

Effects of Different Types of Classical Music at a Veterinary Hospital on the Behavior of Pets & Owner Satisfaction

Music has many positive effects in reducing anxiety and stress before and after procedures in medical settings, and can influence a person's feelings.^{1,2,3} Research involving music suggests animals may be similarly affected; classical music induced more relaxed and desirable behaviors in dogs housed in shelters, compared to other music.⁴ Regarding cats, recent research reports that owners' reasons for decreased veterinary visits was due to their cats' stress during the appointments.⁵ Commercially available CDs with modified classical compositions characterized by simplified complexity, slow tempos, and low tones have been developed using these human-centered concepts to reduce stress in companion animals.^{6,7} Music's effect on decreasing stress in parents in relation to their children's medical care may correlate to decreasing pet owners' anxiety related to their pets' veterinary appointments.⁸ Positive effect on owners may also indirectly influence their pets, or vice versa, through their shared bond.⁵ Results from the proposed study can provide important evidence whether music, and specifically what type of classical. We hypothesized that veterinary patients exposed to simplified classical compositions in the exam room will demonstrate a lower frequency of stress-related behaviors, compared to dogs and cats in a room in which the original classical compositions or control is played. Secondly, we hypothesized that owners exposed to simplified classical compositions in the exam room will report higher satisfaction with the outcome of the appointment compared to owners in a room in which the original classical compositions or control is played.

Materials & Methods

- Veterinary appointments at the VMTH Community Practice included patient visits requiring a veterinarian exam, excluding euthanasia.
- Students were asked to hand the client a standardized survey after their initial history-taking and physical exam, including questions on their perception of their pet's behavior throughout the visit, and rank their satisfaction. Clinicians were given a separate standardized survey after the end of the appointment, including questions on their perception of the patients' behavior in the room.
- Each of the 3 exam rooms had unmodified classical music, TADE, or no music (control) playing at a predetermined volume set with a decibel reader, at a level that would not interfere with the appointment. Treatment rotated weekly.
- Heart rate, respiratory rate, and body temperature, as well as final charges and visit type were evaluated by gathering the information from VMACS records.

Results

- 207 visits qualified, 109 clients were surveyed. 88 visits met criteria (13 cats and 75 dogs).
- No significant difference in outcomes based on clinician or room location, so results were combined.
- No significant difference was found between the three groups for owners' rating of satisfaction with communication, exam room atmosphere, or perception of their pets' comfort and behavior compared to the previous veterinary visit.
- Cats exposed to TADE compared to classical music had significantly lower clinicians' aggression ratings ($z = 2.56, p = 0.011$).
- No significant difference was found between the three groups for clinicians' ratings of pets' socialness, anxiety, aggression, or need for muzzling. Dogs exposed to music compared to control had nearly significant lower aggression ratings ($p = 0.055$).
- No significant difference was found between groups for physiological parameters.
- Cats exposed to TADE compared to classical music had significantly lower clinicians' aggression ratings ($z = 2.56, p = 0.011$), and nearly significant for dogs ($z = 1.7, p = 0.09$).
- Clients rate dogs' anxiety level higher than clinician's rating ($t = 3.27, p = 0.0013$). However, there was no significant difference in the rating of cat or dog aggression levels when comparing clients' and clinicians' ratings.

- Dog owners with music compared to no music were significantly more satisfied with their time spent during the appointment ($z=-2.4$, $p=0.0163$). Dog owners with classical music were almost significantly more satisfied with time spent than those with TADE music ($z=1.86$, $p=0.0636$). For all animals, clients in appointments with music compared to no music rated their satisfaction with time spent higher ($z=-2.74$, $p = 0.0061$)
- There was no significant difference in final visit charges for purebreds compared to mixes, cats compared to dogs, or between the three music groups.

Discussion

- Clinicians stated they enjoyed music, which may improve their work satisfaction.
- For clients exposed to music, significantly higher client satisfaction ratings for time spent may indicate that listening to music gives clients something to do or a distraction while waiting.
- Pets exposed to music compared to control showed a trend with lower client reported anxiety ratings and lower clinician reported aggression levels. Music may indeed decrease pets' stress level and related stress behaviors in a practice setting.
- CD volume was set so that the loudest section of the CD could not interfere with appointments. During softer sections, the CD player's motor was audible, which may have interfered with the study. Ideally, songs should be equalized.
- Recognition of the song commonly known as "Mozart's Funeral March" spurred comments of concern due to the negative response a client might experience.
- The low number of cat visits ($n=13$) resulted in insufficient data for significance.
- Too few appointments were recorded due to technical difficulties to demonstrate significance, but will be analyzed later.

Conclusion

Minimal significant findings resulted from the comparison of the three music groups, disproving the first hypothesis, however though clients were more satisfied with time spent for music versus control. Classical music may have decreased dogs' anxiety as perceived by the owners. Interestingly, owners perceived more anxiety in their pets than the clinicians rated.

References

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