

My Puppy

**What Makes a Dog
Popular?**



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Data Sources

TidyTuesday

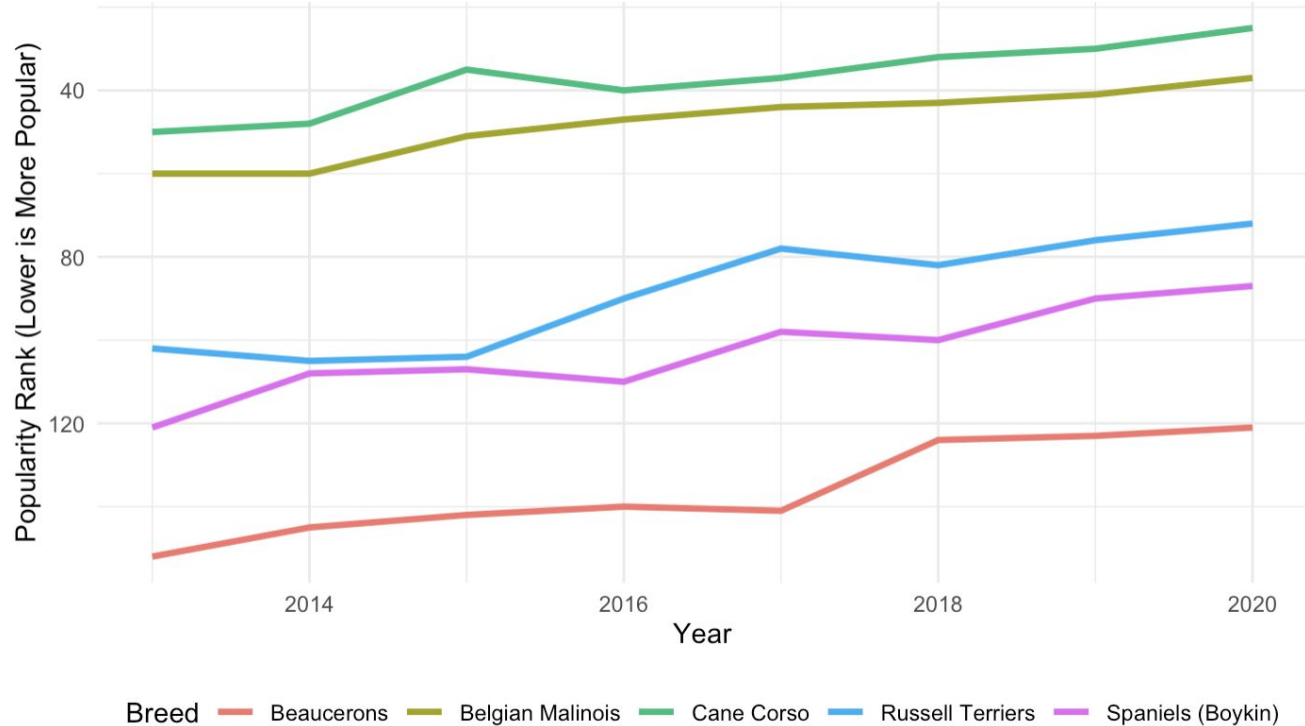
- `breed_rank_all.csv` – AKC breed rankings (2013–2020)
 - `breed_traits.csv` – Dog trait scores (1–5 scale)
 - `trait_description.csv` – Trait meaning reference
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Research Question

- Which breeds are more popular? Which are fading out?
- Common personality traits for popular breeds and less popular group
- Personality classification
- Why these changes are happening?

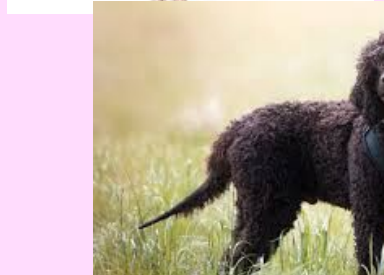
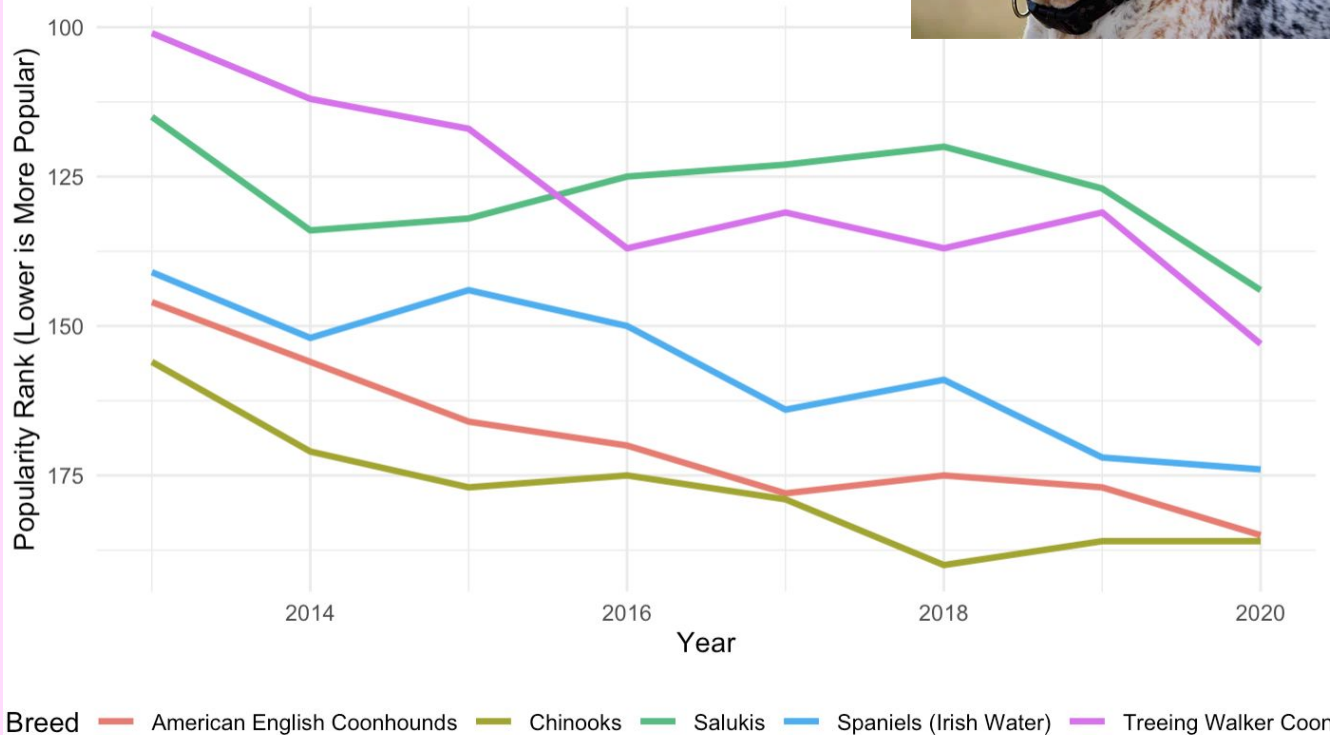
- Which breeds are more popular?

Top 5 Rising Dog Breeds (2013–2020)

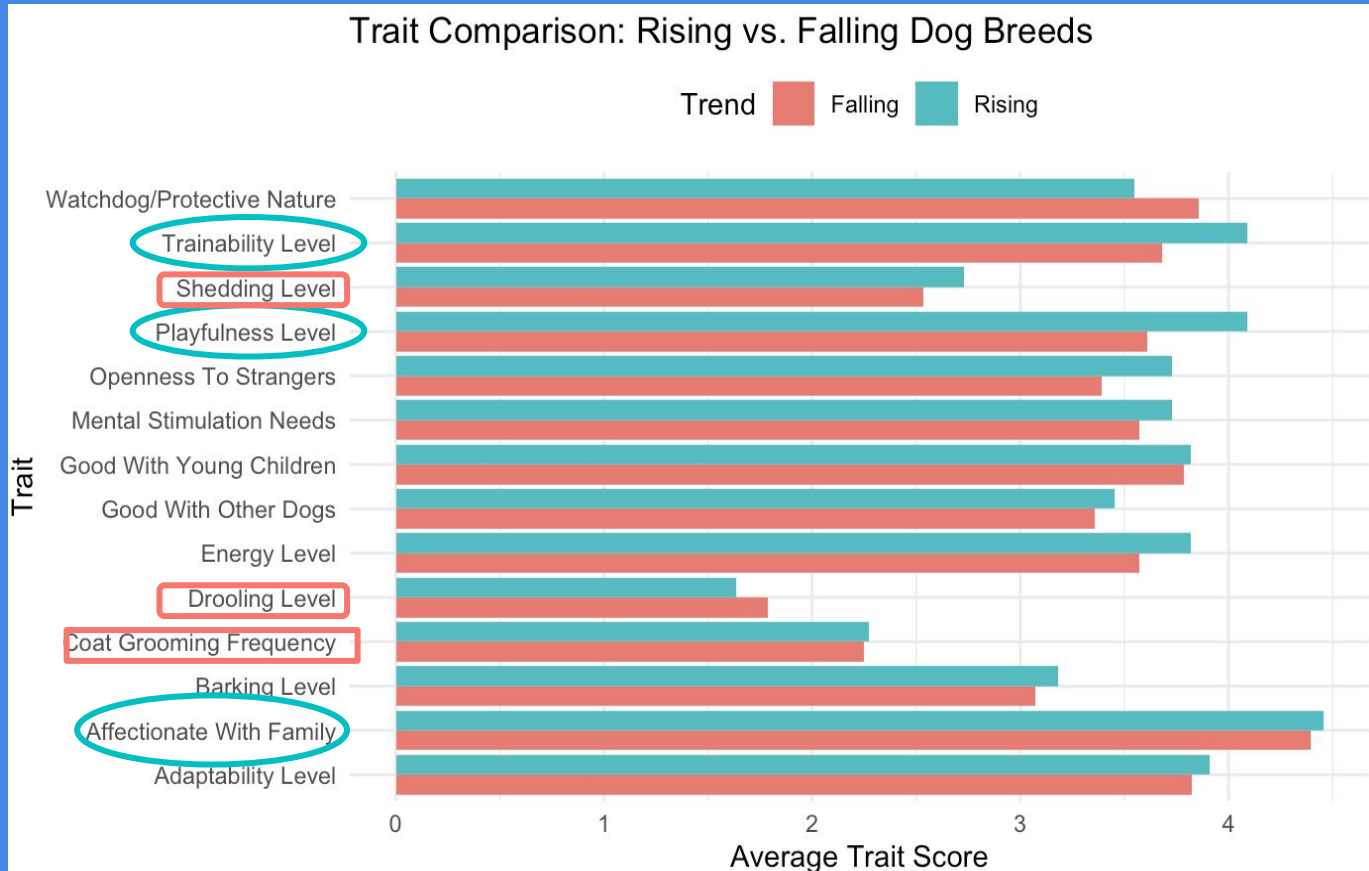


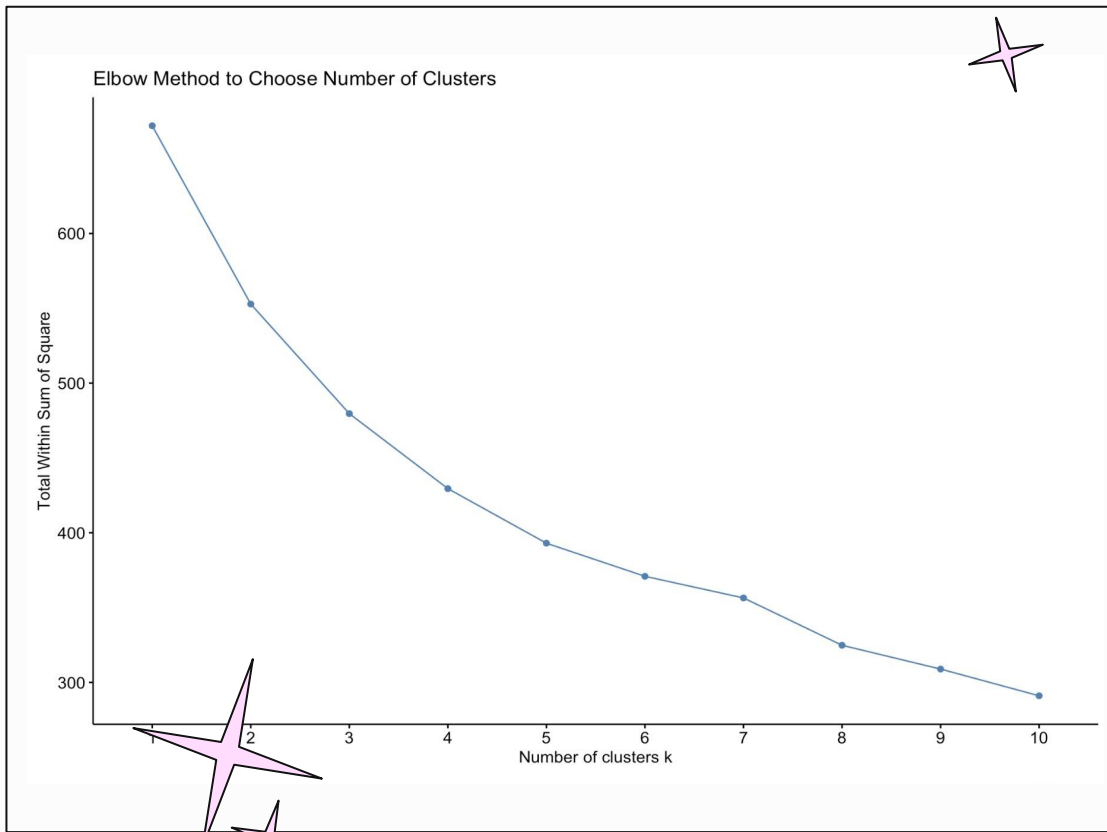
- Which breeds are fading out?

Top 5 Falling Dog Breeds (2013–2020)



- What personality traits differentiate rising dog breeds from falling ones?





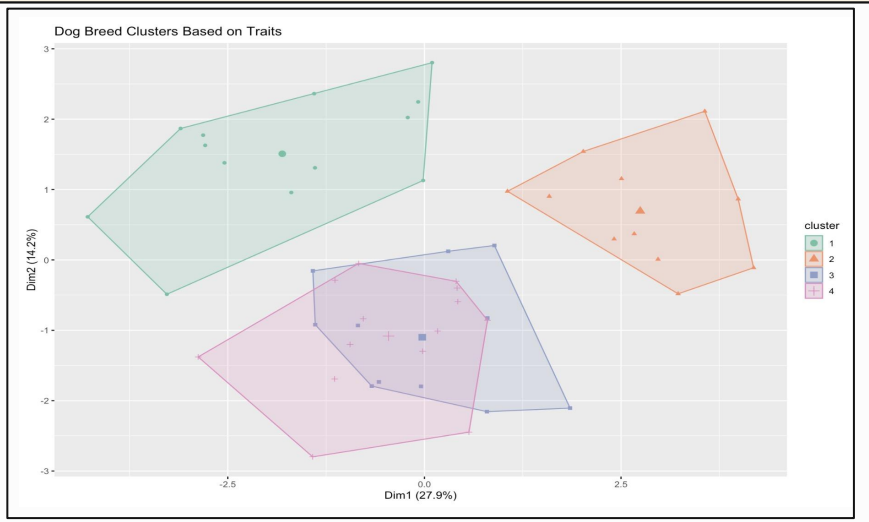
195 dogs' species



K-means

How well the dog breeds, based on their traits, group together for different values of k (clusters).

Looking for the “elbow” in this curve to decide how many distinct breed-type groups make the most sense.



Combinations of them that explain the most variance

Colors represent clusters — i.e., groups of breeds with similar traits, as determined by k-means

How well-separated the clusters are

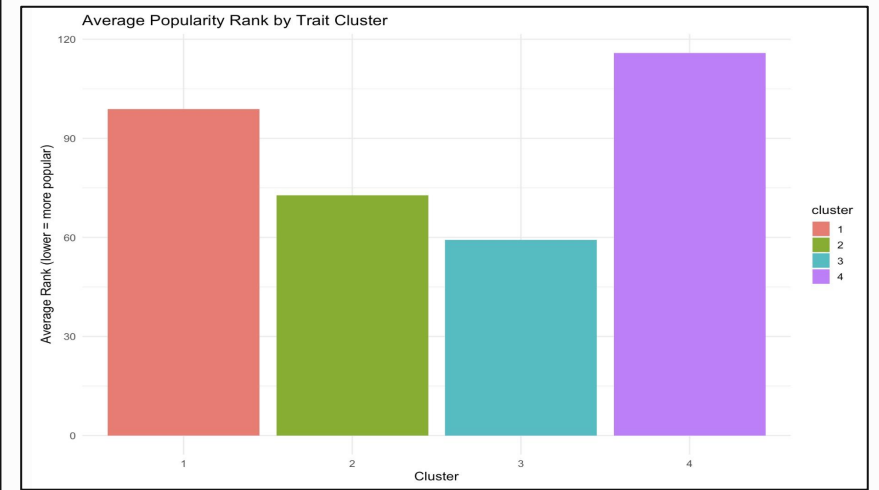
How compact or spread out each cluster is

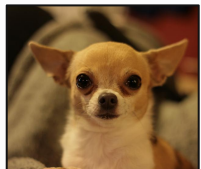
🧠 Cluster 1: High trainability, affectionate, moderate energy → "Family-Friendly, Obedient Breeds"

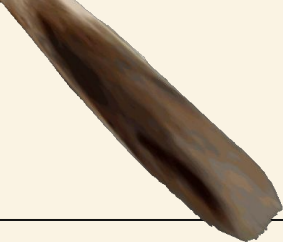
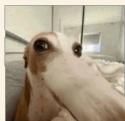
⚡ Cluster 2: Super high energy, low trainability → "High-Drive Working Dogs"

🛏 Cluster 3: Low energy, low shedding → "Laid-Back Companions"

💆 Cluster 4: High grooming needs, moderate traits → "Show Dogs or Fancy Breeds"







Thank you

