Applied Animal Behavior and Obedience Training Course: A Model for Veterinary Curricula

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ABSTRACT

Animal behavior problems often have detrimental effects on the relationships between pets and their owners and are one of the most frequently given reasons for canine relinquishment. The stressful environment of animal shelters can exacerbate behavior problems; yet most shelters do not have the staff necessary to address this issue adequately. Veterinary students may provide an untapped resource for solving this dilemma. As a service component of the curriculum, veterinary schools can join with local humane societies to expose students to behavioral issues and concurrently build relationships within the community and perhaps even offer shelter animals a better chance of successful adoption. The following paper describes a "hands-on" undergraduate animal behavior and obedience training psychology course, created as a model to address these needs.

BACKGROUND

Behavioral problems are one of the most frequently given reasons for canine relinquishment.^{1, 2, 3} Animal behavior problems often have detrimental effects on the relationships between pets and their owners,⁴ and consequently, function as important determinants in relinquishment decisions.⁵ The stressful environment in animal shelters can exacerbate pre-existing behavior problems, as well as create new ones in dogs previously free of problems.⁶ Even the best shelters create stress for dogs, through exposure to unpredictable and unknown noises, disruption of familiar routines, and a general loss of control over environmental contingencies.⁶ Hennessy et al.7 found the plasma levels of the stressrelated adrenal hormone, coritsol, increased for dogs recently placed in shelters. High stress level, to which dogs can respond both physically and behaviorally, has been included in the definition of poor animal welfare.8

Human interaction, however, can reduce the behavioral and physiological effects of canine stress.^{9, 10, 11} Contact with a previously known human (i.e., caretaker) has been shown to decrease stress more effectively than the presence of a canine companion.¹² Within shelter settings, studies have shown that 20 minutes of slow, firm petting can have an ameliorating effect on dogs' stress levels.^{7, 13} Because sheltering and the resultant increased stress level can have a negative impact in a multitude of areas, including behavior problems, it is important to explore avenues to facilitate stress reduction in sheltered dogs. A program that would create opportunities for human/dog interactions and include a behavioral and obedience training component is one option.

Unfortunately, few shelters have the extra personnel needed to implement such a program. Shelters have traditionally relied on volunteers from the community to fulfill the needs unmet by staff; veterinary students may provide another resource. It has been suggested that the inclusion of animal behavior in veterinary curricula could reduce both animal and owner suffering.^{14, 15} Furthermore, veterinarians who make behavioral education and training a priority within their practices may help foster better relationships with their clients and facilitate smoother, faster office visits.¹⁶ Given the impact behavior problems have on relin-

quishment decisions, and the fact that over two-thirds of people who relinquish their pets report visiting a veterinarian at least once prior to relinquishment,³ it seems likely that veterinarians who feel comfortable discussing and advising their clients on behavioral issues could have an impact on the detrimental combination of frustrated owners and misbehaving dogs.

Because most veterinary curricula offer little latitude for additional elective courses, a pilot course, described in the following paper, was designed with undergraduate psychology students to assess the feasibility of implementing an applied behavior and obedience training course in conjunction with a local humane society.

COURSE DESCRIPTION

A three-credit upper division psychology course, entitled "Applied Animal Behavior," was initiated in the spring 1999 semester at Colorado State University. The class cap was set at 12, due to the local humane society's space limitations. Although this was unplanned, the class consisted of all female students. All the students reported positive perceptions and at least some prior experience with dogs. Most of the students indicated they owned a dog (either at school or with parents). In addition to the 12 students, 2 undergraduate seniors with several years of prior experience in animal behavior and obedience training were chosen to supervise the training sessions. These students received class credit for their involvement.

Each week, the class consisted of one 50-minute session at school and two 1-hour sessions at the local humane society. In order to provide supervision during all dog/student interactions, students were asked not to visit the dogs outside of class time unless they contacted the humane society volunteer coordinator.

Training

Students received training through the following:

- two eight-hour training sessions at the humane society offered by the shelter's volunteer coordinator and animal trainer;
- 2. constant supervision and feedback during dog/student interactions;

- 3. class presentations given by professional animal trainers;
- 4. opportunity (facilitated through class) to observe dog training/obedience classes in the community;
- 5. required and elective reading material (journal articles, books, and book chapters) presented in class;
- 6. list of Websites pertaining to various dog training and obedience topics, presented in class and available on the class Website; and
- class assignment to read two dog behavior and/or training books and compare/contrast the methodologies in a written report.

Although they were introduced to a variety of training techniques, all training conducted by the students involved the use of positive reinforcement. Food treats were used initially to shape behavior and were slowly tapered off as dogs began to respond consistently. Negative behaviors were ignored instead of forcefully corrected. The choice to use positive reinforcement exclusively was made to maximize the potential stress reduction effect of the interactions.

Goals

The following class goals included potential benefits for the dogs, students, and shelter personnel:

- provide social contact and potential stress relief for the dogs;
- teach dogs basic obedience commands;
- identify and correct behavior problems, as permitted by time and severity of problem;
- encourage student excitement in learning through hands-on experiences;
- create the opportunity for undergraduate students to receive supervisory experience;
- help students become familiar with different styles of obedience training through observations, speakers, and reading material;
- help students become familiar with the programs and operations of the local humane society;
- encourage students to think critically about real world issues (i.e., pet overpopulation, euthanasia);
- create additional resources for the local humane society through student participation; and
- create a mutually beneficial working relationship between the university and the humane society.

Class Time

Class time generally began with an opportunity for students to discuss events that transpired at the shelter during the previous week. Examples of issues that were addressed included experiences with shelter staff and public (positive and negative); emotional reactions to students' work with the dogs (i.e., joy when an animal was adopted, sadness about an animal that seemed less adoptable); and training techniques (i.e., what worked, what did not, what to try differently next time). In addition to animal behavior and/or training, weekly classroom meetings covered such topics as overpopulation, relinquishment, grief and loss, human health benefits of animal interaction, the human-animal bond, and the use of shelter animals in research. This was facilitated through the use of lectures, speakers, videos, and discussion of assigned readings.

Shelter Visits

The training supervisors were placed in charge of selecting and matching the dogs with the students. The dogs selected for training had all passed an initial health and temperament exam, receiving, thereby, the status of *adoptable*. Once a dog had been determined adoptable, it remained at the shelter until adopted, notwithstanding unforeseen developments (e.g., sickness). There was minimal risk, therefore, that any of the dogs handled by students would be euthanized. This also meant that aggressive dogs were identified as such prior to any student contact. In the rare event that an aggressive dog was available for adoption, its aggressive nature was clearly noted on the kennel. Students were not permitted to work with any dogs labeled as aggressive and were instructed to stop working immediately with any dog that became aggressive.

Once a student began working with a dog, she was asked to continue for the duration of the dog's stay at the shelter. The total number of dogs handled over the course of the semester (151 sessions) was 52. The dogs were trained for from 1 to 11 sessions, depending on the training needed and the period of time the dog remained at the shelter. The mean number of sessions was 2.9 (SD = 2.2), and the median was 2.

Interaction time with the dogs consisted of a combination of the following:

- basic obedience training (i.e. come, sit, down, stay);
- training to sit on command while still in their kennels, to utilize the sit command as a structured interaction tool;⁶
- working to decrease submissive behaviors (if necessary);
- teaching dogs to walk on a lead if appropriate and/or necessary (due to restrictions at the humane society, this was always practiced indoors);
- familiarizing dogs with the prospective adopters' visiting rooms;
- familiarizing dogs with crate(s);
- increasing dogs' sense of the acceptability of overall body touching (i.e., mouth, feet, and tail);
- teaching dogs special tricks (i.e. sit up, shake);
- teaching and rewarding appropriate playing; and
- facilitating acceptance of petting and brushing.

A log was kept at the humane society to facilitate communication throughout the week among students, supervisors, and the instructor. The log recorded the date and time; the name of the student and supervisor; the name, description, and/or breed of dog; and specific comments pertaining to each individual dog (i.e., what commands a dog was working on, what, if any, problems the students experienced, and what techniques they found to work most effectively). Additionally, the supervisors met with the instructor for one hour per week to review the previous week and make any changes deemed necessary for the following week.

To further enhance student interaction, a course Website was created. In this way, students had access to the course bulletin board and chat room. To promote computer use, students were asked to check-in and post a note on the bulletin board every week.

EVALUATION

Overwhelmingly, the students reported positive feelings about their experiences at the humane society, with many reporting that they looked forward to their semiweekly visits. Feedback from the shelter personnel indicated that they enjoyed the students' participation and felt it was beneficial to the dogs and the shelter as a whole. Typically of most shelters, the local humane society operated within a tight budget and the additional help was appreciated. Several employees reported that it was beneficial to have students in the adoption area to interact with potential adopters. They also noted that the public seemed to enjoy watching the students interact with the dogs. The opportunity to "show off" to potential adopters appeared to be beneficial to the animals and the students.

The pilot nature of this course, the size of the shelter, and the relatively small number of adoptable dogs made the control of several factors that influence adoption (i.e., dog characteristics [type, color, size, sex, age, temperament, and previous behavior and/or obedience training], time of year, where dog is located within the shelter, the number and type of other dogs available for adoption) unrealistic. Therefore, data to assess the course's impact on adoption rates could not be collected. Furthermore, assessment of obedience training for this size sample, due to different levels of prior obedience (which was often not apparent during initial contact(s) with the dog) and the variance in number of sessions (depending on the amount of time the dog spent in the shelter), was not deemed to be practical. Future studies designed to assess the benefits accruing to the dogs, such as improved adoption rates and increased obedience and training, will likely need to involve larger samples, so that these potentially confounding variables can be controlled for..

SUMMARY

The Applied Animal Behavior and Obedience Training course was a positive experience for everyone involved, without the humane society's accruing any additional costs. The course appeared to provide some dogs with basic obedience training and human contact, which may have helped counteract the stressful environment of the shelter. Additional research measuring stress indicators (i.e., plasma cortisol level and specific behaviors such as yawning and panting)¹³ is needed to assess whether this type of brief student contact has a measurable effect on the dogs' stress levels.

The effects on students, however, were easier to assess. Students reported feeling they benefited from the opportunity to learn about animal behavior and training in an applied setting and from the time spent thinking critically about current issues (i.e., overpopulation and relinquishment). They also enjoyed the unique aspect of working within the community and feeling that they could actually make a difference.

Perhaps most importantly and excitingly, the course offered a glimpse of the potential gain to be made by implementing a modified version for veterinary students. Additional components of the course for veterinary students could include medical evaluations, temperament testing, vaccinations, heartworm and other parasite testing, and spay/neuter procedures. With service often the most publicly visible component of veterinary colleges,14 the inclusion in the curriculum of behavioral training, in connection with local humane societies, offers one prospect for veterinary colleges to take a prominent positive role within their communities. In looking toward the future, it is imperative that veterinary faculty understand that the human-animal bond incorporates much more than traditional medicine.14 The inclusion of behavioral training, in the form of a cooperative partnership with a local humane society, could be one step toward expanding veterinary medicine curricula.

REFERENCES

1 Arkow P. The humane society and the human-companion animal bond: reflections on the broken bond. *Vet Clin North Am Small Anim Pract* 15:455–466, 1984.

2 Patronek GL, Glickman LT, Beck AM, McCabe GP, Ecker C. Risk factors for relinquishment of dogs to an animal shelter. *J Am Vet Med Assoc* 209:572–581, 1996.

3 Salman MD, New JC, Scarelett J, Kass P, Ruch-Gallie R. Human and animal factors related to the relinquishment of dogs and cats in 12 selected animal shelters in the U.S.A. *J App Anim Welfare Sci* 1:207–226, 1998.

4 Ben-Michael J, Vossen JMH, Felling AJA, Peters VAM. The perception of problematic behavior in dogs: application of multi-dimensional scaling and hierarchical cluster analysis. *Anthrozoos* 10:198–213, 1997.

5 Nassar R, Mosier JE, Williams LW. Study of the feline and canine populations in the greater Las Vegas area. *Am J Vet Res* 45: 282–287, 1984.

6 Tuber DS, Miller DD, Caris KA, Halter R, Linden F, Hennessy MB. Dogs in animal shelters: problems, suggestions, and needed expertise. *Psychol Sci* 10:379–386, 1999.

7 Hennessy MB, Davis HN, Williams MT, Mellott C, Douglas CW. Plasma cortisol levels of dogs in a county animal shelter. *Physiol Behav* 62:485–490, 1997.

8 Broom DM. Assessing welfare and suffering. animals. *Behav Process* 25:117–123, 1991.

9 Fuller JL. Experiential deprivation and later behavior. *Science* 158:1645–1652, 1967.

10 Lynch, JJ McCarthy, JF. The effect of petting on a classically conditioned emotional response. *Behav Res Ther* 5:55– 62, 1967.

11 Pettijohn TF, Wong TW, Ebert PD, Scott JP. Alleviation of separation distress in three breeds of young dogs. *Dev Psychobiol* 19:373–381, 1977.

12 Tuber DS, Hennessy MB, Sanders S, Miller JA. Behavioral and glucocorticoid responses of adult domestic dogs (Canis familiaris) to companionship and social separation. *J Comp Psychol* 110:103–108, 1996.

13 Hennessy MB, Williams MT, Miller DD, Douglas CW, Voith VL. Influence of male and female petters on plasma cortisol and behaviour: can human interaction reduce the stress of dogs in a public animal shelter? *Appl Anim Behav Sci* 61:63–77, 1998.

14 Beaver B. The role of veterinary colleges in addressing the surplus dog and cat problem. *J Am Vet Med Assoc* 198:1241–1243, 1991.

15 Rollin BE. Social ethics, veterinary medicine, and the pet overpopulation problem. *J Am Vet Med Assoc* 198:1153–1156, 1991.

16 Spencer L. Behavioral services in a practice lead to quality relationships. *J Am Vet Med Assoc* 203:940–941, 1993.

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