Knowing what dogs like to watch could help veterinarians assess their vision

January 18 2024, by Gian Galassi

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Ever wonder what kind of TV shows your dog might choose if they could work the remote control? New research from the University of Wisconsin–Madison's School of Veterinary Medicine provides some

answers, but the study was more interested in solving a longstanding problem in veterinary medicine than turning canine companions into couch potatoes.

According to Freya Mowat, veterinary ophthalmologist and professor in the School of Veterinary Medicine's department of surgical sciences, researchers wanted to determine factors, including age and vision, that influence a dog's interest in interacting with video content. Ultimately, the goal of the study, which launched two years ago, was to support development of more sensitive ways to assess canine vision—something that has been sorely lacking in veterinary medicine.

"The method we currently use to assess vision in dogs is a very low bar. In humans, it would be equivalent to saying yes or no if a person was blind," says Mowat. "We need more sensitive ways to assess vision in dogs, using a dog eye chart equivalent. We speculate that videos have the potential for sustaining a dog's attention long enough to assess visual function, but we didn't know what type of content is most engaging and appealing to dogs."

Published recently in the journal *Applied Animal Behaviour Science*, the study found that dogs are most engaged when watching videos that feature other animals. Content featuring other dogs was the most popular. But if a National Geographic documentary about canine evolution seems too highbrow for your four-legged friend, Scooby Doo might be a perfectly acceptable option as well.

To better understand the type of content dogs might be most attracted to on screen, Mowat created a web-based questionnaire for dog owners around the globe to report the TV-watching habits of their canine companions.

Participants responded to questions about the types of screens in their

homes, how their dogs interacted with screens, the kinds of content their dogs interacted with the most, as well as information about their dog's age, sex, breed and where they lived. They also provided descriptions of their dogs' behavior when watching videos.

Most commonly, dog owners described their pets' behavior as active—including running, jumping, tracking action on screen and vocalizing—compared with passive behaviors like lying down or sitting. Dog owners also had the option to show their dog(s) four short videos featuring subjects of possible interest, including a panther, a dog, a bird and traffic moving along a road. They were then asked to rate their dog's interest in each video and how closely the dog tracked the moving objects on the screen.

Mowat received 1,600 responses from dog owners across the world, including from the United States, Canada, the United Kingdom, the European Union and Australasia. Of those respondents, 1,246 ultimately completed the study. The following are some of the most interesting highlights:

- Age and vision were related to how much a dog interacted with a screen.
- Sporting and herding dog breeds appear to watch all content more than other breeds.
- Video content featuring animals was the most popular, with other dogs being by far the most engaging subjects to watch.
- Humans do not appear to be very appealing for dogs to watch, ranking ninth out of 17 predetermined categories.
- Cartoons were engaging for more than 10% of dogs.
- Movement on screens was a strong motivator for screen attention.

Mowat says she plans to build on the results of this study. Future

research will focus on the development and optimization of video-based methods that can assess changes in visual attention as dogs age as well as answer questions that could help our four-legged friends age as gracefully as possible.

"We know that poor vision negatively impacts quality of life in older people, but the effect of aging and vision changes in dogs is largely unknown because we can't accurately assess it," she says. "Like people, dogs are living longer, and we want to make sure we support a healthier life for them as well."

Another goal for Mowat is to compare how a dogs' vision ages compared with the human or humans they share a home with.

"Dogs have a much shorter lifespan than their owner, of course, and if there are emerging environmental or lifestyle factors that influence visual aging, it might well show up in our dogs decades before it shows up in us," she explains. "Our dogs could be our sentinels—the canine in the proverbial coal mine."

More information: L.K. Donohue et al, Screen interaction behavior in companion dogs: Results from a dog owner survey, *Applied Animal Behaviour Science* (2023). DOI: 10.1016/j.applanim.2023.106151

Provided by University of Wisconsin-Madison