

Attitudes and Trends in Pet Adoption and Overpopulation

*Joshua M. Frank, Ph.D., Executive Director
Foundation for Interdisciplinary Research and Education
Promoting Animal Welfare (FIREPAW)*

*Pamela Carlisle-Frank, Ph.D., President
Foundation for Interdisciplinary Research and Education
Promoting Animal Welfare (FIREPAW)*

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Running Head: Adoption

Abstract

Pet overpopulation is a serious problem in the U.S. with millions of animals being abandoned and euthanized each year. One solution to helping reduce the amount of unwanted and abandoned animals is to increase the level of adoption of unwanted companion animals.

The present study surveyed randomly selected households and randomly selected registered dog owners in the Capital District area of upstate New York. The purpose of this study was to explore the attitudes and trends surrounding purchasing pets from for-profit sources (i.e. breeders, pet stores) versus adopting companion animals from area shelters or rescue workers.

The results of the present study have several implications for public education programs. Results revealed that people tend to purchase their pets from for-profit sources rather than adopting them from shelters because they (a) are looking for a puppy or specific breed of dog, (b) have misperceptions of the costs and benefits about purebred dogs that they believe cannot be fulfilled by adopting shelter dogs, (c) were unaware that shelters have both puppies and purebred dogs, and (d) either made an impulse decision to buy their current pet or did not even consider visiting a shelter or adopting.

One approach to addressing the problem of pet overpopulation in the U.S. is to encourage people to adopt their companion animals from nearby shelters rather than purchase their pets from for-profit sources. The question then becomes, “How do animal welfare professionals convince the general public to adopt?”

In order to answer this question animal welfare advocates must first determine the attitudes and beliefs of those who typically purchase animals to determine why they choose for-profit sources and why they do not choose adoption.

This paper will present current trends in pet overpopulation, the most common reasons people give for acquiring pets, and findings regarding purchasing versus adoption. This paper will then present the results of the present study revealing the most common attitudes of people regarding their choices to purchase from for-profit sources versus adopting from shelters or rescue workers.

Background

While it is clear that the numbers are high, it is difficult to obtain a precise figure on the number of companion animals abandoned and euthanized. According to Hoyt (1983) approximately 13.5 million cats and dogs are put to death in the United States annually in shelters and community pounds. The Humane Society of the United States (1987) estimates the number of pets euthanized each year at 7.5 million, while a study by the American Humane Association puts the number at between 7.3 and 11.3 million. Rowan & Wilson (1985) estimate the number of animals euthanized between 8 and 10 million, Mackie (1992) estimates 7 to 15 million, Thornton (1991) estimates 16 million, and Carter (1990) estimates 13 to 17 million. Arkow (1994) extrapolated data from nine states to come up with a national estimate of 8.3 million animals sheltered and 5.7 million euthanized every year. On average, for the nine states, 7.6% of the total dog and cat population is sheltered every year and 5.2% is euthanized. The intake rate was found to be higher for dogs, but the euthanasia rates were similar. Arkow also concluded that the rate of

animals sheltered is lower than that found in studies from the 1980's which report rates in the high double digits.

A clearer statistical picture of the overpopulation problem emerges from looking at shelter statistics, although they can vary significantly by region. A study by Arkow & Dow (1984) found that in the Colorado Springs area which contains approximately 300,000 people, the local shelter receives over 50 animals per day. The authors estimated that almost one-quarter of all dogs and cats in the area pass through the shelter over the course of a year. Approximately 10% of the total regional dog and cat population is euthanized every year. The authors also estimated that 40% of the dog and cat population in the area will not be at the same address a year later.

Rowan (1992) has also reported that the number of animals being euthanized is significantly down from previous decades from about 20% of the previously owned animal population to 5% (or from 13.5 million to between 5 and 6 million in actual values).

Looking just at New York City data from the late 1800's on, Zawitstowski et al. (1998) indicate a peak in euthanasia rate per person at around the time of the depression, followed by a steep decline to about a tenth of the peak rate in the 1990's. The authors cite this as evidence of a general decline in euthanasia rates both per person and per animal sheltered. This conclusion is consistent with other studies, though the fact remains that millions of companion animals are still put to death in the U.S. each year.

These same authors also examined survey data on shelters nationwide. They found that there are an estimated 4,700 shelters in the United States that take in 100 or more animals a year. For the 22% responding in the latest survey (1995), about 45% of dogs came from animal control officers, 27% came from owner relinquishment, and the remainder came from other or unknown sources. Approximately 26% of dogs were adopted, 16% were reclaimed by owners, 55% were euthanized, and the remainder had unknown or other dispositions.

According to Kidd, Kidd, & George (1992), approximately 20% of dogs adopted were returned to the shelter or another source within six months. Similarly, Patronek, Moyer, & Glickman (1995) found that 18.8% of adopted dogs were subsequently returned.

And finally, strays comprise less than 15% of the overall dog population (Baetz, 1992). This estimate counts only "true" strays: dogs that have no owner rather than those that have temporarily become missing.

Why people acquire companion animals

Before exploring the motivations for adopting versus purchasing pets it is important to first examine some of the reasons people hold for acquiring companion animals.

For some companion animal owners the animal-human bond is as strong as the bond with any other family member (Flynn, 2000). In fact, DeGroot (1984) argues that the emotional attachment many humans have for their pet not only equals, but actually transcends the emotional attachment they form with other humans.

At first glance, it may seem that the number of people who are strongly bonded with their pet is very high. Studies report a high percentage of companion animal owners who state that the pet is a family member. For example, a survey by Friedmann et al. (1984) found that 88% of respondents agree with the statement, "The pet is a family member".

Hirschman (1994) also found a high percentage (80%) of pet owners who consider their pets to be family members. This research also searched for "emergent themes" in the human-animal relationship. One theme that was particularly interesting relates to "wildness", where owners seem to want some aspect of nature or wildness but not "too much wildness" in their animal. Animals perceived as "too wild" are often given up.

In a survey by Ory & Goldberg (1984), when pet owners were asked how attached they were to their pet, 72.9% described themselves as "very attached" while 27.1% described themselves as

"not very attached". These results are interesting in light of the fact that pet abandonment is likely to be closely tied to a low level of attachment.

In a survey by Salmon & Salmon (1983) in Australia, 46% of respondents gave "companionship" as the primary benefit of pet ownership. Twenty-seven percent gave "security/protection" as the primary benefit, 10% said "pleasure", 5% said "affection/love". Other answers included "an interest", "teaches children", "something for family to share", "prestige", and "made new friends through dog" (all between 1% and 5% individually). In the same survey, most respondents reported they derived happiness and companionship from their dog, yet only half felt that it was like a close friend to them.

In a survey of people in the Netherlands done by Endenburg et al (1994), the most commonly cited reason for acquiring an animal was companionship (79%). This reason was followed by "used to it" (29%), social/attachment (20%), social/taking care of an animal (20%), social/child-rearing considerations (14%), usefulness (13%), companionship for other animal (13%), social/tactile contact (12%), and health reasons (12%). Respondents were allowed to select more than one answer on this survey, so numbers add up to more than 100%.

One common previous assumption as to why people acquire companion animals now seems unlikely. There is now little evidence that pet ownership occurs as a "child substitute"--less than 9% of dogs and 14% of cats are owned by people who have no children (Beck, 1983).

Purchasing versus adoption

An important question for purposes of the present study is why people choose certain sources for acquiring their companion animals. One potential advantage of choosing to buy a purebred animal is that such a choice can reduce uncertainty in the animal's traits. A study by Hart & Hart (1984) attempted to explain thirteen traits by dog breed. The researchers used cluster analysis to create dog groupings and found that 88 % of the variation in traits could be predicted by four

factors. However, it should be noted that what was being explained was not the *actual* behavior or traits of dogs. Rather, the cluster analysis explained expert opinion (veterinarians and trainers) regarding what traits are associated with what breeds.

Hart et al. (1983) stated that the main advantage of selecting a purebred rather than a mixed breed as a family pet is that "one has more success in predicting what the dog will be like as an adult." This is true both of morphological traits and behavioral traits. The article documented some significant behavioral differences between dog breeds, at least as perceived by experts when asked to rank these traits.

Another reason why companion animal purchasers may choose to purchase their animal and seek out a specific breed, is that they desire a replacement for a prior pet. According to a survey by Messent (1984), after the death of a companion animal, 72% of the owners who acquired a replacement animal purchased a dog or cat of the same breed. One explanation for this decision may be to cope with the loss of an animal. However, it could also be argued that some people will purchase the same breed simply because they were satisfied with the traits of that breed, just as some people will purchase the same make of car repeatedly if they are satisfied with that car's features and quality. Regardless of why people choose to purchase the same breed, utilizing breeders or pet stores for such a focused search rather than looking for an animal of a certain breed to adopt at a shelter probably reduces both the costs and energy of such searches.

There are other potential disadvantages of adopting animals from shelters. For one thing such animals may have been strays. According to Salmon & Salmon (1983), dealing with animals that run off is more often a problem for owners of dogs that had previously been strays.

Despite the obvious advantages of purchasing purebred animals rather than adopting from shelters or rescue workers, purebred animals are an inferior product (defined biologically rather than economically). Purebred animals are, by definition, in-bred populations that lack genetic variation and whose traits have been engineered in such a way as to cause health defects (Rollin, 1983). The shape of the face and eye in the collie and Shetland sheepdog has led to a disease

called "Collie eye" or "Sheltie eye" which can result in blindness. Foreshortened faces in bulldogs has been linked to breathing difficulties and heart problems. German shepherd aggressiveness may be genetically linked to hip dysplasia. Irish setters, bred purely for aesthetics, are known to have very low intelligence. Dachshunds suffer spinal disease, frequent diabetes and Cushing's syndrome. Dalmatians get bladder stones and often are deaf; both of which appear to be related to the same genetic predisposition that creates their unique coat color.

According to Preece & Chamberlain (1993) when comparing the qualities of purebred versus mixed-breed pets, "mutts make better pets, particularly if they are to be the companions of children." (pg. 237). The authors attribute part of the reason people choose a specific purebred dog as an extension of their own personality.

Though the desire to own a purebred animal may steer some consumers away from shelters, it is possible to get a purebred dog or cat from a shelter. According to Erhardt (2000), a quarter of the animals adopted out by shelters are purebred. Salman et al. (1998) found that 30% of the dogs turned in to shelters they studied were purebred.

According to some researchers, pet purchasers may not even fully know their own motivations, let alone all the facts about their purchase decision. For a psychotherapist's perspective on the effects of pet ownership, Simon (1984) used case studies to show that there are important psychological consequences of such decisions and that people often do not consider the psychological impacts of pet ownership. The author states, "What makes the decision to acquire a pet different from many other life decisions is that for the most part we are unaware of (and usually unable to predict) the psychological changes it will produce in our lives. In contrast with the decision to marry, or to have a child, or to choose a career, the decision to bring a pet into one's home seems utterly innocuous." (underline from original). Simon raises an important point that is relevant to pet abandonment. Frank & Carlisle-Frank (2001) have argued that there is a great deal of uncertainty regarding the consequences of pet ownership and that this uncertainty can cause perceived costs to outweigh the perceived benefits, leading to abandonment of the

animal. Many of these unpredicted costs may be psychological in nature. Simon contends that people often neglect to take the psychological impact of a pet on the entire family into consideration.

In a study of military communities by Catanzaro (1984), respondents were asked about some of the family interaction changes associated with bringing a pet into the home. In this study, 8% of respondents reported more arguing after the pet was brought into the home while 9.2% reported less arguing. A decrease in travel and freedom after a pet was brought into the home was reported by 39.3%. A decrease in "happiness and fun" after the pet was brought into the family was reported by 1.4%. However, most respondents (70.1%) reported an increase in happiness and fun.

In the same survey, respondents were asked whether certain aspects of pet ownership had more or less problems than expected, with results as shown:

Insert Table 1 Here

For every category except grooming, the problem was less severe than the average expectation (more people reported "less problems" than reported "more problems"). If problems are generally less than expected, it could be the case that many people who currently do not own pets could potentially be satisfied pet owners. They may simply not own pets because they overestimate the costs of ownership. But it should be noted that even if there were more positive surprises than negative surprises, there are still a fairly large percentage of people reporting more problems than expected. This supports the theory that uncertainty in the costs and benefits of pet ownership may be a cause of pet abandonment (Frank & Carlisle-Frank, 2001).

Table 1

Problem Area	More problems than expected	Less problems than expected
Housebreaking	15.1%	31.5%
Discipline	17.8%	27.0%
Feeding	6.4%	23.7%
Behavior within family group	10.6%	22.3%
Location/Space/Territory	11.9%	19.7%
Grooming	18.1%	17.1%
Cleaning	14.5%	16.7%

Other researchers also found that pet ownership can have unanticipated results, including family conflict. Cain (1983) reports 60 % of respondents had disagreements with family members over their pets involving discipline, pet care, or the space used by their pets.

In this same study, Cain found that of those who owned a pet, 49 % gave their primary reason as being pleasure and companionship. Eleven percent gave "rescue of an abandoned pet" as their reason. Other common reasons included "educational function for children" (11%), "replacement of a person or pet" (10%), "protection: environmental and personal" (10%), "gifts" (7%), "sports and breeding" (2%). In this study no mention was made of prestige or status as a reason for pet ownership.

Attitudes about adoption versus purchasing

The present study surveyed random households and randomly selected registered dog owners about their attitudes, past behaviors, and anticipated future behavior regarding adopting pets from local shelters versus purchasing animals from breeders and pet stores. A thorough search of the current literature elicited no previous studies of this nature.

Procedure/Sample

A total of 1,000 surveys were sent to both random households and registered dog owners in upstate New York. Seven hundred surveys were sent to Rensselaer and Albany Counties, while an additional 300 surveys were sent to random residents of those counties. Registered dog owners were randomly selected from a list supplied by the New York State Department of Agriculture and Markets. The list contained a total of 27,989 registrations. The total response rate for all surveys was 36%. Forty percent of respondents were male and 60% were female. The median age for all respondents was 44 years.

The distribution of dogs by source for the random and total survey population is shown below.

Table 2

SOURCE	RANDOM POP	TOTAL POP
Other pet owners	36.9%	27.1%
Shelters	25.0%	29.3%
Strays	3.6%	8.7%
Pet Breeders	26.2%	25.3%
Pet Stores	8.3%	9.7%

Results

Survey respondents who have not ever purchased a pet from a shelter or rescuer and who paid money for their dog, were asked about the reason they did not adopt their dog from a shelter. The extent that respondents indicate that they were unaware of shelter options or simply did not think about the shelter at the time they made their purchase was used as a proxy to estimate how much potential there is for shelters to increase adoptions through marketing efforts.

Of the respondents who had paid money for their dog and gotten their animal from breeders, pet stores, private owners and other "non-rescue" sources, 38% reported that they would switch to an animal shelter for their next dog if the price of animals from other sources went up. The graph below shows the price at which respondents reported they would switch sources. The median is at around \$500. Since we are looking at the price of a substitute, interpreting the graph economically, quantity increases as price goes up. Assuming regional dog owners would respond the way the randomly selected respondents reported they would behave, a tax of \$500 would change buying behavior for approximately 19% of buyers who currently purchase pets from non-adoptive sources (i.e., purchasing from breeders, private owners and pet stores).

Insert Table 3 Here

Respondents who did not get their dog from a shelter or rescue worker and who did not get their dog for free were asked why they did not choose to get their dog from a shelter or rescue worker. The chart below gives the responses to this question.

Insert Table 4 Here

Table 3

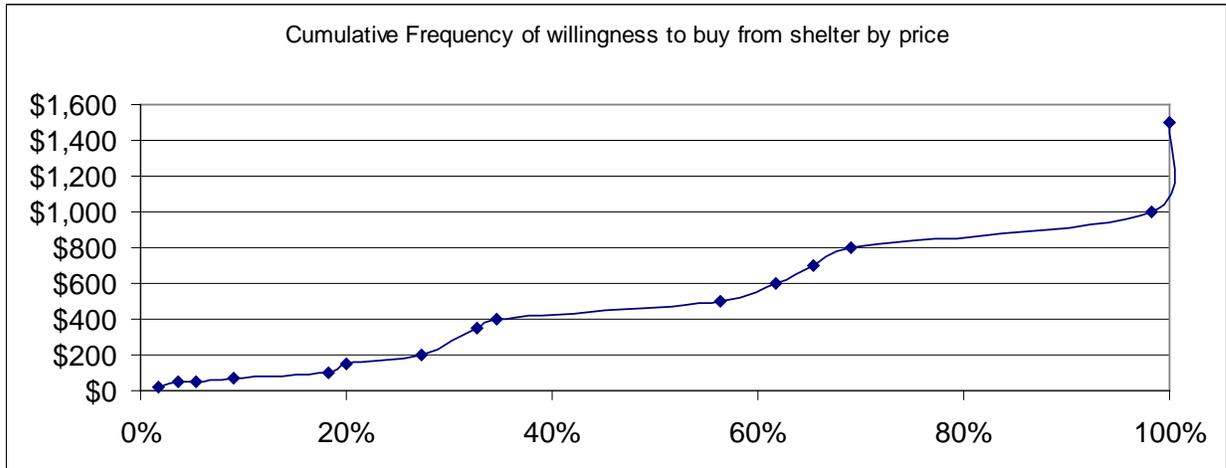


Table 4

	% of respondents
Wanted specific breeds/qualities	67.6%
Visited a shelter but could not find type I wanted	15.2%
Impulse decision	15.2%
Aware of option but did not consider at time of purchase	11.7%
Visiting a shelter is too depressing/unpleasant	11.0%
Convenience	4.8%
Don't want a used dog/concerned about quality of shelter dogs	4.8%
Bad experience with shelters*	2.8%
Dog would have probably been put to sleep*	2.1%
Own litter*	1.4%
Shelter dog too expensive*	1.4%

It should be noted that the percentages add up to more than one hundred percent because respondents could include multiple answers. The asterisked response categories were paraphrased from handwritten responses in the "other" category. It should also be noted that one category on the questionnaire not shown here, "I was unaware of those options" received no responses. This indicates that shelter awareness is high which may be a significant change from prior decades.

By far the most common reason for not choosing a shelter was the desire to get specific breeds/qualities in a dog. Some respondents expanded on what they specifically were looking for, with the desire for puppies being cited about as frequently as the desire for a purebred dog. Often, both conditions were cited together (i.e., a puppy of a specific breed). A few respondents indicated that they had other requirements unrelated to a specific breed (such as, "a 40-50 pound dog with black hair that does not shed", for example). Others specified they wanted to know the animal's history/lineage. A few respondents indicated that they had actually checked at a shelter for the type of dog they wanted. However, most of the respondents that indicated that they wanted specific breeds/qualities did not seem to be aware that shelters do often have both purebred dogs and puppies available for adoption.

Respondents who did not purchase from a shelter or rescuer and who did not get their dog for free answered a free response question asking if anything could be done to change their mind and make them purchase from a shelter next time. About a third of these people said they would never buy from a shelter. The second most common response was a desire for specific breeds. About 28.5% of respondents indicated they either might or definitely would plan on purchasing from a shelter next time. Other responses included knowing the dog's history (either behavior or health), better advertising (some specifically suggested internet postings or creating lists for notification when specific types of dogs were available), better access, and not putting sick animals with healthy ones. Categorized responses are shown below: <<Insert Table 5 Here>>

Table 5

Breakdown of response to whether anything could be done to change purchase decision

Never	32.3%
If desired breed available	18.0%
Nothing against shelter--may purchase there next time	15.0%
Plan on purchasing from a shelter next time	13.5%
If dog's history/health could be known	6.0%
Better Selection	3.8%
Would not get another dog	3.8%
Better Advertising (internet/list for specific types)	3.0%
Better Access	1.5%
Don't put sick animals in with healthy ones	1.5%
Lower price or free	1.5%

Randomly selected segments of the population were sent biased surveys. One type of biased survey contained a paragraph about the implications for dog overpopulation of buying an animal from a shelter instead of from a for-profit source such as a breeder or pet store. The purpose of including these biased surveys was to determine whether they would significantly affect reported future behavior.

The table below shows the results for the survey that was biased to encourage adoption of an animal. As the table reveals, respondents with the adoption-biased survey were significantly more likely to report that they would probably go to a shelter for their next dog. Respondents to the biased version of the survey were also significantly less likely to report that they would definitely not go to a shelter for their next dog. The significance levels for all values was obtained by using the binomial distribution with the null hypothesis that the biased results are obtained as a random sample from a population with the same composition as the core.

Insert Table 6 Here

Perceived costs and benefits of adopting versus purchasing

An additional question on the survey concerned the level of costs and benefits relative to expectations. These responses were measured using a 5-point scale.

The unexpected costs and benefits of animal ownership were split by the source (adoption vs. purchase from breeders) of the dog to see if costs/benefits relative to expectations varied by source. The most common source for adoption (shelters) and purchasing (breeders) are shown in Table 7. The data here contradicts the hypothesis that buying a dog from a breeder reduces uncertainty in the costs and benefits of ownership. If anything, the costs and benefits vary more from expectations when dogs are from breeders. In addition, costs if anything, are slightly

skewed higher and the benefits skewed lower among dogs from breeders. For shelter dogs it is just the opposite. Uncertainty appears slightly lower for owners of shelter dogs than for all owners, with costs being skewed slightly lower and benefits slightly higher for this population.

Insert Table 7 Here

Table 6

	Frequency in Adoption-Biased Population	Frequency in Core Population	p-value
Percent who say they will definitely not go to shelter	8.6%	30.0%	0.24%
Percent who say they will probably go to a shelter next time	17.1%	8.6%	2.69%

Table 7

SOURCE: SHELTERS	Dollar Costs	Non-monetary Costs	Benefits
Much higher than expected	9.0%	4.5%	50.7%
Slightly higher than expected	10.4%	13.4%	16.4%
About what I expected	76.1%	80.6%	30.0%
Slightly lower than expected	1.5%	0.0%	3.0%
Much lower than expected	3.0%	1.5%	0.0%

SOURCE: BREEDERS	Dollar Costs	Non-monetary Costs	Benefits
Much higher than expected	9.3%	16.0%	46.1%
Slightly higher than expected	26.7%	16.0%	10.5%
About what I expected	64.0%	65.3%	39.5%
Slightly lower than expected	0.0%	0.0%	2.6%
Much lower than expected	0.0%	2.7%	1.3%

Discussion

The present study examined the attitudes and behavior of people with regard to adopting companion animals versus purchasing their pets at a breeder or pet store. The results indicate that people tend to purchase dogs from pet stores and breeders primarily because they (a) are looking for a puppy or specific breed of dog, (b) have misperceptions of costs and benefits about purebred dogs that they believe cannot be fulfilled by adopting a shelter dog, (c) were unaware that shelters often have both puppies and purebred dogs, and (d) either made an impulse decision to buy or didn't consider or think about visiting a shelter at the time of purchase.

Before exploring the implications of these findings it is important to first discuss the shortcomings of the present study. Caution should be used when interpreting the results because as with any survey, there may be an issue of response bias. Although the demographics of the respondents was representative of the demographics for the region, there may be a bias with regard to who chose to respond. Additionally, the responses may be regional-specific. While the results may reflect the attitudes of respondents in the region studied they are not necessarily representative of the entire country. In addition, for those questions that reported expected future behavior, it should be kept in mind that this may not be reflective of *actual* future behavior with regard to adopting from shelters or rescue workers.

Despite the potential shortcomings there are a number of important implications derived from the present study. The results of this study indicate that purebred dogs do not have lower uncertainty. One reason people purchase dogs from breeders is to reduce uncertainty in traits and because they believe this will lead to "higher quality" dogs. The results of the survey do not indicate support for the conclusion that there is reduced uncertainty or higher quality from purebred dogs. Unexpected benefits were actually lower and unexpected costs were higher (though these differences were not statistically significant) for dogs from breeders. Of course, it

is possible that this difference (or lack of a difference) is due to the differences in overall expectations of owners in the two populations.

This finding is worthy of further study, perhaps on a national scale with a specific focus on this particular issue. If a research data base could be built that confirms the finding that shelter dogs have no greater problems than purebred dogs, and these finding were brought to the public's attention, this could be a powerful tool in altering attitudes and long-term buying/adoption behavior. This is a particularly salient point in light of the other survey results indicating the desire for a purebred dog was among the most common reasons for not adopting from a shelter or rescue worker.

The results of this study also revealed some key reasons for understanding why people did not adopt their animals from a shelter. The implications of these results offer some useful information for improving adoption rates regarding why people purchase dogs from other sources. The results indicate that if shelters could better reach people looking for purebred dogs or puppies, they could greatly increase the number of adoptions. This could be done either by informing potential adopters of the presence at shelters of both puppies and purebred breeds or by addressing the underlying reason that some consumers seek these animals (i.e. addressing concerns about quality of mixed breeds and "used" dogs and pointing out the advantages of obtaining a mature dog over a puppy). Another approach mentioned by several respondents is for shelters to create a "waiting list" for specific breeds and to notify those on the list when such breeds arrive in the shelters. In addition to notifying those on the list, the availability of puppies and various breeds could be managed on a web site that is frequently updated, allowing people to easily check to see what is available.

Other important ways to increase adoption include addressing issues of selection, general quality concerns, and better marketing to the impulse buyer or the buyer who does not immediately think of going to the shelter. Selection issues can be addressed by partnering with other shelters to jointly list dogs and by increasing shelter space for dogs available to adopt. (The

additional space would, of course, be filled by a longer delay before euthanizing an animal.) Perceptions of quality can, in many cases, be changed by simply improving the aesthetics of shelter spaces (visual, auditory and olfactory). Impulse buyers and those who would not normally think of the shelter at time of purchase can be reached by mobile adoption units and increased media presence in general. Additionally, urging those relinquishing animals to bring in any records they have of lineage, health, vaccines, etc. and supplying those records to potential adopters could also address issues of quality and desire for purebred dogs.

The results here indicate that financial incentives to promote adoption can also be effective on a significant segment of the population, though most buyers would not switch based on price changes alone. Of course, creating a tax on breeders and pet stores, proceeds of which could be used towards enhancing adoption and spay-neuter programs at shelters, would likely be difficult to pass and enforce. However, arguments that such a tax would be completely ineffective are simply incorrect. The results of this survey indicate that at least some shift towards adoption would result from such a tax.

In general, the reasons why people did not adopt, their responsiveness to financial incentives, and the response to the biased survey are all encouraging because they indicate the potential for changing the purchase behavior of many dog owners who currently purchase their animals from for-profit sources.

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