

Pawsitive Profiling

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The main objective of this study is to find popular trends of the dogs that are adopted in the United States for a class project. Pets are an important part of a family dynamic for many around the globe. Recognizing trends and popularity among types of dogs can be useful for anyone looking to adopt a pet or simply for educational research.

SMART goals are also detailed for this project. For specificity, the goal is to analyze and visualize trends in dog adoptions across the United States using data to identify patterns in dog types, characteristics, and adoption popularity. Next, create and present different graphics to effectively communicate adoption trends for seven dog types. To achieve these goals, GitHub and RStudio were utilized to clean and analyze data for visual processing in addition with Shiny and Google Slides for presentation. Insights into dog adoption and trends can inform adopters and researchers on the most family-friendly, popular, and size-suitable dogs for various households, enhancing pet adoption decision-making. Finally, these tasks are completed in a timely matter of 3 weeks from data gathering to final presentation as highlighted in the class schedule and assignment deadline.

Raw data was obtained through an open API on GitHub, which has been referenced below. Using the API, data was transferred into RStudio. Prior to analysis, data was reorganized and cleaned for visuals and Shiny app. A few columns were removed containing unnecessary data, the remaining were renamed, and formatting was changed to prepare for visualizations. Several visualizations were created which include word count images, bar plots, scatterplots, and a heat map.

Results reveal that companion dogs are playful, affectionate, and loving dogs. Their height ranges from 7 inches to 18 inches. Popularity ratings for companion dogs include the most popular, popular, and unpopular. They are also affectionate and family friendly dogs. Guardian dogs are brave, loving, and stately. Their average height and weight are 25 inches and 50 pounds. For guardian dogs, popularity ratings are neutral, and they are more family friendly than child friendly. Herding dogs are intelligent and clever, and most dogs are 20 inches and 50 pounds. Herding dogs are not as popular as guardian or companion dogs. Lastly, most herding dogs are low in family

affection and child friendliness compared to both companion and guarding dogs. Hound dogs are mostly serene, and most are 25 inches to 65 pounds. Hound dogs are mainly rated as unpopular with high family affection and low child friendliness. Sporting dogs are retriever and spaniel dogs (silky coats and drooping ears), and most are between 22.5-25 inches to 55-60 pounds. Their popularity ratings are mostly neutral and rate high for family and child friendliness. Terrier dogs are like companion dogs and most dogs are between 13-15 inches and 18 to 40 pounds. Terrier dogs, like hound dogs, are also rated higher for being unpopular, however, most are rated high for family and child friendliness. Lastly, working dogs are faithful and brave like guardian dogs and most dogs are between 20-25 inches and 80 pounds. The popularity ratings are mostly neutral like guardian and sporting dogs. Unlike most of the other dogs discussed, working dogs rate high for family affection and child friendliness.

To highlight, here are the most noticeable patterns. There is not one dog type that is unpopular among the adopted dogs in US. This is understandable because most dogs are known to improve health and happiness of most owners (Why Adopt a Dog, 2019). Furthermore, companion dogs have the smallest ratio for height and weight. Guardian dogs, however, have the highest ratios. Compared to most dog types, terrier dogs have the best averages for height and weight despite being rated as less popular. Unfortunately, guardian, herding, and working dogs rate high for family affection but also rate low for child friendliness.

In conclusion, regardless of dog type, most dogs are loving, brave, perfect, faithful, and intelligent; hence considered ‘top of the list of the most popular pets’ (7 Most Popular Pets to Have - My Pets Wellness, 2024). Dogs are considered a human’s best friend, and these are just some statistics that are highlighted. Additional research can be done to gather more evidence for dogs that are adopted more frequently, especially in the United States.

References

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Why Adopt a Dog? | Passion 4 Paws. (2019, March 18). *Passion 4 Paws*. <https://www.passion-4-paws.org/why-adopt-a-dog/>

7 Most Popular Pets to Have - My Pets Wellness. (2024, February 11). *My Pets Wellness Veterinary Hospitals*. <https://mypetswellness.net/7-most-popular-pets-to-have-2/>