squall can currently identify nearly 150 toys by their names.



was (surprise!) the Border Collie, and at rock bottom was the Afghan Hound. The popular press went wild, deeming the Border Collie the smartest breed, and the Afghan Hound (oh yes, they said it) the dumbest. This was unbelievably simplistic.

Obedience scores represent only part of the canine-intelligence picture; they

LEFT: COURTESY OWNER; RIGHT: ROBERT YOUNG ©AKC



No Dummy: A survey rated Afghan Hounds low on smarts, but those who live with them beg to differ.

What About Your Dog?

It is important to recognize that breed does not limit a dog's learning ability. About 50 percent of intelligence is related to genetics. The rest can be attributed to such factors as socialization, training, and the skills of the human trainer. Intelligence relates to individuals, not entire breeds or species.

All breeds are capable of learning, and dog owners are encouraged to teach their dogs new things, while working to improve their own training skills.

are simply a measure of a dog's ability to perform specific tasks. Some breeds do better in formal obedience than others, but never underestimate a hound.

Afghan Hound expert Michael Canalizo tells a story about one of his dogs. As he ate lunch, the dog kept a close eye on his sandwich and lemon pie. Canalizo then put the food away and went outside. He came back later to find a very regal Afghan with meringue on his chin. The dog observed where Canalizo put the pie, remembered it, and demonstrated problem-solving by not only opening the refrigerator, but closing it after he had helped himself to dessert. This cunningness and ability to solve problems are characteristic signs of intelligence.

In fieldwork, sporting breeds are trained to retrieve. At the advanced levels, there are double and triple retrieves. The triple retrieve involves the dog sitting at the handler's side and watching as three birds fall one at a time behind cover,

such as tall brush. The handler sends the dog to retrieve each of the birds. The dog must remember where each bird fell. This is a practical test of memory, another indicator of intelligence.

There are different ways to measure intelligence. Some of these include language (identifying objects), trainability (e.g., obedience), memory, problem-solving, and instinctual tasks. The press uses pithy headings, such as "The Smartest Dog in the World," because a more accurate heading such as "Border Collie Identifies a Lot of Toys" will not draw in readers.

Finally, research that involves teaching dogs to identify objects is important because it adds to knowledge about how dogs learn, and it may provide insight into how humans learn. **FD**

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