



Breed differences in dog-human communication

Use of problem solving and pointing tests to study differences in dog-human communication between German Shepherds and Labradors

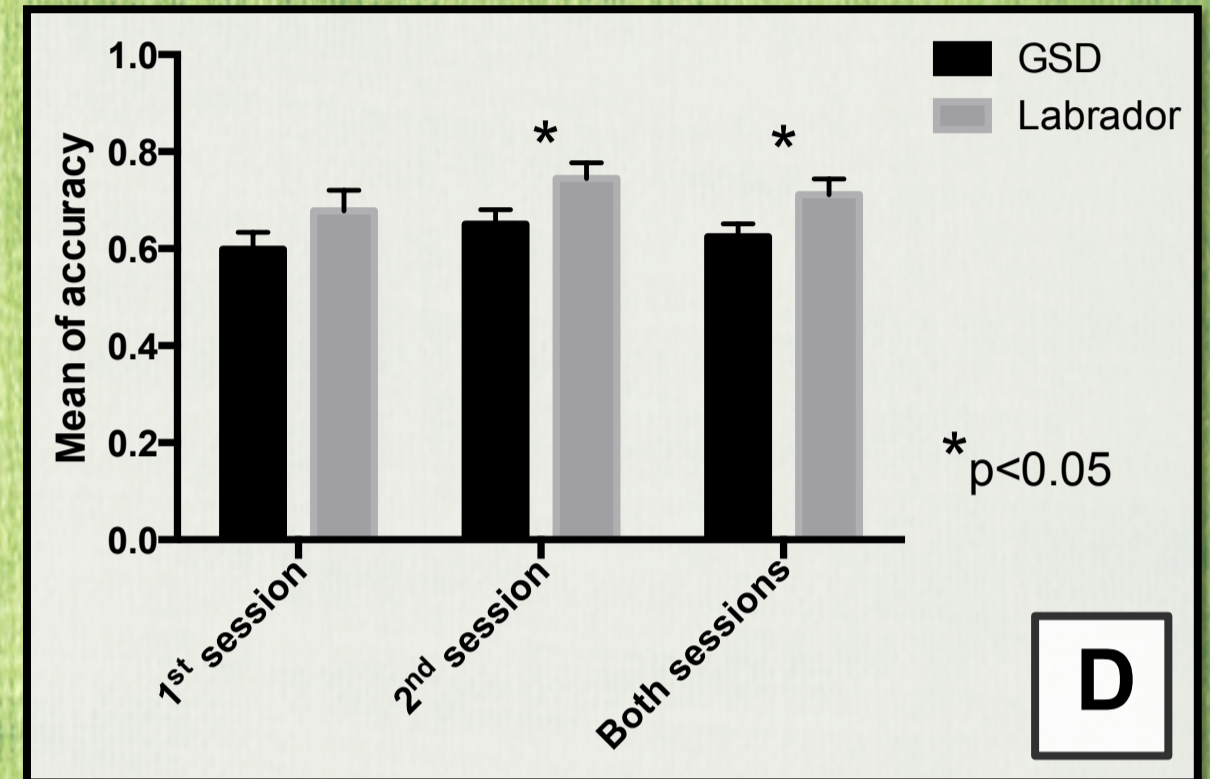
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Introduction

Dogs have developed more advanced communication with humans than any other species. They understand us better and also effectively communicate back to us. Labradors and German Shepherds are from different breeding background (respectively hunting and herding): will it impact a lot the results despite having mostly pet dogs in the study?



Methods

30 Labradors and 36 German Shepherd dogs (GSD) were tested.

Dogs' communication towards humans was tested with a problem solving test (PST, figure A, device shown figure B with treats).

Dogs' understanding of human cues was tested with a pointing test (PT, figure C) with buckets and treats.

The owners filled a behavioural questionnaire (C-BARQ).

Results

Breed differences

Labradors performed better in both tests (good accuracy of choice in PT: Labrador 74% correct choices, GSD 65%, figure D, quick solving of PST: Labrador 92s, GSD 118s).

Higher stranger aggression score from C-BARQ in German Shepherds: could explain the lower performances of GSDs in PT.

Correlation

Dogs were quicker to choose a bucket in PT when

- High activity levels
- Confident body posture
- Longer physical contacts with experimenter in PST
- Choosing correct bucket

Conclusions

- Link between confidence of the dog and latency of choice in the PT
- **Low differences between breeds in communication behaviours**
 - Mostly pet dogs in the study: **major impact of recent breeding on behaviour**