Intelligence of Dogs

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Final Project - Step 1

Introduction

We all love dogs. Some more than others but all in all, a dog is man's best friend. I think what we enjoy most about our furry companions is their ability to learn. From just being able to fetch a ball and bring it back to helping the police locate missing persons to alerting their companions that they are about to have a seizure. Dogs are amazing animals.

Research Questions

Studies have been done on which breeds are more intelligent than others, but I was curious if how big a dog was had anything to do with how smart they were.

- Are bigger dogs smarter than smaller dogs?
- Does the classification of a dog really tell their intelligence level?
- Does their heterozygosity (diversity in the genes) have anything to do with their intelligence?
- Within a classification, do the larger breeds fair better than the smaller ones for intelligence?
- Does their heterozygosity influence the number of reps a dog can do?

Approach

I plan to look at if height, weight and heterozygosity have any affect on how intelligent a dog is based on the percentage of times they can obey a command.

How your approach addresses (fully or partially) the problem

With my approach I think it would partially answer whether or not how big a dog was and if it plays a part in the how smart they are.

Data (Minimum of 3 Datasets - but no requirement on number of fields or rows)

- dog_intelligence.csv (Fishman, n.d.b)
- Table_4_Heterozygosity_85_breeds.csv (Fishman, n.d.b)
- Table_5_Expected_Heterozygosity_60_breeds.csv (Fishman, n.d.b)
- AKC Breed Info.csv (Fishman, n.d.a)

Required Packages

- ggplot2
- dplyr
- magritter
- Hmisc
- ggm

Plots and Table Needs

- Histogram
- Scatter Plots
- CDF
- Linear Regression

Questions for future steps

To begin, I suppose you look at histograms of the different variables and then decide how to proceed.

References

Fishman, L. n.d.a. "'Dog/Canine Breed Size (AKC)'." https://data.world/len/dog-canine-breed-size-akc.
———. n.d.b. "Intelligence of Dogs." https://data.world/len/intelligence-of-dogs.