



Owner Experience and the Choice to Euthanize

Rute Canejo-Teixeira^{a*}, Isabel Neto^b, Luís V. Baptista^c, Maria M. R. E. Niza^d

^{a,b,d}*CIISA-FMV ULisboa, Avenida da Universidade Técnica, 1300-477 Lisboa, Portugal*

^c*Centro Interdisciplinar de Ciências Sociais, FCSH, Universidade Nova de Lisboa, Portugal*

^a*Email: adrutecanejo@fmv.ulisboa.pt*

Abstract

The human-dog relationship has change significantly over the decades, with the dog now frequently being considered a member of the family, but it still falls to the human to grantee the dog's well-being, both legally and morally. One of the decisions required of a dog owner is when, and if, to euthanize an animal. It has been suggested that chronic illness, financial considerations and behaviour issues may predispose a dog to euthanasia. Through the use of questionnaires administered to dog owners, this study evaluated possible connections between reported canine health issues and owner choice to euthanize. Owners were asked if they had cared for at least one dog with chronic illness, that suffered a trauma (vehicular or otherwise), had been hospitalized, if their dog had bitten a person or an animal and if they had ever euthanized a dog. Contrasting with some previous reports, no association was found between any of the issues investigated and euthanasia. It is possible that the voluntary nature of this study may have introduced a bias, attracting owners with higher educational and economical status, which may make them more reluctant to euthanize their dog. In any case, more studies are required to clarify this issue.

Keywords: euthanasia; dog; owner; dyad; relationship.

* Corresponding author.

1. Objectives of the Study

The relationship between humans and dogs has changed in the last decades, with the dog now being considered a member of the family [1].

Within this relationship the human is morally, and in many countries legally [2], responsible for the dogs' well-being.

This responsibility goes beyond the provision of food, water, and shelter, into the area of quality of life. For this reason, the question of euthanasia is of particular relevance.

In the literature dogs with chronic illness, requiring expensive treatment, and those with behavioural problems have an increased chance of being euthanized, even against veterinary recommendations [3,4].

This study aimed to evaluate possible connections between owners reported health issues with their dog and euthanasia in a sample population.

In such a way we hope to contribute to a better understanding of dog euthanasia.

2. Materials and Methods

A questionnaire was distributed to dog owners in the Lisbon area to animal 3 hospitals, 10 clinics and 7 municipal anti-rabies vaccination programs.

The questionnaire was also available online for 8 months. Participation was voluntary in nature and owners were asked how many dogs they had cared to date, and if they had cared for a dog(s) with chronic illness, that suffered a trauma (vehicular or otherwise), been hospitalized, bitten a person or animal and if they had euthanized a dog.

Multiple correspondence analysis (MCA) was applied to detect and represent underlying structures in data, and Pearson's chi-square test was used to test independence between variables.

3. Results

A total of 1385 valid questionnaires were completed. Table 1 details the response rate for each dog health care occurrence.

MCA analysis (table 2) showed the variable "euthanasia" was placed at the origin of both dimensions and not associated with any of the other variables considered, a fact confirmed through the lack of significant findings though the use of Pearson's chi-square.

Table 1: Breakdown of responses to the second section of the questionnaire regarding medical occurrences experienced while caring for one or more dogs.

Acute Illness	Yes	Reported	894
		%	64.55%
	No	Reported	491
		%	35.45%
Chronic Illness	Yes	Reported	673
		%	48.59%
	No	Reported	712
		%	51.41%
Unspecified Trauma	Yes	Reported	382
		%	27.58%
	No	Reported	1003
		%	72.42%
Vehicular Trauma	Yes	Reported	364
		%	26.28%
	No	Reported	1021
		%	73.72%
Hospitalized	Yes	Reported	723
		%	52.20%
	No	Reported	662
		%	47.80%
Bitten	Yes	Reported	440
		%	31.77%
	No	Reported	945
		%	68.23%
Bit Other Animal	Yes	Reported	224
		%	16.17%
	No	Reported	1161
		%	83.83%
Bit a Person	Yes	Reported	182
		%	13.14%
	No	Reported	1203
		%	86.86%
Euthanized	Yes	Reported	335
		%	24.19%
	No	Reported	1050
		%	75.81%

Table 2: MCA dimensions discrimination measures

	Dimension		Mean
	1	2	
Total Dogs Owned	.327	.287	.307
Acute Illness	.165	.180	.172
Chronic Illness	.272	.140	.206
Unspecified Trauma	.292	.008	.150
Vehicular Trauma	.233	.003	.118
Bitten	.314	.041	.178
Hospitalized	.281	.153	.217
Bit Other Animal	.332	.243	.288
Bit a Person	.256	.179	.217
Euthanized	.000	.000	.000
Active Total	2.473	1.234	1.853

4. Discussion and conclusion

Although it has been suggested that there may exist factors that predispose owners to choose euthanasia for their dog, such as chronic illness and costly medical care [3], the results of this study seem to disagree with these findings. In our study euthanasia did not correlate with any of the other variables under evaluation (number of dogs, chronic illness, trauma, hospitalization, biting). It has been suggested that dogs with serious traumatic injury may be more likely to be submitted for euthanasia [5] but although experience with various types of trauma in their dog health care histories was reported by owners in this population, no association was found between trauma and euthanasia. Since the mortality rate of serious trauma is known to be high [6], it is possible that in the study population the canines were not submitted to euthanasia because they passed away before medical attention was sought.

Studies have shown that behavioural issues are frequently cited as a reason for the euthanasia of a canine companion [7–9], in this population however, such a link was not observed. Although 29.3% of owners in this study reported that they had cared for dogs that had bitten another animal or a person, they did not report more experience with euthanasia. Owners were not asked about breed or size of dog, since it has been suggested that larger dogs are euthanized for aggression more frequently than smaller breeds [10,11], it would have been interesting to see if this was the case.

It has been postulated that dogs adopted from shelters or as strays are submitted to euthanasia and abandonment more frequently than those that have been purchased [12–14]. Provenience of the dogs under study was not addressed, so it is possible that all the dogs in the population were purchased, and as such more valued by their owners and less likely to be euthanized. Although other studies have shown that dogs with chronic illness are more frequently submitted to euthanasia [15], our results show no such link. The fact that participation in this study was voluntary may have introduced a selection bias [16] and participating owners may represent individuals with a strong attachment to their dogs. This may make them more reluctant to euthanize their pet, regardless of the seriousness of their illness [17].

In general terms, the choice to euthanize can be influenced by owners' culture, socioeconomic status, experience, beliefs, religion etc. [18], aspects of owners' lifestyles that were not addressed in this study. The influence these factors may have on the choice to euthanize needs to be accessed in future studies. The choice to euthanize is never an easy one and it is important to understand how and why owners chose to euthanize a dog, not only to deter convenience euthanasia, but also to prevent unnecessarily suffering for sick canines.

5. Acknowledgements

This work was supported by the project CIISA: UID/CVT/00276/2013.

Bibliography

- [1] S. B. Barker, C. S. Rogers, J. W. Turner, A. S. Karpf, and H. M. Suthers-McCabe, "Benefits of Interacting with Companion Animals," *Am. Behav. Sci.*, vol. 47, no. 1, pp. 94–99, 2003.
- [2] Assembleia da República, Estatuto Jurídico dos Animais. <http://data.dre.pt/eli/lei/8/2017/03/03/p/dre/pt/html>, 2017, pp. 1145–1149.
- [3] A. A. Rocha, "EUTANÁSIA EM CANÍDEOS E FELÍDEOS," Universidade Técnica de Lisboa, 2010.
- [4] E. Voslárová and Passantino Annamaria, "Stray dog and cat laws and enforcement in Czech Republic and in Italy," *Ann Ist Super Sanità*, vol. 48, no. 1, pp. 97–104, 2012.
- [5] C. W. Bruce, B. A. Brisson, and K. Gyselinck, "Spinal fracture and luxation in dogs and cats," *Vet Comp Orthop Traumatol*, vol. 21, pp. 280–284, 2011.
- [6] E. Streeter, E. Rozanaski, A. Laforcade-buress, L. M. Freeman, and J. Rush, "Evaluation of vehicular trauma in dogs: 239 cases (January–December 2001)," *J. Am. Vet. Med. Assoc.*, vol. 235, no. 4, pp. 405–408, 2001.
- [7] C. Siracusa, L. Provoost, and I. R. Reisner, "Dog- and owner-related risk factors for consideration of euthanasia or rehoming before a referral behavioral consultation and for euthanizing or rehoming the dog after the consultation," *J. Vet. Behav. Clin. Appl. Res.*, vol. 22, pp. 46–56, Nov. 2017.
- [8] K. A. Houpt, D. Goodwin, Y. Uchida, E. Baranyiová, J. Fatjó, and Y. Kakuma, "Proceedings of a workshop to identify dog welfare issues in the US, Japan, Czech Republic, Spain and the UK," *Appl. Anim. Behav. Sci.*, vol. 106, no. 4 SPEC. ISS., pp. 221–233, 2007.
- [9] L. van den Berg, M. B. H. Schilder, H. de Vries, and Leeg, "Phenotyping of Aggressive Behavior in Golden Retriever Dogs with a Questionnaire," *Behav. Genet.*, vol. 36, no. 6, pp. 882–902, 2006.
- [10] K. L. Overall and M. Love, "Special Report Dog bites to humans — demography , epidemiology , injury , and risk," *Javma*, vol. 218, no. 112, pp. 1923–1934, 2011.

- [11] P. Rezac, K. Rezac, and P. Slama, "Human behavior preceding dog bites to the face," *Vet. J.*, vol. 206, no. 3, pp. 284–288, 2015.
- [12] D. L. Wells and P. G. Hepper, "Prevalence of behaviour problems reported by owners of dogs purchased from an animal rescue shelter," *Appl. Anim. Behav. Sci.*, vol. 69, no. 1, pp. 55–65, 2000.
- [13] E. N. Osullivan and A. J. Hanlon, "A review of official data obtained from dog control records generated by the dog control service of county cork, Ireland during 2007," *Ir. Vet. J.*, vol. 65, no. 1, p. 1, 2012.
- [14] B. Turcsán, Á. Miklósi, and E. Kubinyi, "Owner perceived differences between mixed-breed and purebred dogs," *PLoS One*, vol. 12, no. 2, p. e0172720, 2017.
- [15] L. C. Marston, P. C. Bennett, and G. J. Coleman, "What Happens to Shelter Dogs? An Analysis of Data for 1 Year From Three Australian Shelters," *J. Appl. Anim. Welf. Sci.*, vol. 7, no. 1, pp. 27–47, 2004.
- [16] J. K. Murray, W. J. Browne, M. A. Roberts, A. Whitmarsh, and T. J. Gruffydd-Jones, "Number and ownership profiles of cats and dogs in the UK.," *Vet. Rec.*, vol. 166, no. 6, pp. 163–168, 2010.
- [17] T. Rehn, U. Lindholm, L. Keeling, and B. Forkman, "I like my dog, does my dog like me?," *Appl. Anim. Behav. Sci.*, vol. 150, pp. 65–73, 2014.
- [18] H. S. Lund, S. Eggertsson, A. M. Grøndahl, and A. V Eggertsdóttir, "Views on euthanasia and the rehoming of dogs in Norway and Iceland.," *Vet. Rec.*, vol. 166, no. 24, pp. 749–52, Jun. 2010.