

Music influence on the behaviour of sheltered dogs

Introduction

There are a large number of previous researches on the effects of listening to music for different species, including humans, dairy cows, wild animals in captivity and even dogs.¹ Dogs can be kept in kennels for a variety of reasons, such as laboratory purposes, housing work-dogs or in shelters. The life in a shelter means physical and social restraint, therefore dogs generally show the signs of stress after having arrived in it.² The supply with toys improved only the state of experimental dogs, but not for kennel ones.³ The influence of displaying human voice is not clear:⁴ while Wells et al.,⁵ found the radio ineffective, on the other hand, the listening of audio books proved to be beneficial.⁶ The general mood of dog is influenced by the type of the music, too. In a study with 117 dogs the heavy metal music caused nervousness and trembling.⁷ On the other hand, a series of different genre of music (motown, soft rock, pop, reggae and classical) was able to decrease the stress level of dogs. The most powerful were the soft rock and the reggae, but the no musical treatment mitigated the barking. Owing to the individual differences in the taste of the animals, the deviation of data was big.⁴ This phenomenon is known in human, too.⁸ The shelters are noisy premises, therefore the use of a well-chosen background music may do a lot of good. The purpose of this research was to reduce general stress level of dogs.

Materials and methods

Crossbred and mongrel dogs are typical for the state shelters, therefore five mongrel dogs (aged 5 month, 10 month, one year, eight and ten years, three of small and two medium body size, all hysterectomised) were studied for 20 days kept in the same box of 8 m², which fulfil the minimum floor area of 0.6 m² per medium size dogs. During the evaluation of data, the area was divided into three parts: ahead (at the entrance), middle and back (at the dog houses). The trial lasted 19 days, the animals listened to four genres of music: classical (Bach: Goldberg variations), reggae selection, binaural (Canine Lullabies Combo) and for control, white noise. The everyday musical treatments lasted from 8 AM till 6 PM at 70 dB (not too loud, not too low) and continuous video recording was made. The data of the 2-hour-long period after the visit (3 till 5 PM) are shown below. Noldus. The Observer XT software and SPSS statistical package was used for the evaluation of the records.

Results

The positions of the dogs in the box (front, middle, back) differed significantly during listening to classical music. The dogs spent less time back, more time in the middle ($p < 0.05$). Total time spent active (standing) was significantly less during the exposure to music than the time spent passive (sitting, lying, hiding in the house) ($p < 0.01$). No significant differences were found between music genres in eating, drinking, tail-wagging, jumping, scratching. Tendencies were shown: the barking was the most frequent during the quiet control and Bach; there was no barking during the binaural music session. The social playing time was the longest during the Bach piece, followed by the

Volume 9 Issue 2 - 2020

Zsoltne Hauber,¹ G Korsos,² KD Dudas,²
 Sandor Gy Fekete²

¹ELTE Faculty of Education and Psychology, Hungary

²Department of Animal Breeding, Nutrition and Laboratory
 Animal Science at the University of Veterinary Medicine,
 Hungary

Correspondence: Sandor Gy Fekete, Unit for Laboratory
 Animal Science and Animal Welfare, University of Veterinary
 Medicine, Budapest, Hungary,
 Email sandorgyorgfekete@gmail.com

Received: April 16, 2020 | **Published:** April 27, 2020

reggae; less during the binaural music, compared to the music-free period. The frequency of the tail-wagging behaviour was the highest during listening to the Bach music.

Conclusion

During the first music-free control period, the dogs were more stressed than during the music sessions. There were not any significant differences between the genres, however the classical music had promising results: the dogs played and wagged their tails more during the Bach music and no barking occurred during the binaural one. During any music sessions animals were standing less and were found more ahead of the box compared to the quiet control. Similarly to the results of Amaya et al.,⁹ and the analysis of Lindig et al.,¹⁰ the presented results suggest that playing music to sheltered animals can help adapting to excessive environmental noises. The music of Bach proved to be the best in the calming effect and in inhibiting the barking the binaural one. Finding a type of music or acoustic stimulus, which is able to decrease the stress level and modify the behaviour of dogs in a positive way may enhance not only animal welfare in shelters and laboratory animal facility, but can also increase the chance of getting adopted.

Acknowledgments

None.

Conflicts of interest

Author declares that there are no conflicts of interest.

Funding

None.

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