

CALIFORNIA STATE SCIENCE FAIR 2008 PROJECT SUMMARY

Name(s)

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Project Number

S1114

Project Title

Man: A Dog's Best Friend?

Abstract

Objectives/Goals

In "Man: A Dog's Best Friend?" the objective was to investigate whether or not culture has an effect on brain hemisphere dominance in dogs.

Methods/Materials

Thirty canine test subjects and their owners were surveyed via video camera and written survey before average angles of tail wagging were calculated and brain hemisphere dominance was found. Brain hemisphere dominance tendencies were compared in each dog/owner combination.

Results

It was found that 38.71% of dogs that had been owned by the same owner since they were puppies had the same dominant brain hemisphere, 32.26% of dogs that were owned by the same owner since they were puppies had different dominant hemispheres than their owners, 12.9% of dogs that were not owned by the same owner all their lives had different dominant hemispheres, and 16.13% of dogs that were not raised by the same owner since they were puppies had the same dominant brain hemisphere.

Conclusions/Discussion

The hypothesis "if the same people have raised their dog since it was a puppy, then the dog will have the same dominant hemisphere as its owner" turned out to be correct, according to the sample of thirty canines from the High Desert of Southern California. Humans do affect their dogs' dominant brain hemispheres, so they might even affect their beloved furry friends in other ways, too.

Summary Statement

"Man: A Dog's Best Friend?" investigates whether or not a dog's owner affects it's brain hemisphere dominance tendencies.

Help Received

Mother provided transportation to the homes of various dog owners; Various friends and family members gave a little bit of their time to promote scientific research about their effects on their dog's or dogs' brain hemisphere dominance tendencies