

# Animal\_Shelter\_Adoption\_Analysis



Milena Bebelska



# Introduction

- Which animals are adopted most frequently?
- Does breed, gender, age, or color matter?
- What are the most common outcomes for animals (adoption, euthanasia, return to owner)?
- Are there differences between dogs and cats?

## Summary of Key Findings

In total, 72,365 animals were analyzed in the Austin Animal Center Shelter Intakes and Outcomes dataset.

The analysis revealed several important insights:

- Dogs and cats are the most frequently adopted animals.
- Based on the intake and adoption data, dogs are adopted slightly more often than cats.

Furthermore, several factors were found to influence adoption rates:

- Breed: Certain breeds, particularly mixed-breed dogs, are adopted more frequently than others.
- Gender: Gender plays a role — neutered males and spayed females are adopted more often compared to unaltered animals.
- Age: Younger animals, especially those under one year of age, are significantly more likely to be adopted.
- Color: Coat color also has an impact — animals with more common or lighter colors (e.g., black and white, brown) tend to be adopted more quickly.

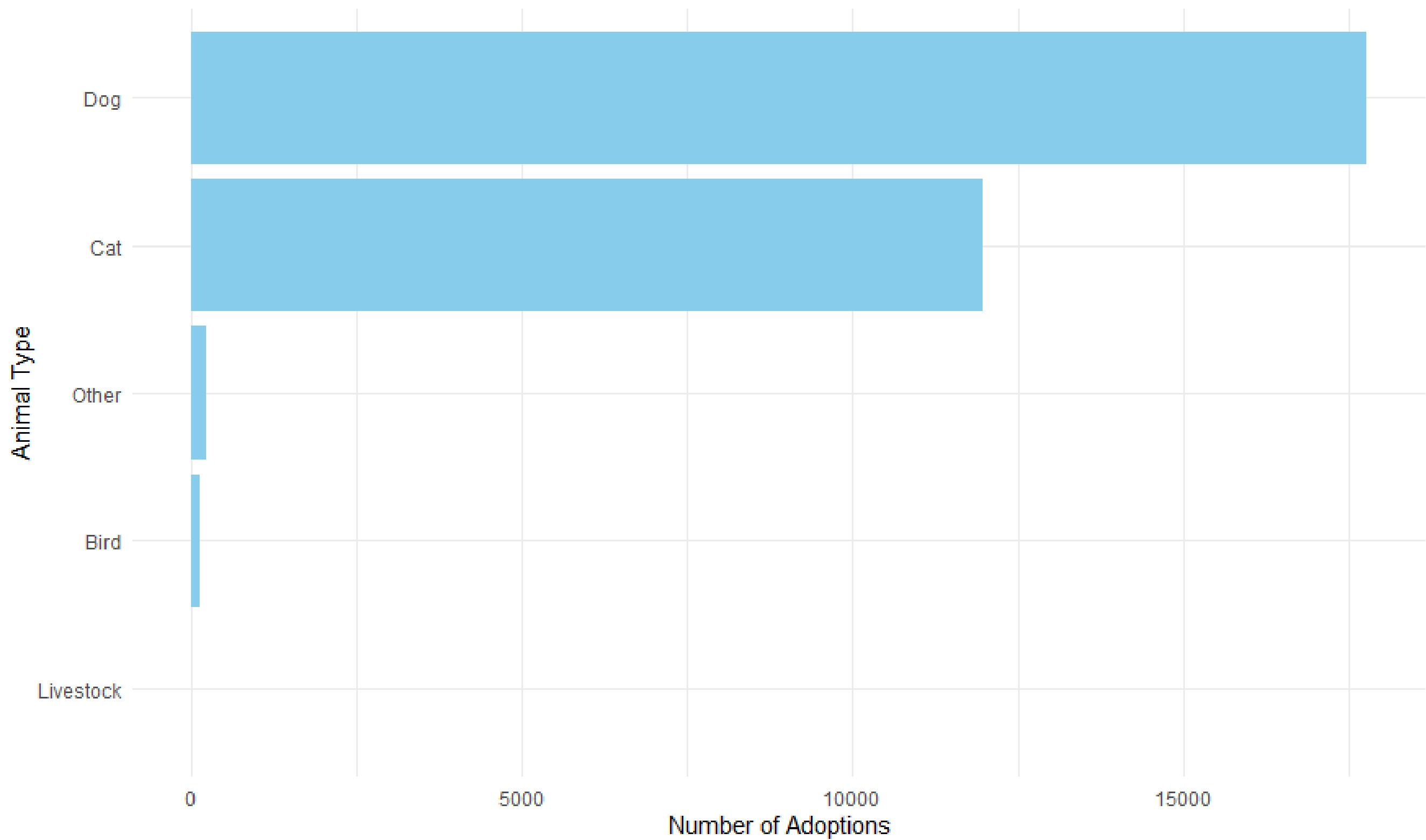
Regarding age specifically:

- Puppies (dogs under 2 months old) account for 27.4% of all adoptions.
- Dogs aged 2–6 months account for 18.3% of adoptions.
- Dogs aged 6–12 months account for 8.3% of adoptions.

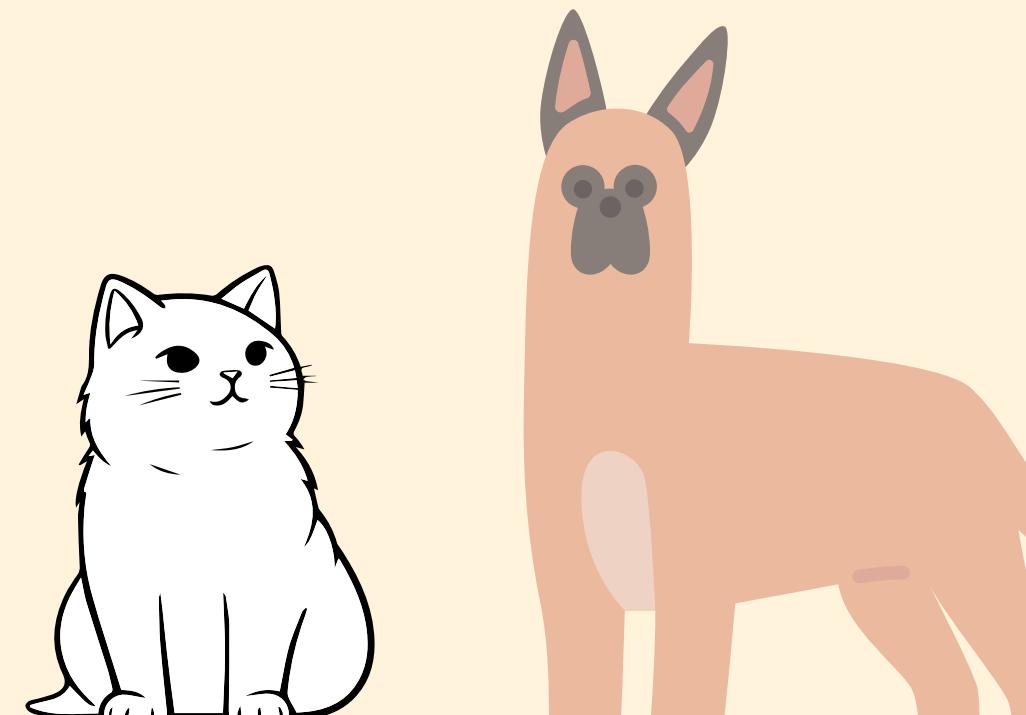
**This means that nearly 54% of all adoptions involve dogs under one year old, demonstrating a strong preference for adopting puppies over older animals.**



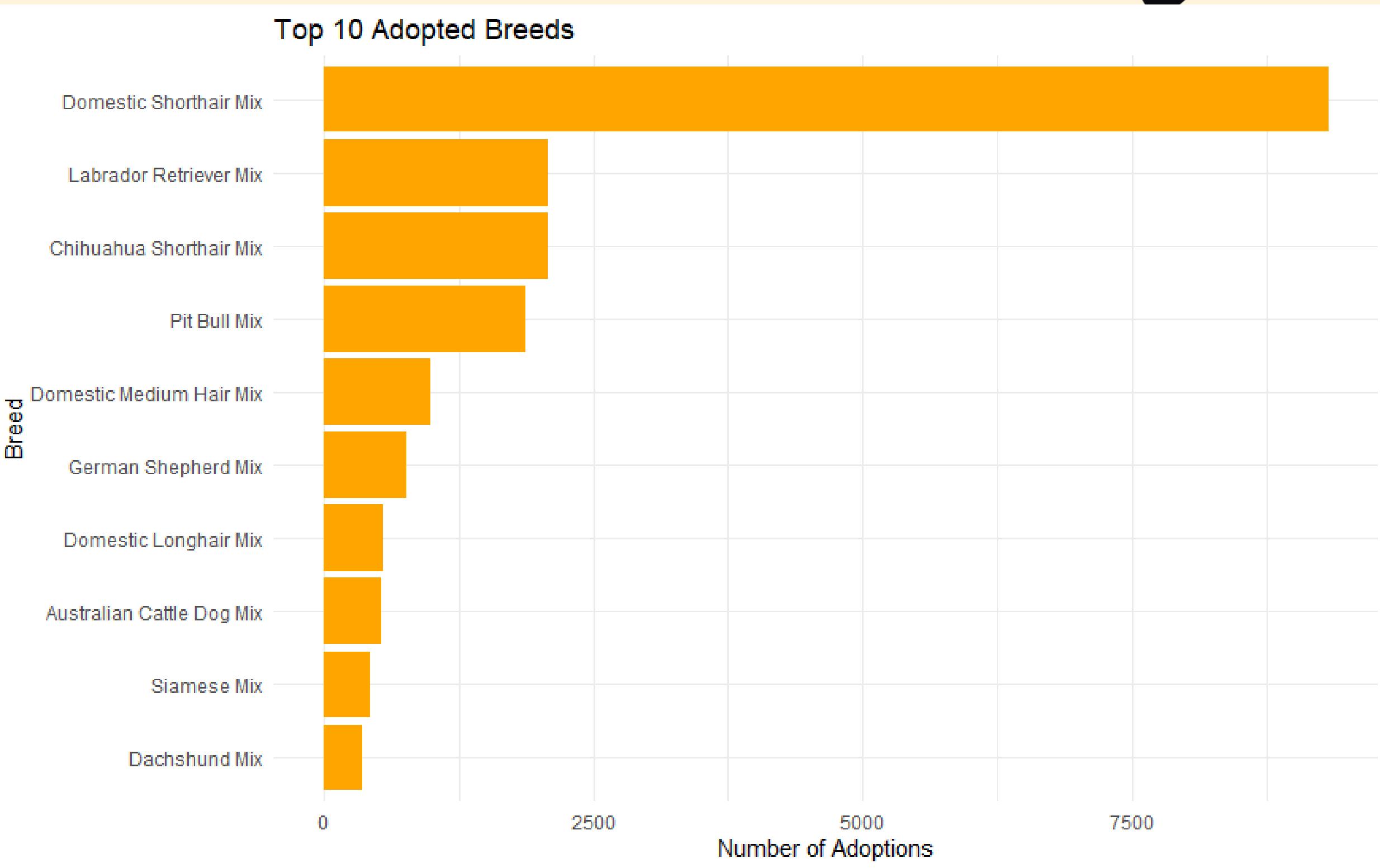
## Which Animals Are Adopted Most Frequently?



- Dogs and cats are the most frequently adopted animals.
- Based on the intake and adoption data, dogs are adopted slightly more often than cats.

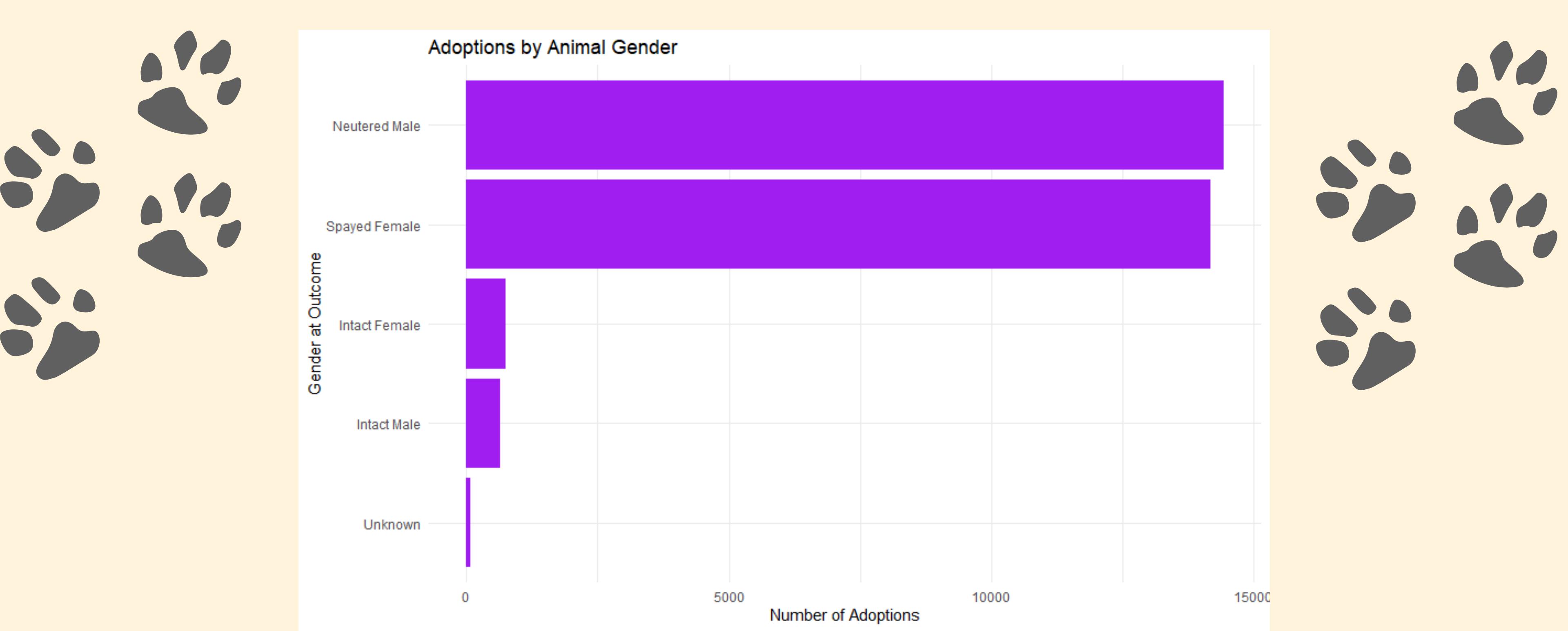


**Does breed, gender, age, or  
color matter?**



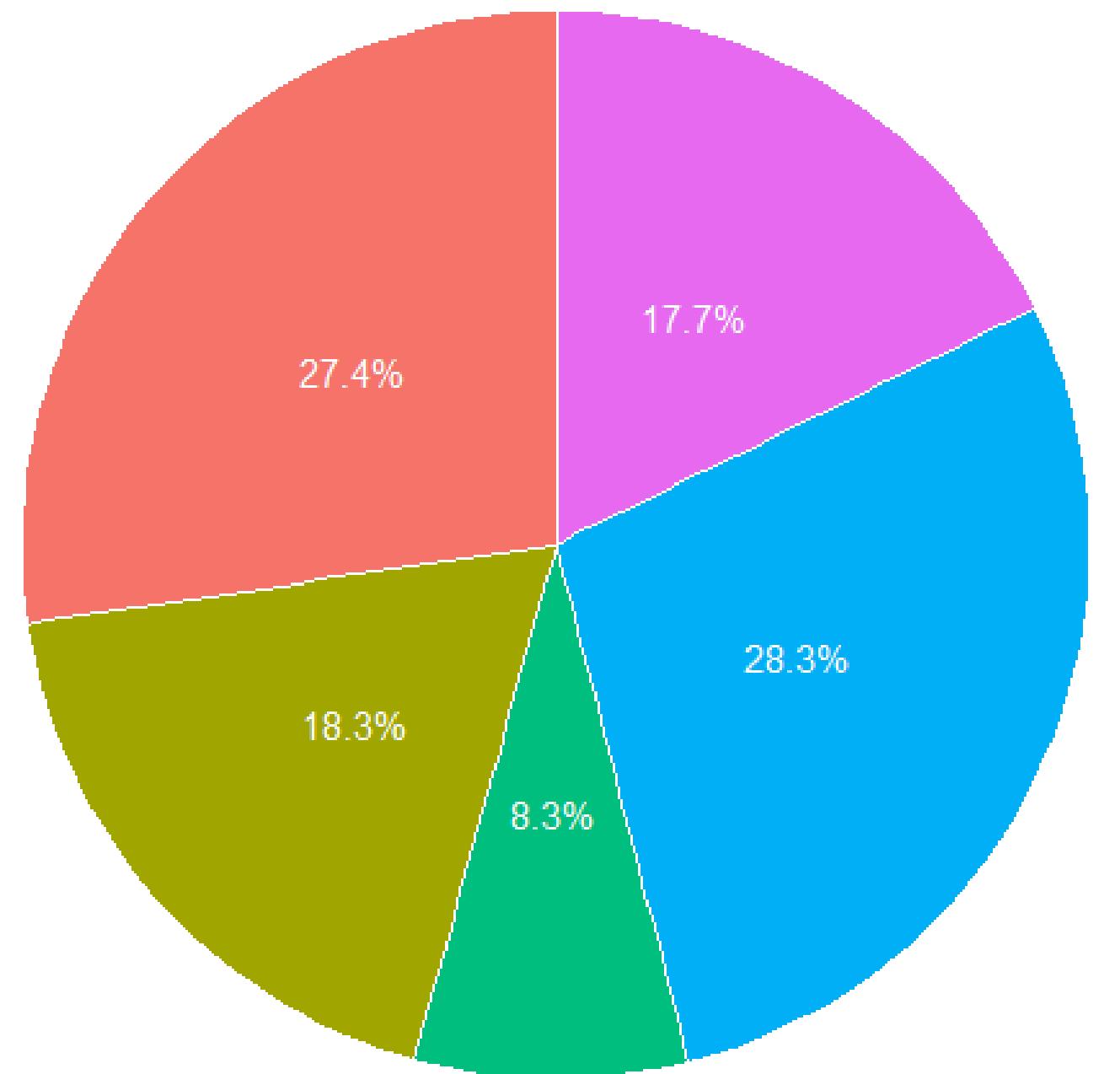
Yes, these factors influence adoption rates:

Breed: Certain breeds, especially mixed-breed dogs, are adopted more frequently than others.



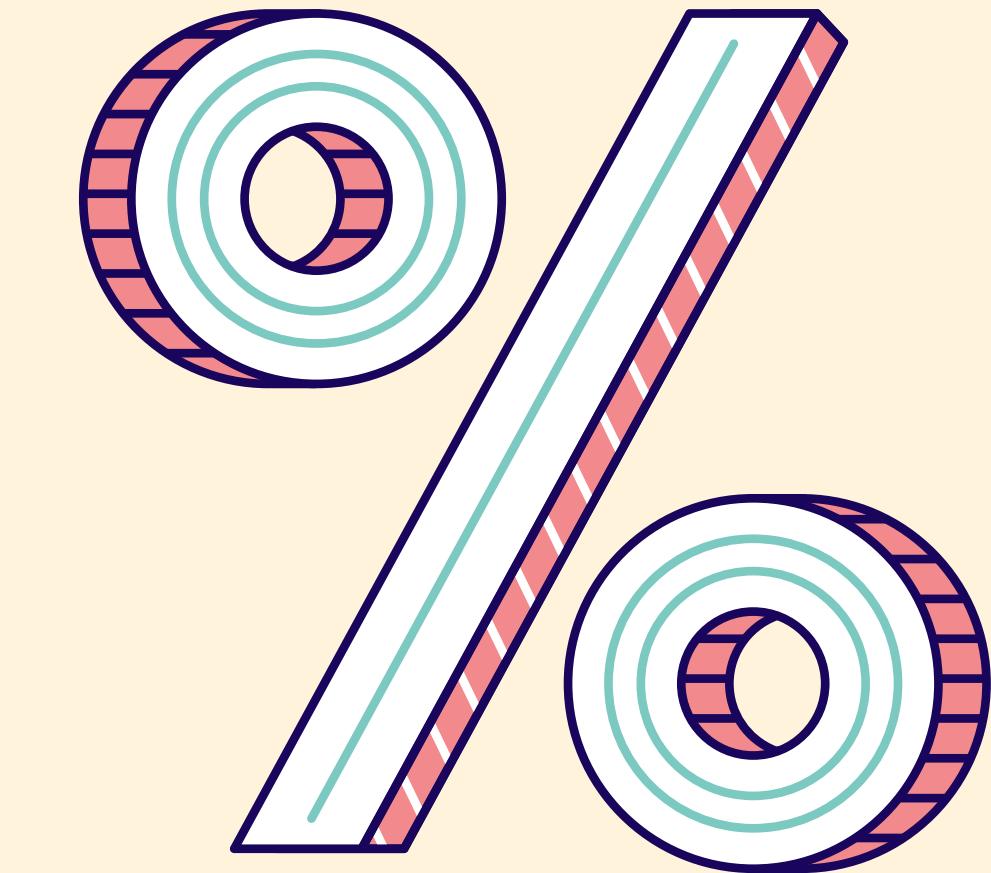
Gender: Gender matters — for example, neutered males and spayed females are adopted more often compared to unaltered animals.

### Adoptions by Age Group (%)

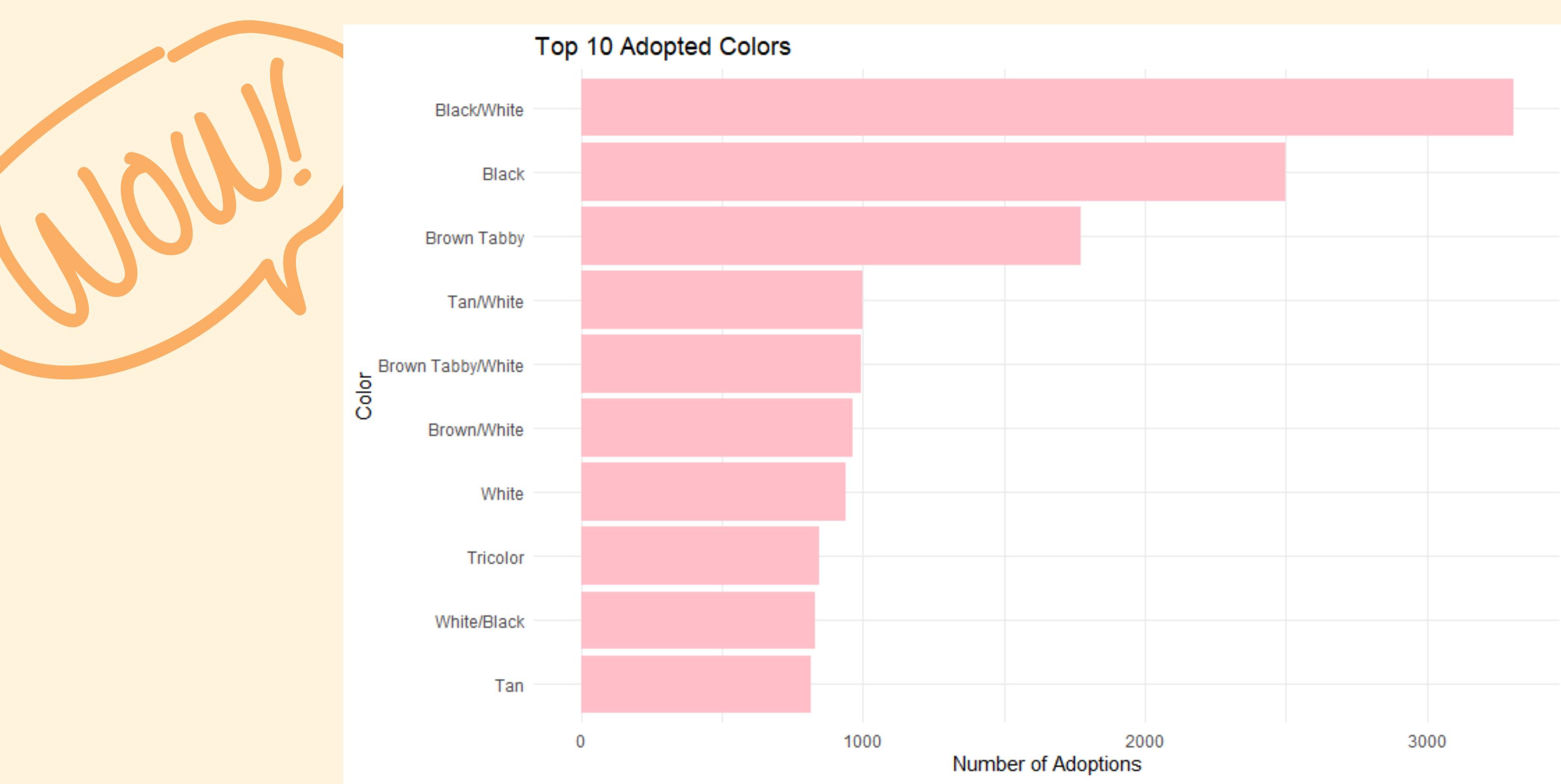


Age Group

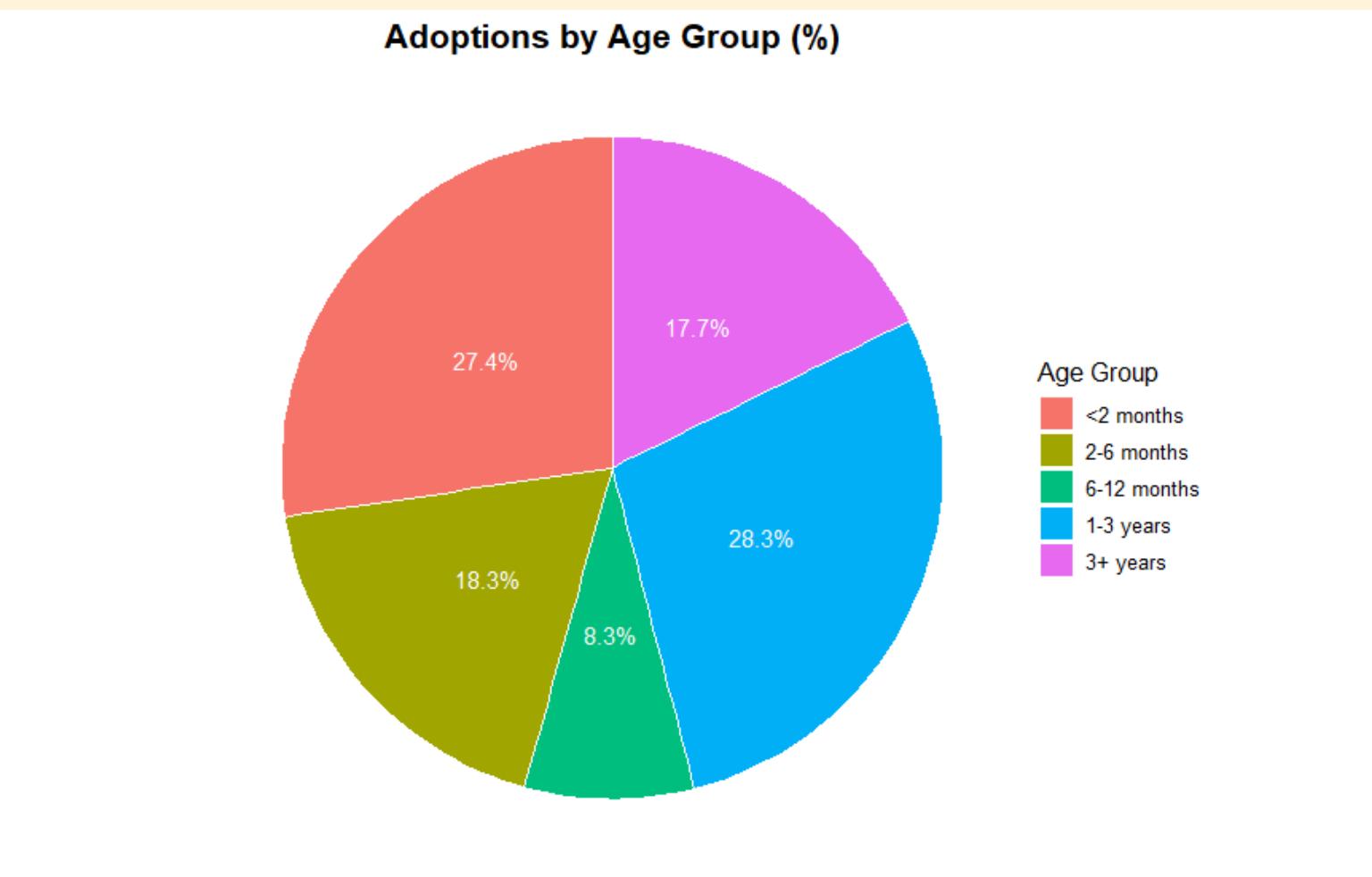
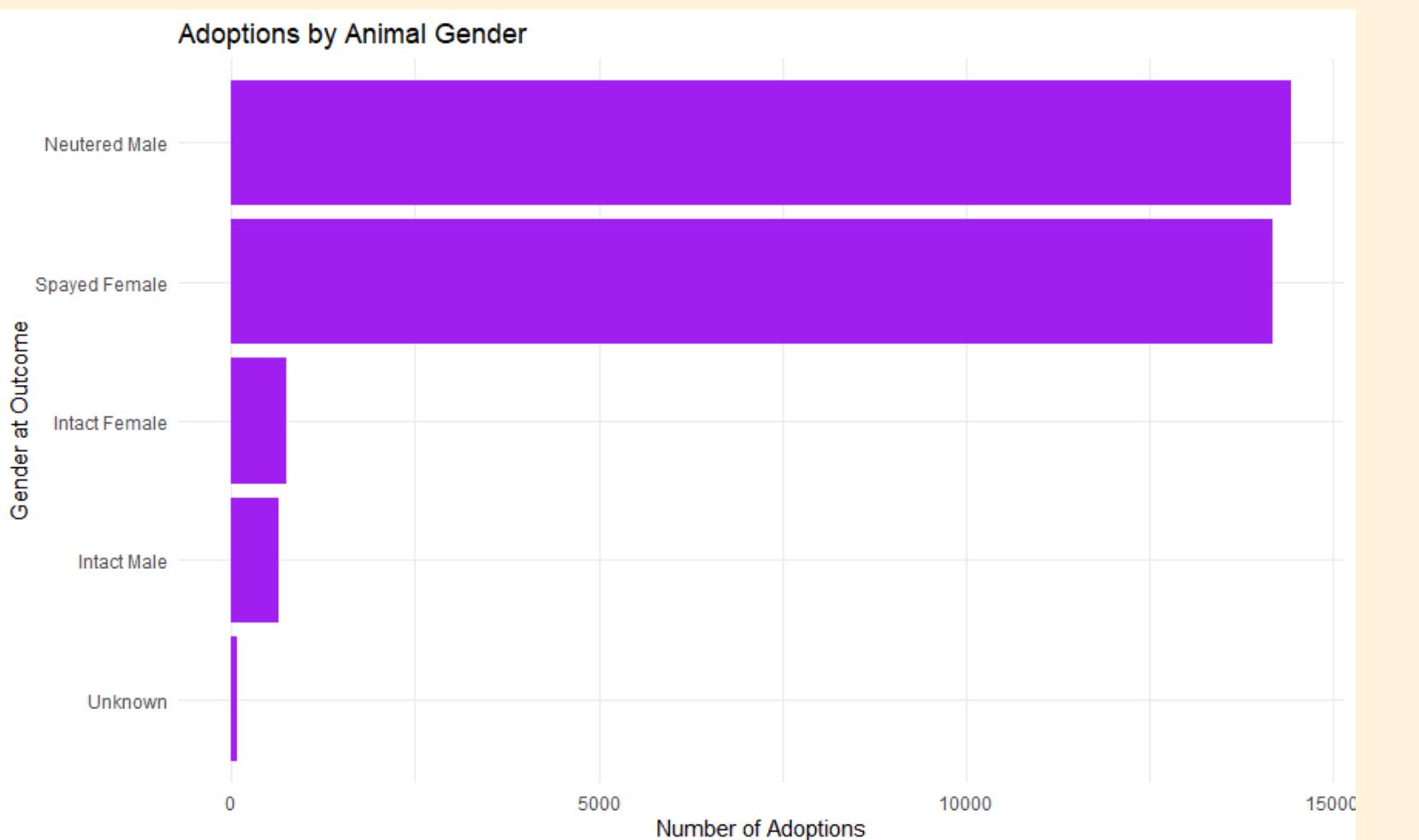
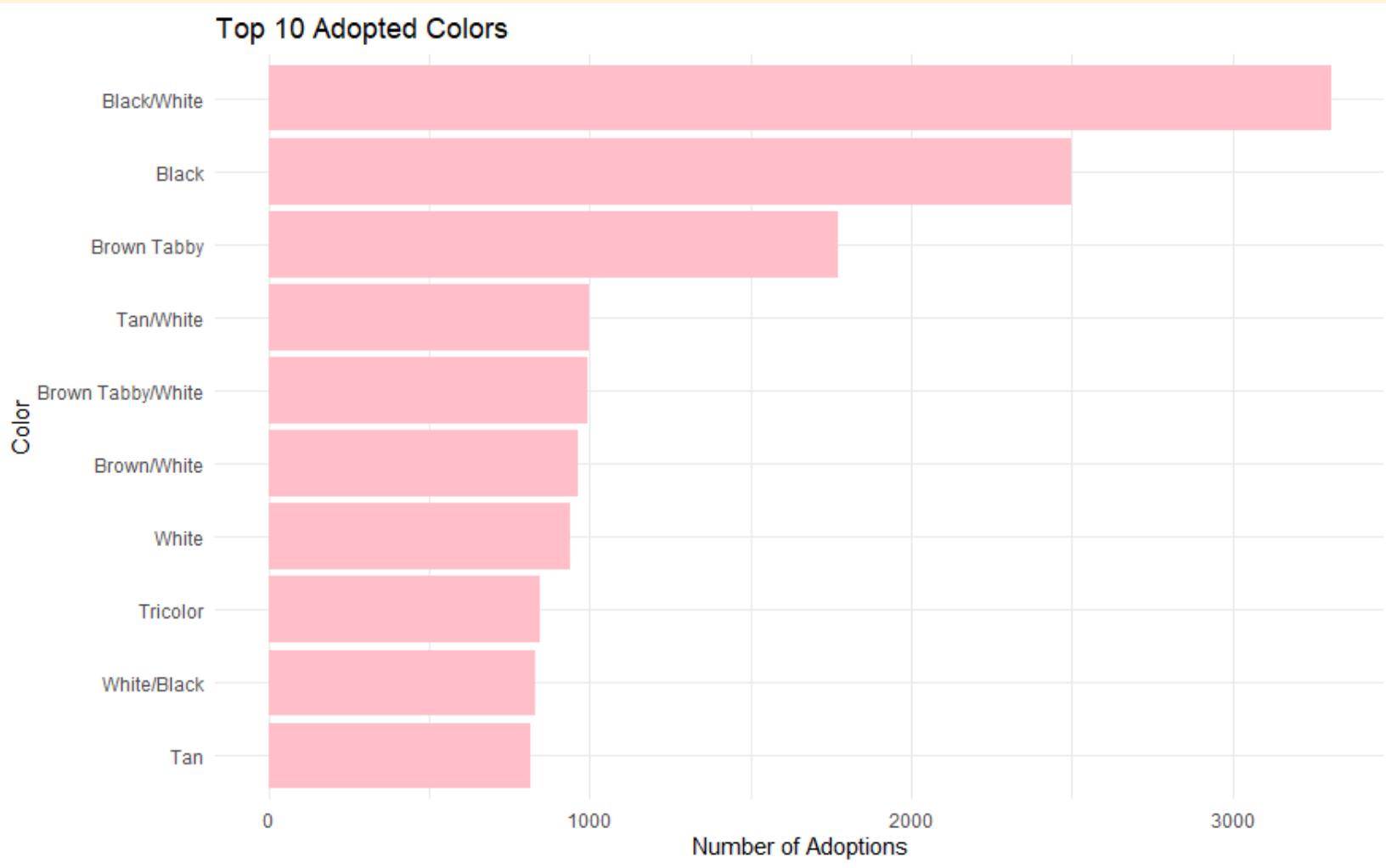
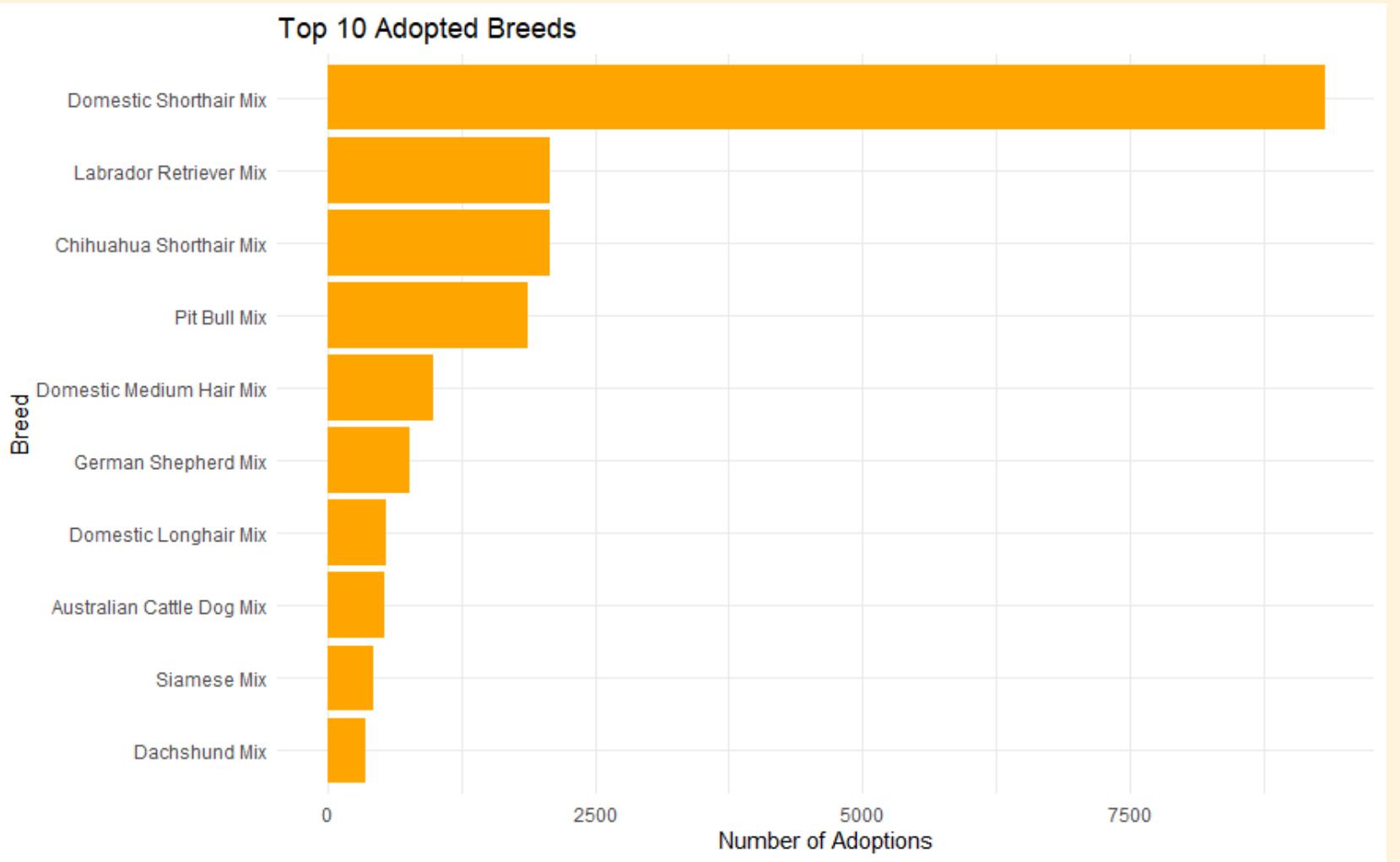
- <2 months
- 2-6 months
- 6-12 months
- 1-3 years
- 3+ years



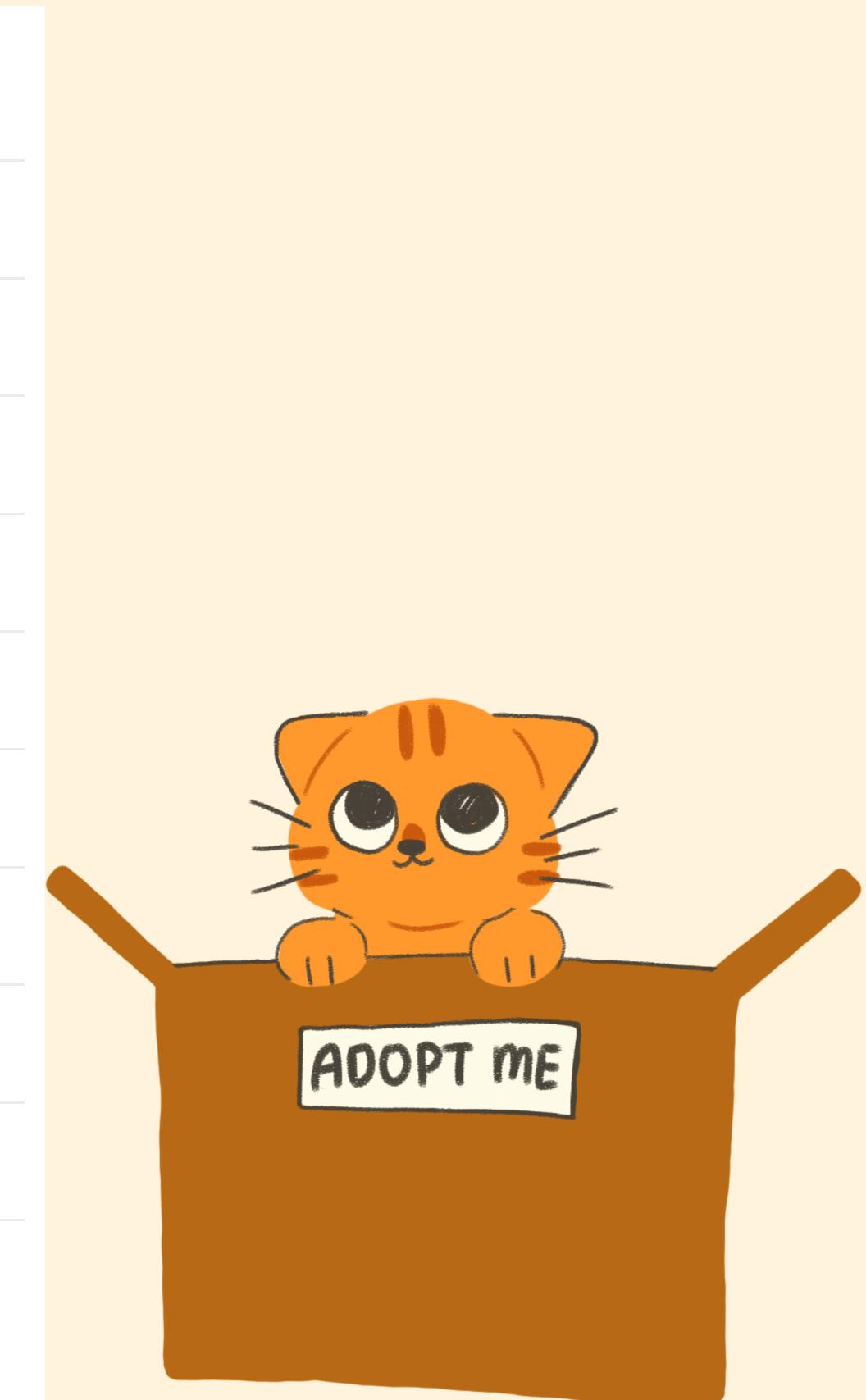
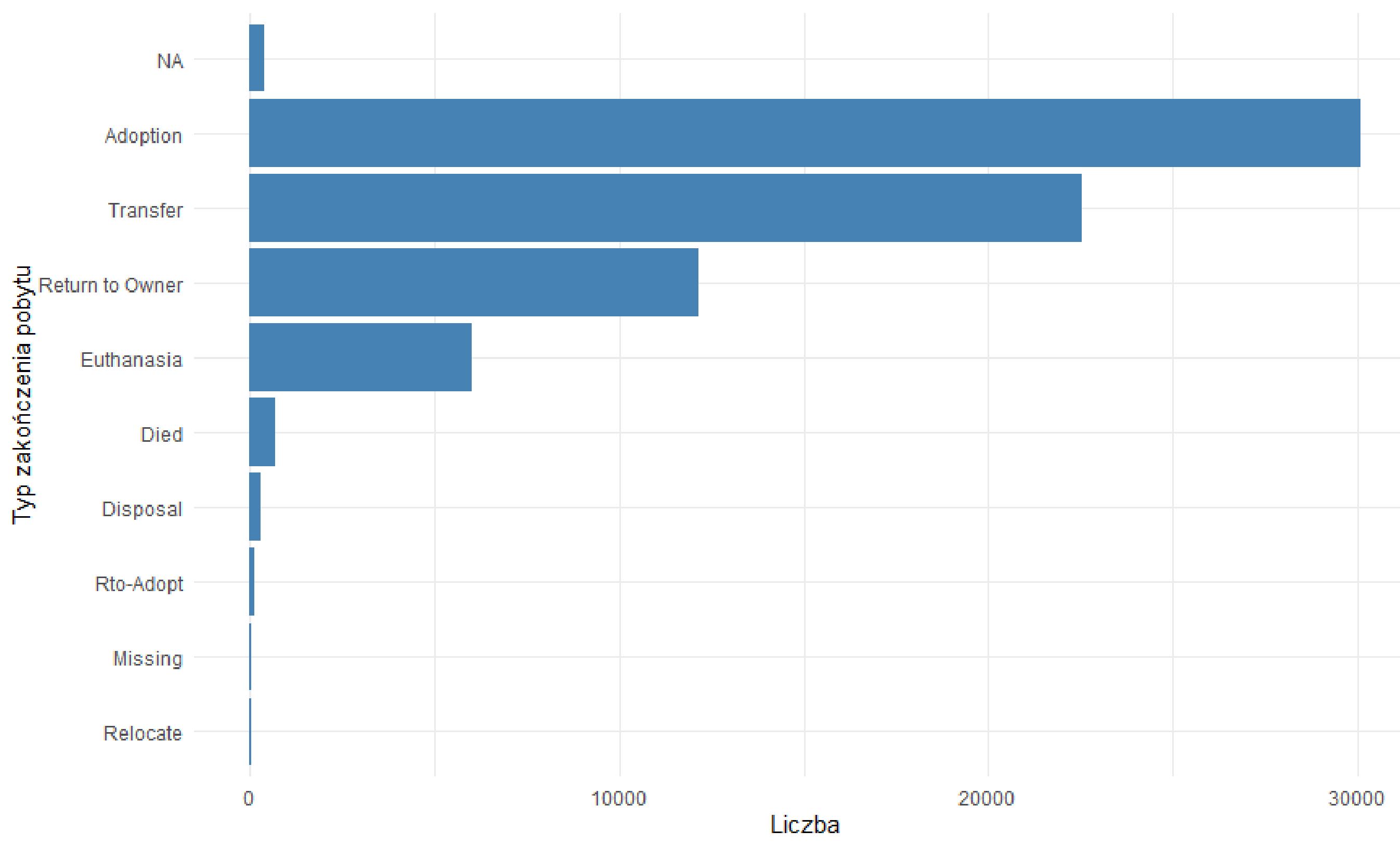
Age: Younger animals (especially those under one year of age) are significantly more likely to be adopted.



Color: Color has an impact as well — animals with more common or lighter coat colors (e.g., black and white, brown) tend to be adopted more quickly.



## Distribution of Animal Shelter Outcome



Adoption is by far the most common outcome for animals at the shelter. Other outcomes, such as return to owner or euthanasia, occur much less frequently.

Types of animals that end up in the shelter

Typ zwierzęcia

Dog

Cat

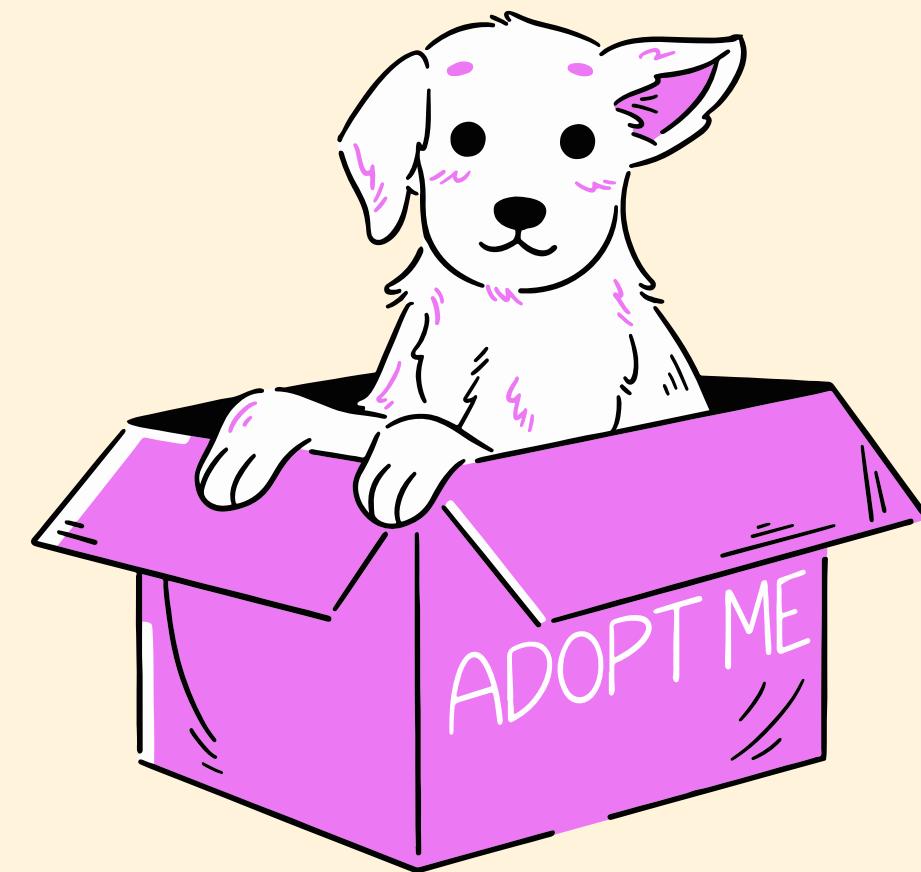
Other

Bird

Livestock



Liczba



Dogs are admitted to the shelter more frequently than cats.

Dogs also tend to have slightly higher adoption rates compared to cats.

**This project provided a comprehensive analysis of animal intakes and outcomes at the Austin Animal Center.**

**Key insights into adoption trends were identified, particularly the significant influence of age, breed, gender, and coat color on adoption likelihood.**

## **Source of data**

<https://www.kaggle.com/datasets/aaronschlegel/austin-animal-center-shelter-intakes-and-outcomes>