

# **ORIGINAL RESEARCH ARTICLE** Dog Acquisition in Lower-Income Communities as Consumer Behavior: An Exploratory Qualitative Study

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# Abstract

Introduction: This qualitative research article examines the nature of the decision-making processes used by people to acquire dogs in low-income communities compared to how people in middle and upper socioeconomic communities make this decision.

Methods: We explored the preferences, thoughts, and concerns that influenced decisions of a convenience sample of 40 respondents who acquired dogs or puppies within the last 2 years. Sixty-five percent of respondents (N = 26) described living in or near poverty, while 35% held middle or upper socioeconomic status. To elicit detailed accounts of their decision-making process, a semi-structured interview was administered. Results were subjected to qualitative data analysis to identify different features of the acquisition process and to compare these features by respondents' socioeconomic status.

Results: Most respondents described similar 'stages' in dog acquisition as consumers making other high-involvement purchases: recognizing need (mulling), information-gathering and evaluating (creating criteria sets, sourcing pragmatically, and encountering decision triggers), and adjusting to new dogs post-acquisition. Aspects of acquisition were extended or attenuated, and more complex than predicted by models built for inanimate products. Social class influenced some but not all stages of dog acquisition.

Conclusion: Findings from this analysis support advertising and wide dissemination of adoptable dog information. A community engaged model of sheltering including non-judgmental adoptions, community veterinary and behavioral pet support, and building trust could increase local dog adoption.

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esearchers usually study dog ownership long after adoption, or when dogs are relinquished,<sup>1,2</sup> rather than the decision-making process leading to acquisition. The small and mostly survey-based literature on dog acquisition suggests that potential adopters go through an involved decision-making process before adopting at shelters,<sup>3,4</sup> in which they prioritize the characteristics of sought-after dogs5-9 and shop various sources to find them.<sup>10</sup> As 'quasi-property/persons'<sup>11</sup> or property with limited interests,12 the acquisition of animals occurs in a marketplace where people make deliberate choices, consider options, consult with others, and draw on information to make their decisions, not unlike the adoption of human children.13-16

In consumer market theory,<sup>17</sup> buyers who make high-involvement product acquisitions (i.e. purchases that are complex, not regular, time-intense, and might pose some risk18-21) pass through a linear series of decision-making stages with degrees of deliberation.<sup>21,22</sup>

The decision-making process for high-involvement purchases begins with acknowledgement of an unmet need, known as problem recognition.23 After problem recognition, consumers assemble information about the high-end item. They often do research and talk with others, especially in their personal networks, about the acquisition or the products themselves.<sup>24-26</sup> Consumers construct criteria sets or lists of product features, which help them to evaluate options and decide what products to buy and where best to acquire them.<sup>27</sup> The final stage of decision-making is the consumer's post-acquisition mindset. They evaluate their new purchase and decide whether the item was worth acquiring. The result is satisfaction or dissonance with (and sometimes resale/relinguishment of) the acquired product.28

Social inequality influences the attitudes, values, and behaviors of consumers.<sup>29,30</sup> Specifically, consumer motivations to acquire high-involvement products have been shown to vary considerably by social class.<sup>31</sup> Higher-income consumers generally consider product attributes more than lower-income consumers, and the attributes they value are less utilitarian.<sup>30</sup> Lower-income consumers are more likely to buy secondhand products and source new products locally.

Understanding differences in how people with lower SES acquire and adjust to new pets could provide animal welfare organizations (AWOs) with a more complete strategy for placing dogs and helping owners maintain them. It could also inform AWO outreach and adoption policy, especially in underserved communities where improved veterinary access and better relationships with shelters are needed. Clearer understanding about the decision-making process regarding dog acquisition could challenge the stereotype that low-income individuals are impulsive adopters who cannot provide for their pets.<sup>32–37</sup>

The objective of this study was twofold. We sought to understand how decisions are made to acquire dogs in low-income communities as a form of consumer behavior<sup>38</sup> and to explore whether this decision-making varies by social class. A qualitative approach was used to encourage people to explain how they viewed their circumstances, to define issues in their own terms, to identify processes leading to different outcomes, and to self-interpret the meaning of their experiences.<sup>39</sup> Finally, findings are discussed in the context of AWOs to explore critical opportunities for adoption and outreach.<sup>40</sup>

# Methods

Ethical Board Approval was obtained from The University of Pittsburgh Human Subjects Protection Board.

## Recruitment and screening procedures

Three animal shelters across the US initially committed to helping recruit dog owners, but two eventually withdrew due to staffing challenges. The authors refocused the study on Western Pennsylvania, where the second author lives and has community contacts near the remaining shelter partner in Scranton, PA. Study participants were recruited through various strategies, including advertising via email to a database of community members associated with the University of Pittsburgh, and individuals identified from the dog adoptions database of the Scranton shelter. Recruitment flyers were provided to dog owners during pet food distribution by two local shelters and at low-cost veterinary outreach events. Flyers were also hung in 'free stores', libraries, thrift shops, laundromats, senior high rises, coffee shops, work-sharing spaces, and community centers throughout the study area.

The recruitment flyer included a qualifying question about obtaining a dog within the past 2 years (to reduce recall bias), a \$20 incentive for the interview, and a phone number to call/text/email. Both adult dog and puppy adopters were recruited to remove barriers to acquisition such as the high cost of puppies.<sup>41</sup> During the initial contact, respondents were asked to identify the year that they obtained their dog and whether they received food, housing, income assistance, or federal disability.

All respondents were screened for the year of dog acquisition and self-reported SES. Most of the respondents recruited through the university mailing list were employed by the University of Pittsburgh and not using benefits; these individuals were generally screened and interviewed first. Eighteen community members who saw the flyer and reached out via email or text did not respond to follow-up. Seven individuals were scheduled for an interview but did not keep the appointment and did not respond to follow-up. Thirty-five respondents were recruited through flyers and none through the shelter's adoption database. Five individuals known to the researchers, and not recruited through flyers, were interviewed bringing the total number of respondents to 40.

# Data collection

Single 45–65-min interviews (see Supplementary material) were conducted between February 2022 and January 2023 via telephone or Zoom (Version 5.17.7) by the second author, who is experienced in qualitative interviewing. With the respondents' permission, interviews were recorded, and the audio professionally transcribed. Before analysis, all identifying information was removed.

Interviews were guided by a semi-structured framework that allowed the researcher to maintain a conversational atmosphere and react to informants' responses.<sup>42</sup> Items in the framework were updated iteratively as interviews progressed and were analyzed. Not every question was asked in every interview, but as each conversation progressed, all items were checked off.

At the conclusion of each interview, categorical demographic information was solicited. Socioeconomic status (SES) is a complex and multifaceted assortment of resources that link to health and disability outcomes.<sup>43,44</sup> Standard measures do not reflect important and relevant aspects of lived experiences.<sup>45</sup> Alternative measures, such as self-perceived or self-assigned SES, a subjective assessment based upon past, present, and expected social and economic position, may be a better representation.<sup>46-48</sup> Therefore, in this study, each respondent was asked to describe their SES in their own words.

Interview transcripts were categorized by description of SES, verified and annotated where needed by the interviewer, and then given to the first author for analysis. Thematic saturation was reached after 40 interviews, and the study was concluded.<sup>49</sup>

## Analysis

Qualitative data analysis was used to identify important features of the acquisition process that emerged from the data,<sup>50</sup> such as reasons for acquisition or ways acquisition

sources were picked. Each transcript was read several times, while taking notes on patterns of response. A provisional coding system was created to enable comparison across transcripts. Themes were compared to identify differences or similarities in the decision-making process between the respondents identifying as lower or middle to upper SES. Inductive analysis of the interview data pulled out statements concerning the stages of dog acquisition, for comparison to consumer marketing models. The interview framework was revised as new themes and ideas emerged. Themes were finalized after interviewing, and analysis concluded.

The interviewer is a White, middle-aged female social worker who has worked for 10 years in animal rescue and, like many respondents, grew up in the region and is a first-generation US citizen. The primary analyst is a White, male retired academic who has consulted with AWOs for >15 years. Both authors came to the project from a position of power (researcher), but with shared experiences of acquiring and owning companion animals.

## Results

#### Respondent demographics

The median age of interviewees was 54 (range: 19–79) years. Three quarters of respondents identified as female (N = 30), one quarter as male (N = 9 male), and one as 'queer'. Almost two-thirds of the respondents were White (N = 25), a quarter African American (N = 10), and fewer than 10% Hispanic (N = 3) or Asian (N = 1); one declined. Almost half were unemployed (N = 19), 10% were employed part time (N = 4), and one quarter employed fulltime (N = 12), with three fulltime students. Almost half of respondents had a graduate degree (N = 9), a college degree (N = 8), or an associate degree (N = 2); the rest had some college, had completed high school, or passed a General Educational Development test (GED) (N = 21).

Approximately two-thirds of the respondents (N = 27)reported living in or near poverty, while approximately one-third (N = 13) identified as middle or upper class. Interviewees who described themselves as low SES or as 'poor' were unemployed, had no income, received few federal benefits, were insecurely housed, used food pantries, and received medical assistance. Others held minimum wage job(s), were retired, qualified for food assistance, and felt they were struggling (particularly if they had lost their jobs due to the pandemic or a medical condition) and described themselves as 'working poor' or as 'low-middle' SES. Interviewees who described their SES as 'middle' generally did not qualify for benefits, believed they were secure but did not have a lot of extra money, while those who identified as 'high' SES were fulltime wage earners with advanced degrees, worked in

professions such as higher education or corporations, owned property, and had not experienced life-altering events since 2020, or, were full time graduate students supported by their parents.

# Decision-making stages

# Mulling

For many respondents, need recognition emerged as they mulled over the idea of getting a dog, frequently taking months or even years. A lengthy time lag was noted by one respondent: 'we took our time with deciding. We didn't jump in so quickly. It took us 2 years to decide to adopt the doggie'. During this stage, respondents often reported having had vague thoughts about acquiring a dog but were not ready to make specific decisions. One respondent said, 'it was kind of like we wanted a dog, but we weren't exactly like actively looking'.

For most respondents, pre-acquisition motives became clearer as mulling continued, although in a few cases, the only reason given was 'wanting' a dog or that their children were 'obsessed' with getting one, without elaboration. 'Companionship' was a primary reason reported by all middle and upper SES respondents and most lower SES respondents, for both emotional and sociological benefits. A dog would, respondents hoped, enable them to be seen as a pair in their own and others' eyes,<sup>51,52</sup> provide a remedy for social isolation or missing domestic roles, be a partner for activities, or give them a 'reason for getting out of bed' each day. One intermittently homeless respondent wanted a dog because people would be less suspicious of his activities. 'You become invisible if you have a dog with you. If you're semi-trespassing, someone pulls up, you go, "dog got off the leash, man".

For many lower-income respondents, pragmatic reasons, such as security or adding income, were also important. One respondent wanted a dog for 'protection' in her 'dangerous' neighborhood. 'When you have like a woman alone who's disabled and a child, I thought it's good to have some security, so I'd feel a lot safer with him (dog) around than if I didn't'. By contrast, middle and upper SES respondents were less likely to share practical reasons for acquiring a dog and, when they did, the purpose was exercise, rather than security.

During this mulling stage, reservations often surfaced. Respondents questioned whether they could be sufficiently responsible, manage physical or behavioral problems, or pay for pet care costs. While people living in lower SES considered these risks, they hoped that issues would not arise and believed they could find ways to manage them. For example, one respondent was concerned about who would care for her dog if it outlived her, so she made sure that her daughter would take the dog if something happened. A few respondents spent very little time mulling over the reasons for wanting a dog or the problems ownership might entail. In these cases, they had always wanted a dog or always lived with one, so when circumstances changed, acquisition was rapid. For example, one respondent identifying as low SES had always had dogs. 'I had a black lab that sadly passed away at almost 16 years old. I needed, for lack of a better word, a replacement, so I went and got one. I'm not married, no kids. I like having at least a living creature around'.

# Gathering and sharing information

Almost all respondents, regardless of social class, were interested in gathering information about the specific dogs under consideration and the trustworthiness of their sources. Respondents of middle and upper SES felt their searches were unsuccessful: there was little available online about specific dogs or breeders, only a few breeders provided information about specific dogs, and only a few had friends who could share breeder experiences. By contrast, lower-income respondents felt more successful at obtaining information. They spoke firsthand with local breeders and even met their future pets, or they acquired dogs from family members, friends, or neighbors who knew the animals well.

Many respondents regularly shared information about pending acquisitions with roommates or family members, to make sure everyone was comfortable adding a new pet and to see if they might help care for it. For example, one respondent's roommate offered to occasionally walk the dog, while another's sister agreed to pet sit when the respondent was away. However, a few respondents made executive decisions, only telling others in their household after acquisition. One respondent explained, 'we had recently got a cat and I was working like 12-hour shifts. I just felt like he would think it was impulsive. I don't think he quite has the same love for animals'.

Most respondents did not contact significant others outside the home, such as parents or friends, for help with sources or breed choices. When they did reach out, they shared information to enlist possible material assistance, such as help with food or veterinary bills and pet care responsibilities. When outsiders disapproved of respondents' decisions, their advice was routinely ignored. One respondent's parents advised against getting a dog because they thought she could not afford its care. 'Going back to school, I knew I wasn't going to have any money, and they just weren't happy about it. I think that they foresaw that if I got a dog, that they were going to have to pay for things'.

# Creating criteria sets

Most interviewees created and used criteria sets when searching for dogs. Respondents of middle and upper SES created sets deductively, first deciding on criteria and then seeking dogs who possessed the desired features, such as puppy age, particular breed, small or medium size, or docile personality. One respondent decided on a mini Australian Shepherd because she wanted a dog that could herd, be obedient and devoted, weighed 25–30 pounds, and would not run off. She proceeded to buy a dog with all these features from a breeder.

Lower-income respondents often created criteria sets inductively by first deciding to get a dog, perhaps with a single desired feature in mind and then selecting an animal accessible to them in their community. For example, one respondent went to a near-by shelter. 'I'm on a limited income. It wasn't like I was going out and picking out French Poodles and all that. You know, when you're poor you go to a humane society and whatever they have there, that's your pick of the litter'. After encountering potential dogs to acquire, lower SES respondents often used emotion-based criteria to decide, choosing the dog they felt a 'spark' for or 'fell in love' with. One respondent said, 'I didn't have a thing in my head that said I'm looking for a particular thing. It could've been, like, some 200-pound freakish bad dog. I had to look at it, it had to look at me, and something had to go, "click". And I heard the click when I saw her'. Inductive criteria sets also arose for lower SES respondents even when their dog's acquisition was unintended. For example, they were temporarily helping a loved one who could not keep their pet, or just helping a needy stray, but the dog ended up staying. After the fact, respondents discovered traits that made their accidental dog special and worth having taken in.

## Sourcing pragmatically

Even though our respondents lived near shelters and rescue groups, middle and upper SES interviewees assumed AWOs would not have dogs they wanted when they wanted them. And, while several respondents with lower SES considered adopting through AWOs, they also rarely did. Low SES respondents described bad experiences they or others in the community had, fear of rejection, concern about cost of adoptions, and discomfort with paperwork and privacy. One claimed that a shelter had rejected him because of his financial situation, and a rescue group had rejected him because he was not a homeowner.

Middle and upper SES respondents were likely to search for puppies from 'established' or 'reputable' breeders, usually outside their communities. Very rarely, despite limited resources, lower SES respondents also acquired expensive dogs from on-line breeders, pet stores, or local breeders of special pedigrees such as 'blue nose pit bulls'. Overall, lower SES respondents were more likely to source dogs from a 'backyard' breeder or from a neighbor dog's accidental litter. One respondent, for example, heard about someone in her neighborhood selling puppies and sent her husband to pick a male from the litter. Lower SES respondents also acquired pets from relatives or fostered dogs for friends or family who became theirs over time. Acquiring dogs through these sources maintained social relationships and 'family' by way of blood-related pets.

#### Decision-making triggers

Social events or changes unrelated to dogs triggered many respondents to act, often after long deliberation. Some of these triggers reduced barriers to acquiring dogs, such as getting new jobs with increased salaries, moving to new homes or communities that permitted dogs, or experiencing social events unrelated to dog ownership that created opportunities to have pets. For example, one respondent acquired a dog 7 years after his first 'sense' that he wanted one, when he moved to a small town where 'having dogs was the norm. I had the space for the first time to get a dog, and I quite immediately started working on it when I moved into this apartment'. In another case, a respondent and his wife felt it unethical to get a puppy when no one was home for many hours. When the pandemic struck, the respondent started working from home, making it possible to care for their new puppy during the day.

For some respondents with lower SES, contact with a dog in need was the trigger. For example, one respondent rescued a puppy that was part of a litter abandoned at her workplace. 'It was the right thing to do. ... Especially her, she definitely seemed small, kind of like the runt of the litter. And she had worms and she was distended. Listen, everybody needs a home. I need a home. Dogs need a home. When you see a dog that's needing a home, the plan is the dog comes home with you'. By contrast, those with middle or upper SES almost always espoused the importance of adoption to save homeless animals, but almost all purchased dogs from breeders without checking their local shelter. Only one of the 13 respondents in this study with middle and upper SES acquired a dog in order to rescue it.

## Adjusting and regretting

Many respondents encountered unexpected problems in the post-acquisition stage, forcing them to make personal sacrifices, rely on others for help, or consider rehoming their pets. New dogs exhibited problem behaviors (e.g. biting, barking, being aggressive, destroying things, being overpowering, being rambunctious, or violating human space) or became unexpected financial burdens.

With limited success, respondents worked to improve their dogs' behaviors. A few middle or upper SES respondents consulted with professional trainers and behaviorists. Others found professional help too expensive, inconvenient, or underestimated the intractability of the behaviors; these owners drew on whatever solution they could devise in the moment, which could be time consuming and exasperating. For example, one respondent tried to restrict his unruly Rottweiler to a few rooms in the house: 'I usually try to keep her out of the living room. She'll just knock everything over when she's in there'. Other respondents simply gave dogs time to adjust, which often seemed to work. If these approaches had limited success, respondents learned to live with these problems by changing their own expectations and behaviors, adjusting their lifestyles, and/or normalizing the problem behaviors.

Lower SES respondents often found dog ownership financially challenging. They accessed pet food banks, made other accommodations to feed their dogs, and relied on free or low-cost local veterinary services. Despite the availability of low-cost services, many of these respondents still sought financial help from friends or family, were selective about veterinary care, made personal sacrifices to pay veterinary bills, or did not access services.

While efforts to manage challenges were somewhat successful, the unwelcomed surprises led some respondents to regret having acquired their dogs and to consider relinquishing or abandoning them. For many lower SES respondents, keeping their dogs meant they had to scramble to care for them and learn to live with less than they had initially desired. Nevertheless, respondents claimed they were too bonded or 'loved' their dogs too much to give them up.

## Discussion

Although most respondents passed through the same decision-making stages to acquire dogs as do consumers making high-involvement purchases of products and services, the nature of these stages differed. Aspects of some stages of dog acquisition were extended, attenuated, or more complex and social class influenced some but not all stages.

While many respondents experienced need recognition, for some, it was significantly protracted, taking months or years. Motivations for considering a dog often included companionship, although this was often for passive company with their pets rather than active exercise<sup>52,53</sup> (e.g. run/hike/swim). While prior studies also note companionship as a primary motivation,<sup>54</sup> our lower SES respondents also cited pragmatic reasons for dog ownership, such as security or income. While many considered downsides to dog ownership related to finances and responsibility, few anticipated challenging behaviors even though behavior problems are common for new dog owners.<sup>55</sup>

Most respondents in both SES groups desired information about their future dogs, especially when the acquisition seemed to entail risk (e.g. expense), consistent with research showing little class difference in the desire for information about high-involvement products.<sup>56,57</sup> Lower SES respondents were more successful gathering it because dogs were often sourced locally; middle and upper SES dog owners felt less successful than consumers assessing items in the general marketplace. Unlike consumer decision-making models, our respondents reported more information sharing (e.g. telling roommates and family) than data gathering, showing that respondents of all classes were concerned about and carefully planned for future dog care.

Middle and upper SES respondents, like consumers in the general marketplace, specified multiple criteria for their future dogs. Lower SES respondents divulged fewer predetermined characteristics. The criteria of 'easily available', 'free', or 'needing rescue' could make lower SES consumers appear less selective, or this could be seen as resourceful and practical, given limited resources and a plentiful supply of cheap dogs.

Our respondents evaluated sources differently than consumers of high-involvement products. For example, respondents of all classes avoided acquiring dogs from AWOs, but for different reasons. Middle and upper SES respondents assumed shelters would not immediately have the kind of dogs they sought, reflecting the census of dogs available for adoption in many communities.<sup>58</sup> Lower SES respondents feared rejection, loss of privacy, or discrimination by AWOs. This pattern is consistent with national trends showing <3% of people in underserved communities acquire pets from shelters or rescues.<sup>59</sup>

While respondents of all social classes acquired dogs from breeders, lower SES respondents were more likely to source within their community, often knowing the families or having close connections to them. Acquiring dogs that cost less or were previously owned is consistent with consumer research, showing that many lower SES shoppers buy cheaper, less desirable products<sup>60,61</sup> or buy high-value items second-hand, such as automobiles.<sup>62</sup> For lower SES respondents who acquired costly 'pure bred' dogs, the purchase could be a form of compensatory consumption.<sup>63</sup> Owning breeds that are highly desired in the respondents' communities confers a degree of status. The substantial expense may also have represented an investment if respondents intended to breed and sell puppies.

While some lower SES respondents took their time to acquire dogs,<sup>64-66</sup> a few respondents appeared to act suddenly. This pattern is seen in the general marketplace when consumers of lower SES experience a sudden, powerful, and persistent urge to immediately buy something,<sup>67</sup> with the implication that the purchase is irrational.<sup>26,68,69</sup> Rather than being impulsive or irrational, our interviewees responded to social triggers that allowed them to acquire dogs long after their initial desire, a parallel with people who suddenly seek medical care long after the first appearance of symptoms<sup>70</sup> or even how some people decide to adopt babies or children.<sup>15</sup> Others took advantage of opportunities to acquire dogs that were free, cheap, or needed rescue. Respondents experienced a post-acquisition stage that could be challenging, especially for those with lower SES managing 'bad dogs' with undesired behaviors and 'problem dogs' costing too much time and money,<sup>37,71</sup> leading some to question the soundness of their decision. This reaction is consistent with consumers in the general marketplace after acquiring high involvement products.<sup>72</sup> Respondents in our study blamed challenges on adopting breeds they had not previously owned, or having taken in older dogs with existing problems, compared to respondents of middle or upper SES who acquired pure-bred puppies. Without help from family members or friends, some lower SES respondents might not have been able to keep their dogs.

# Limitations

This research has several limitations. Although retrospective interviewing is an established and reliable method of qualitative data collection,<sup>73</sup> it is possible that respondents might have unintentionally omitted certain details, simplified complex moments in the decision-making process, or failed to capture the role played by others in this process, especially if they were unenthusiastic about getting a dog. The sample set was small and from one general location, so actions and opinions may not be widely representative. We only studied people who acquired and kept their dogs for up to 24 months, rather than those who did not acquire the dog or those who did not keep their pet.

## Lessons for animal welfare

Viewing dog acquisition as a type of consumer behavior can help inform the practice and policy of AWOs. Knowing more about when, where, why, and how dogs are acquired in low-income communities could enable shelters and veterinary community outreach groups to better provide basic veterinary care, spay-neuter, and behavior management to the underserved, as well as increase shelter adoptions. For example, our study found that respondents needed and desired more detailed and accurate information about the dogs being considered. A lengthy window of opportunity existed before dogs are acquired, during which shelters could provide information, advertise dogs and services, and begin engaging future owners. AWOs could share specific animal details to help consumers make informed decisions. Learning about criteria sets or barriers from potential adopters in the community could help AWOs meet their needs, such as advertising the 'security' or 'status' certain dogs might provide. Setting expectations for adopters post-acquisition - for example, that an adjustment period is expected and new behaviors may manifest as the dog becomes more comfortable in their new home - could help prevent relinquishment.

Our findings support efforts to make the shelter experience more welcoming and less judgmental, by reevaluating adoption policies, understanding and checking biases, and hiring from the community. Barriers to AWO engagement identified by respondents included cost, judgment, privacy, and breed selection. Allowing free or pay-whatyou-can adoptions, creating simpler 'paperwork' supplementing conversational matchmaking,<sup>74</sup> and removing income restrictions would make adoption more accessible for everyone.

Many shelters have already taken an 'open' adoptions approach, moving away from protectionist approaches that privilege White adopters of middle and upper SES,<sup>75</sup> but there is still substantial opportunity for improvement. In this study, owners of lower SES had ideal adopter characteristics, going to great lengths to keep their animals safe in the home<sup>76</sup> and being far more open to 'rescuing' animals in need. Indeed, when lower SES residents sourced their dogs by rescuing them from other people in their community or by taking in stray dogs, they essentially kept animals out of the shelter. Likewise, our respondents' assumptions about cost, judgment, and rejection at AWOs show that many communities have not heard about the efforts of some shelters to be more inclusive and accessible.

New approaches are needed to increase shelter adoptions by clients of middle and upper SES. Given the current mismatch between the difficult-to-adopt large adult mixed-breed dogs77,78 that shelters have and the desired breeds, sizes, ages, and behavior profiles that those with higher incomes prefer, it seems unlikely that shelters will be able to count on middle and upper SES consumers to contribute greatly to the 'big dog' solution. When possible, targeted advertising could emphasize puppies or desirable breeds or tone down the 'rescue' narrative. Mobile adoption units could visit up-scale malls and marketplaces with puppies and purebred dogs; increased adoptions were seen when mobile adoption units took dogs into low-income mall parking lots.79 Since low-intake shelters cannot meet demand for puppies, and demand for puppies appears to be growing, shelters might act as clearinghouses that could certify which local breeders were legitimate and could be trusted, referring potential adopters to local, known breeders, while simultaneously providing educational opportunities for breeders.80

Post-adoption support could provide more community-engaged and informed models of delivering veterinary care and services. For our lower SES respondents, free or low-cost veterinary programs and pet food pantries were not always enough to cover basic needs, veterinary issues, and behavioral problems, due to issues of accessibility (transport, hours, and location), cost, and lack of trust in and communication with veterinarians and shelter staff.<sup>81,82</sup> Overall, these findings underscore the importance of AWOs using outreach models that hire locally, build relationships, seek community buy in and support, share information, provide resources, and evaluate the impact of programs to ensure goals are being met. Helping community members creates a healthier population of dogs, builds trust, and creates future shelter clients.

# **Credit Author Statement**

Conceptualization, methodology, analysis, and writing by A.A. Project administration, funding acquisition, interviewing, and respondent identification by M.R.

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