## Public Perceptions of Dog Acquisition: Sources, Rationales and Expenditures

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## Executive Summary

Researchers conducted an online survey of more than 1,500 U.S. residents in Fall 2015 to learn more about how and why people acquire dogs, characteristics they prioritize when selecting a dog and expenditures they make on dogs. Preliminary findings indicated that the most common means of obtaining dogs were adoption, receiving a dog as a gift from a friend or family member, and directly purchasing from a breeder on-site where the dogs were bred or kept. The most common rationale for acquiring a dog was ethical, namely because "it was the right thing to do." The next two most common reasons were wanting a specific breed or type of dog and previous experience. A majority of participants indicated that compatibility with owner lifestyle, behavior and physical health were very important in selecting a dog. The most commonly reported pet service used was that of a veterinarian. Spending was highest on veterinary care and dog-health products for single-dog households, but for those with two or more dogs, food was the biggest reported expense. Further analyses are needed to determine the nature and strength of relationships between demographic and motivational factors for dog selection, acquisition method and spending.

Given that the results presented here are preliminary and absent of statistical analysis that might provide greater insight and clarity, they should be interpreted cautiously. Further analyses are pending.

Keywords: dogs, acquisition, rationales, preferences, spending

## Introduction

In the U.S., steady, high demand for companion dogs has generated interest in people's motives for obtaining dogs and their related purchasing behaviors and preferences. For example, Weiss et al. (2012) reported that adopters of shelter dogs ranked appearance as the most important selection factor for puppies and adult dogs. They also considered the dog's behavior and temperament as important. Earlier research by Lepper et al. (2002) indicated that age, coat color, breed (whether the dog was purebred or not) and health were the factors that most strongly influenced dog adoption in a California animal shelter. Further, according to Tesfom and Birch (2012), previous owner experience primarily influenced people's decisions about whether they should obtain a dog and which breed they selected.

Few studies, however, focused on why people elect to procure or avoid dogs from particular sources or the factors influencing their choices. For example, while shelter or rescue dogs can make excellent pets and are sought after by many, uncertainties about a dog's behavioral history and tendencies may deter some people. In fact, several studies indicate that dogs obtained from shelters often exhibit behavioral problems, which may lead to failed adoptions and, ultimately, their return (Wells and Hepper, 2000).

On the other hand, dogs obtained from breeders may be viewed as desirable given the opportunity to select the preferred breed and gender and to shape the dog's early life experiences. Yet, puppies and adult dogs obtained from breeders and pet stores may also demonstrate problem behaviors or may turn out to be incompatible with their caretakers' lifestyles and/or expectations, especially without due diligence in researching the breed of interest. Depending on the breeder's management practices, concerns pertaining to dog health and well-being may also arise (these may also apply to shelters and rescues). Tesfom and Birch $(2009,2012)$ noted that the acquisition of dogs entails considering the decision to obtain a dog, the choice of breed and seller selection. They also reported that most dog owners in their study purchased their dog from a pet breeder and the next most common source was an
animal shelter. Further, their studies indicated that single people, couples and parents tended to prefer adoption from shelters, rescues or people aiming to rehome their own dog over sourcing from a pet store or directly from a breeder (Tesfom and Birch, 2009). Still, reasons for these preferences were not clear. This study, therefore, aimed to examine U.S. adults' preferences for sources from which to obtain dogs, explore the reasons for source preferences and investigate related spending on companion dogs.

## Research Methods and Data

## Survey Instrument

In October 2015, the Purdue University research team used Qualtrics, an online survey tool, to gather data regarding the spending behaviors of dog-owning households in the United States. They also inquired about animal ownership, dog acquisition and general spending habits.

Online surveys have become a popular method of study administration due, in part, to the increasing Internet availability in the U.S. (Fricker, R. D., \& Schonlau, M., 2002). More than 93 percent of the population lives in areas offering wired broadband service, and about 98 percent have access to either wired or terrestrial wireless connectivity at speeds of at least 3 megabits per second for download and 768 kilobits per second for upload (NTIA \& FCC, 2013).

Lightspeed GMI, a New Jersey-based company that specializes in online data collection, administered the survey and used a double opt-in panel to obtain a representative sample of the U.S. population based on gender and age (U.S. Census Bureau, 2010 Census, Revised 2014); education and income (U.S. Census Bureau, 2008-2012); and resident region of the United States. Participants had to be at least 18 years old.

## Sample Summary Statistics and Demographics

The national-scale survey sample contained 1,523 responses; however, this paper focuses specifically on dog owners. Consequently, the researchers isolated 669 dog-owning households from the original data set to analyze. Widmar and McKendree (2013) found that 48 percent of households in their sample reported owning a dog, which is similar to the 44 percent of dog-owning households identified in this sample. Table 1 compares the dog owners' demographics with non-dog-owning households and the overall survey sample's demographics.

Table 1. Summary Statistics (\% of responses)

| Variable Descriptions | $\begin{gathered} \text { Dog Owner } \\ (\mathrm{n}=669) \end{gathered}$ | Non-Dog-Owning Households $(n=854)$ | Total Sample $(n=1,523)$ |
| :---: | :---: | :---: | :---: |
| Gender |  |  |  |
| Female | 56\% | 53\% | 49\% |
| Male | 44\% | 47\% | 51\% |
| Age |  |  |  |
| 18 to 24 years | 15\% | 11\% | 13\% |
| 25 to 34 years | 20\% | 9\% | 14\% |
| 35 to 44 years | 19\% | 12\% | 15\% |
| 45 to 54 years | 20\% | 19\% | 19\% |
| 55 to 65 years | 16\% | 22\% | 19\% |
| 66 to 88 years | 11\% | 26\% | 20\% |
| Annual Pre Tax Income |  |  |  |
| Less than \$25,000 | 19\% | 30\% | 25\% |
| \$26,000-\$50,000 | 24\% | 25\% | 25\% |
| \$51,000-\$75,000 | 22\% | 15\% | 18\% |
| \$76,000-\$100,000 | 15\% | 10\% | 12\% |
| \$101,000 or More | 19\% | 21\% | 20\% |
| Educational Background |  |  |  |
| Did not graduate from high school | 2\% | 1\% | 2\% |
| Graduated from high school | 31\% | 31\% | 29\% |
| Attended college, no degree earned | 26\% | 25\% | 25\% |
| Attended college, bachelor's (BS or $B A$ ), associate or trade degree earned | 26\% | 27\% | 27\% |
| Attended college, advanced (MS, PhD, law school) degree earned | 15\% | 16\% | 16\% |
| Region of Residence |  |  |  |
| Northeast | 15\% | 21\% | 18\% |
| South | 39\% | 36\% | 38\% |
| Midwest | 22\% | 23\% | 22\% |
| West | 25\% | 20\% | 22\% |
| Political Affiliation |  |  |  |
| Democratic Party | 31\% | 33\% | 32\% |
| Republican Party | 28\% | 26\% | 27\% |
| Independent | 29\% | 28\% | 28\% |
| None of the above | 12\% | 13\% | 13\% |
| Race |  |  |  |
| White or Caucasian | 85\% | 80\% | 82\% |
| Black or African American | 4\% | 9\% | 7\% |
| Asian | 3\% | 5\% | 4\% |
| Hispanic or Latino | 6\% | 4\% | 5\% |
| American Indian or Alaska Native | 0\% | 1\% | 1\% |
| Pacific Islander or Native Hawaiian | 0\% | 2\% | 2\% |
| Other (please describe) | 1\% | 0\% | 1\% |

## Results and Discussion

## Dog Acquisition

Respondents who indicated they owned a dog also answered questions about dog acquisition. There are many ways to acquire a dog; consequently, the survey list offered nine of the most common options, along with the choice to select "other." The tool allowed respondents to make multiple selections because many households have multiple dogs or have acquired dogs over the years in multiple ways.

Figure 1 shows that respondents most commonly acquired dogs through adoption (39 percent).
Receiving a dog as a gift from a friend or family member ( 28 percent) and purchasing directly from a breeder ( 24 percent) were also popular acquisition options. It was less likely for these respondents to purchase from a pet store ( 13 percent) or take in a stray dog ( 11 percent). The least common acquisition options, all with less than 6 percent, were buying from an online retailer, purchasing directly from a breeder's website and breeding by the respondent.

Figure 1. How dog-owning households acquired a dog


The survey presented participants with four different types of animal shelters and asked which type they had visited. Figure $\mathbf{2}$ illustrates the results. More than half of respondents had visited a municipal shelter (funded by state or local government), making it the most popular. In-home shelters/rescues were the least visited ( 30 percent).

Figure 2. Dog-owning participants who had visited an animal shelter


To better gauge participants' exposure to animal shelters and rescues, researchers asked if they had fostered for a shelter or rescue. Figure 3 shows the percentage of respondents who had fostered for a shelter or rescue. Only 17 percent had fostered a dog or puppy, and 10 percent had fostered another type of animal. Most respondents, 73 percent, had not fostered an animal of any kind.

In addition to asking respondents "how" they acquired dogs, the researchers wanted to know "why" respondents selected their specific options. Figure 4 shows that the most common reason for acquiring dogs in a particular manner was because "it was the right thing to do" (47 percent). The next two most common reasons were "they wanted a specific breed or type of dog" ( 33 percent) and "previous experience" ( 22 percent). The least popular reasons were: the dog came with a health guarantee ( 6 percent); the dog came with pet insurance ( 3 percent); and peer pressure ( 3 percent). These findings suggested that for a majority of participants, ethical concerns appeared to be the primary reason for adopting or otherwise obtaining a dog from the chosen source, followed by the desire for a dog meeting specific characteristics.


Figure 5. Characteristics dog owners look for or believe are most important in acquiring a dog


To identify which dog characteristics owners looked for or believed to be of greatest importance in acquiring a dog, the survey tool presented a list of dog characteristics and asked participants to indicate their degree of importance. Figure 5 shows the results of the characteristic ranking. Compatibility with owner lifestyle ( 60 percent), behavior ( 58 percent) and physical health ( 50 percent) were most commonly selected as important characteristics.

Respondents also indicated what they thought other people look for or find most important when acquiring a dog. As shown in Figure 6, respondents believed breed, appearance and cost were of greater importance to other people than to themselves. When asked what they thought others prioritized, 22 percent more respondents selected breed as very important (compared to their own responses); 30 percent more selected appearance; and 13 percent more selected cost as very important. Thirteen percent fewer respondents selected compatibility with owner lifestyle as a very important factor that other people consider when acquiring a dog. A potential reason for the discrepancies between what people identified as important dog characteristics for themselves versus others is that, in describing their own priorities, respondents may have been motivated by social desirability biases. In other words, people may have wanted to appear more socially responsible or ethical in responses pertaining to themselves, but did not feel so compelled when describing others' thought processes.

Figure 6. Characteristics dog-owning participants believe other people look for or find most important when acquiring a dog?


## Dog Services Used and Spending Habits

Dog-owning respondents selected which dog services they used from a list of popular options. The survey allowed them to make multiple selections. Figure $\mathbf{7}$ shows that the most commonly used service was those from a veterinarian, with 79 percent. Forty-two percent used dog groomers. Kenneling and dog training received almost equal selection, with 19 and 20 percent, respectively.


Respondents also indicated how much money they spent per month or year on seven different types of dog services. Figure 8 shows the average monthly household expenditure on dog products and services for self-reported one-dog households. Veterinary services were the highest monthly expense for singledog households; they averaged $\$ 196.42$ per household. The second highest expense was dog food, with a mean of $\$ 45.84$. Single-dog households reported spending an average of $\$ 7.35$ on dog clothes - the lowest expenditure compared to the other products and services.

Figure 8. Average monthly household expenditure on dog products and services for self-reported one-dog households ( $\mathrm{n}=423$ )


Figure 9 shows yearly expenditures for self-reported single-dog households. With a mean of $\$ 1,971$, veterinary expenses were still the highest. The next highest expenditures were dog health products, averaging $\$ 307.71$; dog food at $\$ 286$ on average; and dog treats, with an average of $\$ 272.14$. Dog clothes was the lowest expenditure category, with a mean of $\$ 52.81$.


Average monthly expenditures and standard deviations for self-reported two-dog households are shown in Figure 10. Dog food and veterinary care were the highest expenditure categories, averaging \$46.90 and $\$ 38.37$, respectively. Dog food and veterinary care also had the largest standard deviations when compared to the other categories. With a mean of $\$ 6.65$, two-dog households spent the least on dog clothes.

Figure 10. Self-reported two-dog households' average monthly expenditure and standard deviation on dog products and services ( $\mathrm{n}=168$ )


Figure 11 features the mean yearly expenditures and standard deviations for self-reported two-dog households. People spent the most on dog food and veterinary care, which averaged $\$ 446.81$ and $\$ 383.07$, respectively. Dog food and veterinary care also had the highest standard deviations. The dog clothes category was the lowest yearly expenditure for self-reported two dog households, with a mean of $\$ 88.82$.

Figure 11. Self-reported two-dog households' mean monthly expenditure and standard deviation on dog products and services ( $n=168$ )


Figure 12 shows self-reported three-dog households' mean monthly expenditures and standard deviations on dog products and services. Dog food was the highest expenditure category, with a mean of $\$ 76.35$. The dog food category also had the highest standard deviation (\$189.33) of all the categories. The next highest expense categories were dog grooming, veterinary expenses and dog treats, averaging \$31.24, \$27 and $\$ 21.76$, respectively. Three-dog households spent the least on dog toys, with a mean of \$4.17.


Figure 13 shows self-reported three-dog households' mean yearly expenditures and standard deviations for dog products and services. The highest expenditure category was dog food, averaging $\$ 520.98$. The next highest category was veterinary care at $\$ 349.02$ on average. With a mean of $\$ 8.46$, the dog clothes category was the lowest expenditure for three-dog households.

Figure 13. Self-reported three-dog households' mean yearly expenditure and standard deviation on dog products and services ( $n=47$ )


Figure 14 presents the mean monthly expenditures and standard deviations for households with four or more dogs. The highest expenditure was dog food, averaging $\$ 85.43$. The next highest expense was veterinary care, with a mean of $\$ 68.04$. Veterinary care also had the highest standard deviation (\$124.99). Participants spent the least on dog toys and dog clothes, averaging $\$ 10.03$ and $\$ 9.80$, respectively.


Households with four or more dogs' mean yearly expenditures and standard deviations on dog products and services are shown in Figure 15. Dog food, with a mean of $\$ 845.35$, was the highest expenditure for households with four or more dogs. The next highest category was veterinary care, with a mean of $\$ 601.48$. Dog food and veterinary care also had the highest standard deviations, \$1,494.13 and \$1,145.62, respectively.

Figure 15. Self-reported four-or-more dog households' mean yearly expenditure and standard deviation on dog products and services ( $\mathrm{n}=31$ )


## Conclusion and Impacts

This study revealed that participants' most common means of obtaining dogs were adoption, receiving a dog as a gift from a friend or family member, and purchasing directly from a breeder on-site where dogs are bred/kept. A majority of respondents said the reason for acquiring dogs in a particular manner was because "it was the right thing to do." This ethical rationale for selecting dogs is not surprising given that many groups appeal to public ethics in an effort to promote dog adoption from shelters. Further analyses are needed to determine if adopting dogs from shelters or rescues is associated with specific ethical viewpoints and the extent to which these dog owners may differ in their responses and motivation from others who recently obtained dogs. Another popular reason for acquiring dogs in a particular manner was wanting a specific breed or type of dog. This is likely to be associated with purchasing a dog from a breeder or store, although analyses are needed to ascertain such relationships. Previous experience was the third most common reason and is similar to that reported by Tesfom and Birch (2012).

The characteristics participants rated as very important in selecting a dog included compatibility with owner lifestyle, behavior and physical health. This suggests that regardless as to how dogs are made available to the public, these factors will influence decision making. Dog breeders should particularly note the importance of behavioral soundness, as well as physical health, to prospective buyers.

Veterinary services were the most commonly used pet service with dog owners in this study. Single-dog households also spent the most on veterinary care, followed by dog health products. However, for those with two or more dogs, food was the biggest expense. Wolf et al. (2008) reported similar veterinary service expenditures. Relationships between demographic factors and spending are needed to provide further insight into factors influencing purchasing patterns. Nonetheless, these preliminary findings should be of particular interest to veterinarians and pet product suppliers who may want to tailor public marketing and incentive programs accordingly.

Overall, interpret the results presented here cautiously. They are preliminary and absent of statistical analysis that might provide greater insight and clarity. Further analyses are pending.

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