

# CALIFORNIA STATE SCIENCE FAIR 2003 PROJECT SUMMARY

Name(s)

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**Project Number** 

**J1009** 

**Project Title** 

Can Dogs Discriminate Voices: Does Fido Really Know You?

## Abstract

## **Objectives/Goals**

Can dogs discriminate between their owner's voice and a stranger's voice? The hypothesis was that dogs would be more likely to recognize their owner's voice and follow the commands given by their owner on audiotape than to follow the same commands given by a stranger's recorded voice.

#### Methods/Materials

Twenty well-trained dogs that normally obey their owners' commands were selected for this project. The dogs were tested in their home environment. On audiotape, the owner and a same sex stranger were recorded saying "Come," "Sit," and "Stay." After recording the commands, the owner left the room and the tape was played to determine if the dog oriented to the voices and responded to the three commands.

#### **Results**

Of the dogs tested, 90% oriented to their owners' voices on audiotape, and 55% acknowledged the voice of a stranger. Forty-five percent of all dogs obeyed the "come" command in the owner's voice, compared to 15% who obeyed the stranger's voice. For the "sit," command, 35% of dogs sat in response to the owners' voices, and 30% "sat" for the stranger's voice. For the "Stay" command, 65% obeyed to the voice of the owner. In contrast, only 30% obeyed the "stay" command given by a stranger.

## **Conclusions/Discussion**

From these results, on average, the dogs followed their owner's commands on audiotape approximately twice as often as they obeyed commands given by a stranger. Results support the hypothesis that dogs are able to discriminate their owners' voices from a stranger's voice on audiotape.

## **Summary Statement**

This experiment investigates whether dogs are more likely to follow commands on audiotape given by their owner than by a same sex stranger.

### Help Received

Twenty families participated and allowed me to test their dogs.