Pain management is a key component in veterinary medicine and is increasingly recognized as an essential aspect of compassionate veterinary care. Yet recognizing and assessing animal pain remains one of the major challenges for veterinary practitioners. Veterinarians use a myriad of methods, including the assessment of an animal’s physiological, behavioral, and emotional status, to determine whether an animal is in pain. To aid in this process, several pain measurement scales have been created (e.g., the Canine Brief Pain Inventory, the short form of the Glasgow Composite Measure Pain Scale, and the Colorado State University Canine Acute Pain Scale [CSU-CAPS]).4–6 Regardless of tools, education, and experience, veterinarians are only able to assess and treat pain if the animal is brought into the hospital. An owner must first be able to recognize that their animal is in pain, usually based on behavioral changes, and then...
decide whether the behavioral change warrants a veterinary visit. The ability of owners to accurately identify their pet’s pain and seek treatment is vital to their pet’s quality of life (QOL) and overall welfare.\textsuperscript{7,8} In addition, because pain can strain the owner-pet bond through unwanted behavioral problems,\textsuperscript{9} identifying pain can help ensure the pet remains in the home. It is therefore critically important that owners can identify pain experienced by their dogs.\textsuperscript{10}

Most dog owners view their dogs as family members, have high levels of empathy and attachment toward them, and feel a duty to provide them with the best care possible.\textsuperscript{11–14} Yet despite wanting to provide the best care for their dog, many dog owners are unable to accurately read their dog’s body language.\textsuperscript{15}

While several previous studies\textsuperscript{16–18} have examined owners’ perceptions of their pets’ pain, these studies have typically focused on animals with previously diagnosed chronic pain conditions (eg, osteoarthritis, neuropathic pain, gastroabdominal pain). These studies, along with others\textsuperscript{19–21} that have focused on postoperative pain, have found that, with training, owners are able to detect pain in their pets based on changes in facial expressions, activity level, sleeping patterns, appetite, and interactions with others.\textsuperscript{22}

Our study was designed to test the hypothesis that a minimal amount of owner education pertaining to pain-suggestive dog body language would be positively associated with an increased owner concern level and reported likelihood of contacting a veterinarian. Several studies\textsuperscript{19–22} have shown that owner education can have a positive impact on improving canine welfare and health concerns, including body condition, preventative treatment adherence, and pet disaster preparedness. To our knowledge, there have been no previous studies specifically examining the impact of owner education pertaining to pain-related canine behaviors on concern level and the likelihood of seeking veterinary care.

**Methods**

An online, anonymous, cross-sectional survey was developed with Qualtrics. The study was approved by Colorado State University Review Board (IRB No. 5168). Survey respondents were dog owners, 18 years or older, who resided in the US and were the primary caretakers of at least 1 dog. Participants were recruited December 18 and 19, 2023, through Prolific, an open online marketplace whereby respondents receive small monetary compensation for completing surveys. The quality of data collected through platforms like Prolific has been shown to be higher than typical internet samples and meets the psychometric standards considered acceptable for published research.\textsuperscript{23} Prolific allows researchers to set parameters including dog ownership. Participants for this survey were only eligible through Prolific if they stated they owned at least 1 dog.

**Survey**

The survey began with an introduction that explained the study’s purpose and gave instructions regarding how to complete the survey if the respondent owned more than 1 dog (Supplementary Material S1). Participants were asked questions about pet ownership and veterinary care before completing the Lexington Attachment to Pets Scale (LAPS)\textsuperscript{24} with a numeric range of 0 to 69. The LAPS Cronbach α in the current study was 0.947 (McDonald w, 0.946).

The next section of the survey consisted of 3 scenarios with noted changes in the pet’s behavior (Supplementary Material S1). Each scenario began with, “You have a 5-year-old female mixed breed dog who has been happy and healthy since she was a puppy.” For the “snappy” scenario, this statement was followed by, “She has always been very friendly and loved to be petted. Recently she has wanted less interaction with her family and occasionally gets a little snappy when she no longer wants to be petted.” In the “ear” scenario, the first line was followed with, “She has always enjoyed a good ear rub, but recently you noticed that she leans away when you try and pet her head.” In the third scenario (“walk”), the first line was followed with, “Recently you noticed that she has been walking different/funny. When you examine her legs and paws you do not see anything unusual although she tries to squirm away.”

These 3 scenarios were presented in random order. After each scenario, participants were asked to indicate their concern level regarding the behavioral change using a 4-point Likert scale. They were then asked to indicate their veterinary-related response (ie, “I would call the veterinarian right away,” “I would wait to call the veterinarian,” and “I would likely not call the veterinarian about this change in behavior”).

If participants answered with any response other than calling their veterinarian right away for each of the 3 changes in behavior, they were asked to indicate the impact of 24 potential factors in their veterinary-related decision using a 4-point Likert scale.

After the participants had answered the questions related to each of the 3 scenarios, they were then given pain-related educational information about each scenario and asked to indicate their concern level and veterinary-related response.

Participants were then asked to look at a modified version of the CSU-CAPS.\textsuperscript{5} After viewing the CAPS (Supplementary Material S1), participants were asked to indicate the usefulness of the scale with a 4-point Likert scale in identifying their dog’s pain level, determining whether they should take their dog to the veterinarian, and describing their dog’s pain to their veterinarian. The last question on the survey asked participants how likely they were on a 4-point Likert scale to seek medical care for themselves if they were in significant pain.

**Statistical analysis**

Descriptive statistics, Wilcoxon signed rank test, ordinal regression, and χ² analyses were conducted with SPSS Statistics, version 28 (IBM Corp). Descriptive statistics included responses to questions related to veterinary care, the participant’s ability to read their dog, their ability to detect pain in their dog, and the usefulness of the CAPS. Participants’ responses
to the factors that influenced their decision to seek veterinary care for each of the 3 scenarios were rank-ordered. We hypothesized that cost and convenience would play major roles in participants’ decisions regarding veterinary care.

Wilcoxon signed rank test was used to assess differences within participants’ concern levels and veterinary-related responses before and after they were given pain-related educational information. It was hypothesized that concern levels would increase and participants would be more likely to contact their veterinarian right away.

Ordinal regression was used to assess the potential predictive value of the following on participants’ concern levels (prior to being given pain-related educational information) for each scenario: LAPS score, their confidence in detecting pain in their dog, number of owned dogs as an adult, and their likelihood of seeking medical care for their own pain. All variables were entered simultaneously.

Ordinal regression was also used to assess potential predictive value of the following on participants’ veterinary-related response (prior to being given pain-related educational information) for each scenario: LAPS score, their confidence in detecting pain in their dog, number of owned dogs as an adult, their likelihood of seeking medical care for their own pain, their relationship with their veterinarian, and how often they take their dog to the veterinarian. All variables were entered simultaneously.

The χ² test was used to assess the relationship between participants’ perceived usefulness of the CAPS and stated ability to detect pain in their dog. It was hypothesized that participants who reported lower abilities to detect pain in their dog would find the scale more useful than those who reported higher abilities to detect pain in their dog. Significance level was set at P = .05 for all analyses.

Results

A total of 367 surveys were completed by participants who resided in the US and were the primary caretaker of at least 1 dog. The participants were primarily White (270 [73.6%]), had an average age of 43.75 years (SD, 12.66), and included 185 (50.4%) females and 182 (49.6%) males (Table 1). The mean LAPS score was 54.57 (SD, 0.51). The majority (328 [89.4%]) reported having a primary veterinarian, with most reporting a good (171 [52.1%]) or excellent (91 [27.7%]) relationship with their veterinarian. When asked how often they take their dog to the veterinarian, the largest number reported twice a year (147 [40.1%]) and most reported taking their dog to the veterinarian within the past 6 months (198 [54.0%]).

Participants were asked how well they feel they can read their dog’s behaviors, and most reported “good” (224 [61.0%]). When asked how confident they feel about detecting pain in their dog, the majority reported feeling “moderately confident” (222 [61.2%]). In further analysis, “not at all confident” and “minimally confident” were combined. Participants were also asked how likely they would be to seek medical care for themselves if they were in significant pain. Nearly equal numbers reported being “very likely” (164 [45.2%]) and “somewhat likely” (166 [45.7%]).

Concern levels and veterinary-related behaviors before and after pain-related education

When assessing differences between participants’ concern levels before and after pain-related
educational information by use of the paired Wilcoxon signed rank test, significant differences were found for the snappy ($P < .001$) and ear ($P < .001$) scenarios. The difference between pre- and posteducation concern levels for the walk scenario was not significant ($P = .818$; Table 2).

Wilcoxon signed rank test results between participants' veterinary-related behaviors before and after pain-related educational information resulted in significant differences for all 3 scenarios: snappy ($P < .001$), ear ($P < .001$), and walk ($P < .001$; Table 3).

**Ordinal regression: pre-education concern level**

Ordinal regression was used to assess the potential predictive value of attachment (LAPS score), participants’ confidence in detecting pain in their dog (not at all/minimally, moderately, very confident), number of owned dogs as an adult (1, 2, 3, 4, or more), and their likelihood of seeking medical care for their own pain (not at all likely, somewhat likely, very likely) on concern level prior to participants being given pain-related educational information for each scenario. All variables were entered simultaneously.

The ordinal regression model predicting concern level for the snappy scenario was significant ($\chi^2 = 52.18; df = 8; P < .001$). Significant predictors of concern level for the snappy scenario included LAPS score and participants’ confidence in their ability to detect their dog’s pain. Higher LAPS scores predicted higher concern levels ($B = 0.040; P < .001$). Those who reported lower levels of confidence in their ability to detect their dog’s pain (not at all/minimally, $B = –0.858 [P = .016]$; moderately, $B = –1.003 [P < .001]$) were significantly less concerned than those who reported feeling very confident in their ability to detect their dog’s pain.

The ordinal regression model predicting concern level for the ear scenario was significant ($\chi^2 = 40.06; df = 8; P < .001$). Significant predictors of concern level for the ear scenario included LAPS score, participants’ confidence in their ability to detect their dog’s pain, and their own medical response to pain. Higher LAPS scores predicted higher concern levels ($B = 0.037; P < .001$). Those who reported moderate levels of confidence in their ability to detect their dog’s pain were significantly less concerned than those who reported feeling very confident in their ability to detect their dog’s pain ($B = –0.545; P < .025$). Participants who reported being not at all likely to seek medical treatment for themselves were less concerned than those who were very likely to seek medical treatment for themselves if in pain ($B = –0.973; P < .011$).

The ordinal regression model predicting concern level for the walk scenario was significant ($\chi^2 = 66.19; df = 8; P < .001$). Significant predictors of concern level for the walk scenario included LAPS score, participants’ confidence in their ability to detect their dog’s pain, and their own medical response to pain. Higher LAPS scores predicted higher concern levels ($B = 0.046; P < .001$). Those who reported lower levels of confidence (not at all/minimally, $B = –0.813 [P = .025]$; moderately, $B = –0.720 [P < .005]$) were significantly less concerned than those who reported feeling very confident in their ability to detect their dog’s pain. Participants who reported being not at all likely to seek medical treatment for themselves if in pain ($B = –0.973; P < .011$) were significantly less concerned than those who reported feeling very confident in their ability to detect their dog’s pain.

### Table 2—Participants’ reported concern levels about changes in behavior for 3 scenarios before and after receiving brief pain-related educational information.

<table>
<thead>
<tr>
<th></th>
<th>None/minimal</th>
<th>Some</th>
<th>A fair amount</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-education concern: snappy</td>
<td>14 (3.8%)</td>
<td>88 (24.1%)</td>
<td>156 (42.7%)</td>
<td>107 (29.3%)</td>
</tr>
<tr>
<td>Posteducation concern: snappy*</td>
<td>8 (2.2%)</td>
<td>68 (18.7%)</td>
<td>158 (43.5%)</td>
<td>129 (35.5%)</td>
</tr>
<tr>
<td>Pre-education concern: ear</td>
<td>25 (6.8%)</td>
<td>132 (36.1%)</td>
<td>140 (38.3%)</td>
<td>69 (18.9%)</td>
</tr>
<tr>
<td>Posteducation concern: ear*</td>
<td>9 (2.5%)</td>
<td>85 (23.4%)</td>
<td>173 (47.7%)</td>
<td>96 (26.4%)</td>
</tr>
<tr>
<td>Pre-education concern: walk</td>
<td>7 (1.9%)</td>
<td>66 (18.1%)</td>
<td>166 (45.5%)</td>
<td>126 (34.5%)</td>
</tr>
<tr>
<td>Posteducation concern: walk*</td>
<td>7 (1.9%)</td>
<td>67 (18.5%)</td>
<td>162 (44.6%)</td>
<td>127 (35.0%)</td>
</tr>
</tbody>
</table>

Data are presented as No. (%) of participants.
*Pre-/posteducation change significant ($P < .001$).

### Table 3—Participants’ reported veterinary-related decisions about changes in behavior for 3 scenarios before and after receiving brief pain-related educational information.

<table>
<thead>
<tr>
<th></th>
<th>I would call the veterinarian right away</th>
<th>I would wait to see what happens and then decide whether to call the veterinarian</th>
<th>I would likely not call the veterinarian about this change in behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-education response: snappy</td>
<td>78 (21.4%)</td>
<td>247 (67.7%)</td>
<td>40 (11.0%)</td>
</tr>
<tr>
<td>Posteducation response: snappy*</td>
<td>115 (31.7%)</td>
<td>235 (64.7%)</td>
<td>13 (3.6%)</td>
</tr>
<tr>
<td>Pre-education response: ear</td>
<td>60 (16.4%)</td>
<td>267 (73.0%)</td>
<td>39 (10.7%)</td>
</tr>
<tr>
<td>Posteducation response: ear*</td>
<td>107 (29.5%)</td>
<td>245 (67.5%)</td>
<td>11 (3.0%)</td>
</tr>
<tr>
<td>Pre-education response: walk</td>
<td>95 (26.0%)</td>
<td>260 (71.2%)</td>
<td>10 (2.7%)</td>
</tr>
<tr>
<td>Posteducation response: walk*</td>
<td>125 (34.4%)</td>
<td>233 (64.2%)</td>
<td>5 (1.4%)</td>
</tr>
</tbody>
</table>

Data are presented as No. (%) of participants.
*Pre-/posteducation change significant ($P < .001$).
(B = –1.113; P = .004) or somewhat likely (B = –0.764; P < .001) were less concerned than those who were very likely to seek medical treatment for themselves if in pain.

Ordinal regression: pre-education veterinary-related response

The ordinal regression model to predict veterinary-related response prior to participants being given pain-related educational information for each scenario included attachment (LAPS score), participants’ confidence in detecting pain in their dog (not at all/minimally, moderately, very confident), number of owned dogs as an adult (1, 2, 3, 4, or more), their likelihood of seeking medical care for their own pain (not at all likely, somewhat likely, very likely), their relationship with their veterinarian (negative/neutral, good, excellent), and how often they take their dog to the veterinarian (more than twice a year, twice a year, once a year, less than once a year). All variables were entered simultaneously.

The ordinal regression model predicting veterinary-related response for the snappy scenario was significant (χ² = 44.48; df = 13; P < .001). Significant predictors of concern level for the snappy scenario included LAPS score, participants’ confidence in their ability to detect their dog’s pain, and their relationship with their veterinarian. Those with higher LAPS scores were more likely to take their dog to the veterinarian right away than those with lower LAPS scores (B = –0.037; P < .001). Those who reported moderate levels of confidence (B = 0.626; P = .036) were significantly less likely to report taking their dog to the veterinarian right away than those who reported feeling very confident in their ability to detect their dog’s pain. Participants who reported being not at all/minimally (B = –1.187 [P = .023]) or somewhat likely (B = –0.764; P < .001) were less concerned than those who were very likely to seek medical treatment for themselves if in pain.

Factors influencing veterinary-related decisions

After each scenario was presented for the first time, participants who reported they would delay contacting their veterinarian or not contact them at all were asked to indicate the impact of several potential factors on their decision. The most commonly endorsed factors were the same across all 3 scenarios (Supplementary Tables S1–S3). These included “the cost of a veterinary exam,” “the cost of potential treatment,” “a fear that it could be something very serious,” “veterinary visits are stressful to your pet,” “you don’t see the need for veterinary care unless it is absolutely necessary,” “it is hard to go to the veterinarian with your work schedule,” and “you feel that most veterinarians are just out for the money.”

Canine Acute Pain Scale

Participants were asked to view the CAPS and indicate how useful they felt it would be in identifying their dog’s pain level, determining whether they should take their dog to the veterinarian, and describing their dog’s pain to their veterinarian. Most participants found the scale useful across all 3 areas. In terms of identifying their dog’s pain, 191 (52.6%) reported it was “very useful” and 132 (34.7%) reported it was “moderately useful.” Similarly, 177 (48.8%) reported it was “very useful” and 126 (34.7%) reported it was “moderately useful” in determining whether they should take their dog to the veterinarian. For the ability to describe their dog’s pain to their veterinarian, 213 (58.7%) reported it was “very useful” and 111 (30.6%) reported it was “moderately useful” (Supplementary Table S4).

The χ² test was used to assess the relationship between perceived usefulness of the pain scale and participants’ reported ability to detect pain in their dog. There was a significant difference found for identifying their dog’s pain (χ² = 16.30; df = 6; P = .012), deciding whether they should take their dog to the veterinarian (χ² = 16.64; df = 6; P < .011), and describing their dog’s pain to their veterinarian (χ² = 16.13; df = 6; P = .013). In each of these cases, those who reported a higher ability to detect pain in their dog reported finding the CAPS more helpful than those who reported a lower ability to detect pain in their dog (Supplementary Tables S5–S7).
Discussion

Our study confirmed our hypothesis that a minimal amount of owner education pertaining to pain-suggestive dog body language could increase owners’ concern level and the likelihood that they contact a veterinarian. Given that freedom from pain is a vital component of companion animal welfare and QOL,7,8,25–27 owners’ interpretations of and subsequent actions (or inactions) to pain-suggestive behaviors carry great implications for companion animals’ overall well-being.13

Since a companion animal’s pain cannot be treated unless an owner perceives a problem and it is difficult to effectively assess pain in species that cannot verbally communicate, it is important for veterinary professionals to help owners learn how to accurately assess potential pain in their pets. As a result of coevolution with humans, dogs have developed enhanced social-cognitive abilities that expedite their communication with humans, including behavioral signals that humans can be taught to accurately interpret.28 This makes them good candidates for pain-measuring instruments that rely on subjective judgement.29 To this point, previous research30 suggests that owners are capable of noticing and reporting behavioral cues that signify changes in the emotional or subjective states of their dogs.

Through the introduction of case scenarios depicting changes in a dog’s behavior, our study provides insights into how dog owners perceive potential pain-related changes in their dog’s behavior and the factors that influence whether they seek veterinary care and when. Following exposure to brief educational material about signs and symptoms of canine pain, owners in our study reported significant increases in stated concern related to their dog’s change in behavior and their intention to seek veterinary care. These findings suggest that even very brief pain-related educational material can have a positive impact on owners’ perceptions of canine behavioral changes and increase the possibility that they will seek veterinary care.

Similar to other studies31,32 exploring the role of attachment and owners’ ability to sense their dog’s needs, our study found that most dog owners reported high attachment and an ability to understand and connect with their dog. Interestingly, despite most participants feeling that their ability to read their dog’s behaviors was either “good” (61%) or “great” (36%), most owners reported feeling only “moderately” confident (61%) when asked about their ability to detect pain in their dog. Their confidence level in their ability to perceive their dog’s pain was a significant predictor of their concern about their dog’s behavioral changes, with those having lower levels of confidence in their ability to perceive their dog’s pain being less likely to report concern about changes in behavior. Less confident owners were also less likely to report that they would seek veterinary care for 2 of the 3 scenarios (ie, snappy and walk). These findings highlight the need for educational interventions to increase owners’ confidence in their ability to detect their dog’s pain and thus potentially increase the likelihood of appropriate concern and, as a result, the likelihood of seeking veterinary care. In addition to owners’ confidence, we found that reported attachment with their dog was a significant predictor of both stated concern and willingness to seek veterinary care for all 3 scenarios. Helping strengthen the pet-owner bond by teaching owners how to better read their pets could help owners feel empowered to make proactive veterinary-related decisions.

After the assessment of owners’ initial concern and their willingness to contact a veterinarian for the 3 behavioral scenarios, we offered a brief educational notation about each scenario to explore whether education about signs and symptoms of pain would influence owners’ concerns about behavioral changes that might indicate pain, as well as their willingness to seek veterinary care. We found that after the introduction of pain-related educational content, with the exception of concern level for the walk scenario, owners expressed more concern for their dog’s pain and greater likelihood of consulting a veterinarian. These results suggest that even very brief education can increase owners’ concern when assessing pain and the likelihood of consulting a veterinarian in a timely manner. These findings suggest that dog owners are able and willing to incorporate new information about their dog’s behaviors and, as a result, be more able to identify potential pain in their dog.

Interestingly, owners’ willingness to seek medical care for their own pain was a significant predictor of owners’ concern level and willingness to seek veterinary care for their dog in 2 of the 3 scenarios. In both the ear and walk scenarios, owners who were less likely to attend to their own pain were less concerned about changes in their dog’s behavior and less likely to seek veterinary care. Further research that explores the relationship between owners’ views and experiences with their own medical care and those of their pets is needed.

Following each of the 3 case scenarios, we asked owners who reported reluctance in contacting their veterinarian to select all the reasons for their veterinary-related choice from a given list. Across the scenarios, several of the factors that emerged as most impactful on their decision to delay contacting their veterinarian centered around money (eg, “the cost of a veterinary exam,” “the cost of potential treatment,” and “you feel that most veterinarians are just out for the money”). Even the reasons “a fear that it could be something very serious,” “you don’t see the need for veterinary care unless it is absolutely necessary,” and “finding time from work to go to the veterinarian” could be financially based. Cost has been identified as the top barrier for veterinary care. More than 25% of Americans report barriers to accessing veterinary care, with 80% of these owners identifying cost as a primary cause.33 During the past 20 years, the increase in the cost of veterinarian services has significantly outpaced overall inflation; what used to cost $100 in veterinary services in 2002 increased to $276 in 2023.34 One way to increase access to care is for veterinary health-care teams to embrace a
spectrum-of-care approach to clinical practice: combining evidence-based medicine with owners’ emotional, physical, and financial resources.6–7 A key element of a spectrum of care is flexibility. This may include not only an array of treatment options based on the needs and limitations of owners but also flexibility in hours and appointments. For example, working with owners to reduce the number of visits needed or offering extended or weekend hours or drop-off services can help some owners more easily access veterinary care.

The fourth most common reason given in our study for delaying veterinary care was that “veterinary visits are stressful to your pet.” Many dogs (and therefore owners) find veterinary visits stressful. Clinics that utilize methods to reduce fear and anxiety during veterinary visits, such as Low Stress Handling techniques, pet-friendly handling guidelines, and Fear Free techniques, can help reduce animal stress.6–8 While education can be helpful in helping dog owners recognize pain, it must be paired with strategies to overcome other barriers to seeking veterinary care including cost, convenience, and stress to ensure that pets receive the care they need.

The second part of our study introduced the CSU-CAPS® and asked owners to report their perception of the tool’s usefulness for interpreting their dog’s behaviors, making decisions about seeking veterinary care, and relaying details about their dog’s behavior and pain to their veterinarian. The CSU-CAPS’s5 visual images of dog postures, analog pain scale, and brief descriptions of psychological and physical behaviors related to pain were reported useful by owners in all 3 areas (identifying their dog’s pain, 89%; determining whether they should take their dog to the veterinarian, 84%; and describing their dog’s pain to their veterinarian, 89%). These results support previous research7–13 that suggests, with training, owners can recognize pain-related behaviors and body postures in their dogs and can complete simple pain scales to evaluate their dog’s pain. Our results suggest that the potential benefits of modifying pain assessment tools that were originally designed for veterinarians (eg, the short form of the Glasgow Composite Measure Pain Scale41 and CSU-CAPS5) for owner usage warrant further research.

There were several limitations to this study. As with any cross-sectional study, we were not able to assess changes in owners’ beliefs or behaviors over time. This was a limited sample, so caution should be taken when generalizing to other populations. Participants with more than 1 dog received guidance to rank their dogs in the alphabet. It is possible that owners may have different levels of attachment to their other dogs and may feel more attuned to their pain. It is also possible that the number of dogs owned by participants or their history of dog ownership may have impacted their initial responses to the 3 scenarios. There may be additional social determinants that factor into the owner's decisions to access veterinary care that were not assessed in the current study. It would be of value in future research to incorporate qualitative questions to gain a deeper understanding of dog owners’ perceptions and concerns regarding their dog’s potential pain and their willingness to pursue veterinary care.

Findings from this study offer enhanced knowledge about dog owners’ decisions regarding pain-related concern and resultant veterinary care decisions, including specific personal, interpersonal, and structural factors that dog owners report as barriers to seeking care. Pain in dogs is most successfully managed as a collaborative team approach with owners and veterinary professionals.1 To that end, it is vitally important that owners can accurately assess potential pain in their dogs and its impact on their dog’s QOL.10 Owners’ knowledge and awareness of pain behaviors are suggested to be key elements to early recognition, assessment, and management of pain in dogs.10,11 Unfortunately, many untrained owners are unable to reliably determine pain levels, many times underestimating their pet’s pain.12,13 This suggests a clear need to help educate owners about canine behaviors and body language,14,15 especially factors that might indicate pain. Educating owners can improve animal welfare and compliance for veterinary care.18 Results of this study suggest that visual guides such as the CSU-CAPS® as well as very brief educational information can help owners identify potential pain-related changes in behavior and make more informed decisions about whether to seek veterinary care.

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References


**Supplementary Materials**

Supplementary materials are posted online at the journal website: avmajournals.avma.org.