

Attitude towards pets in veterinary surgeons: a comparison between female and male veterinarians in Italy

Chiara Mariti^{1*}, Sabrina Giussani², Simone Moreira Bergamini³, Angelo Gazzano¹

¹ *Department of Veterinary Sciences, University of Pisa, Italy*

² *SISCA, Società Italiana Scienze del Comportamento Animale, Cremona, Italy*

³ *Veterinary behaviorist freelance*

Abstract: The aim of this study was to investigate possible gender differences in the attitude towards animals among companion animal veterinarians. The sample was made up of 337 veterinary surgeons involved in the clinic of small animals, 41.1±9.4 years old, graduated in the period 1974-2015, working in different areas of Italy. The sample was formed by 261 female and 76 male veterinary surgeons. The participants filled in a questionnaire included items regarding personal data as well as items related to welfare. Respondents' were asked to rate, using a 1-5 Likert scale, the importance of the Brambell's five freedoms for the welfare of pet species and their actual protection. The questionnaire also included the 20-item ethics subscale of the Animal Attitude Scale (AAS). Women showed a higher AAS total score (78.8±11.4 vs 72.1±13.7; U=7062.00; p<0.001). However, no difference was found between women and men for the items of AAS regarding pets, specifically where dog-fighting and dog shelters were mentioned. Women were found to consider more important, for the well-being of pets, the provision of an appropriate physical environment (U=7574.00; p<0.001), the freedom from fear and distress (U=8432.00; p=0.012) and the freedom to express normal behaviour (U=8400.00; p=0.012). Males were instead found to consider their patients more protected in their need to express normal behavior (U=8222.50; p=0.012). These findings confirm a strong influence of the gender on the attitude towards non-human animals: female veterinarians showed more concern for animal welfare issues than did males both in terms of sensitivity to animal use by humans and in importance given to the five freedoms for the welfare of pet animals.

Key Words: veterinarian, attitude towards pets, behaviourist.

* *Corresponding Author:* chiara.mariti@unipi.it

Introduction

The existence of gender differences in both attitudes and behaviour towards non-human animals is a widespread phenomenon. Herzog and colleagues (1991) found that gender and the expressive (feminine) dimension of sex role orientation accounted for a significant proportion of the variation in attitudes towards animal welfare issues. It is likely that such sex differences exist also in professional categories such as veterinary surgeons (Ozen et al., 2004).

The veterinary profession plays a significant role in animal welfare issues, particularly in research, clinical care, and the animal protection movement (Wu et al., 2015). Their positions and attitudes towards animal welfare are fundamental in preventing animals from unnecessary suffering and improving their welfare status in practice (Sabuncuoglu & Cabon, 2008).

The aim of this study was to investigate possible gender differences in the attitude towards animals among companion animal veterinarians.

Subjects, materials and methods

A convenience sample of veterinary surgeons working with dogs and cats was recruited through social networks, personal contact and word of mouth, and asked to participate at an online survey. The questionnaire included items regarding personal data as well as items related to welfare. Respondents were asked to rate, using a 1-5 Likert scale (see tab. 1), the importance of the Brambell's five freedoms for the welfare of pet species and their actual protection. The questionnaire also included the 20-item ethics subscale of the Animal Attitude Scale (AAS) (Herzog et al., 1991). The AAS was back-translated into Italian, and item number 3 was modified using the word dog-fighting instead of cock-fighting.

The total sample was made up of 337 veterinary surgeons involved in the clinic of small animals, 41.1 ± 9.4 years old, graduated in the period 1974-2015, working in different areas of Italy. The sample was formed by 261 female and 76 male veterinary surgeons. The answers provided by the two genders were compared using the Mann Whitney U test ($p < 0.05$).

Results and discussion

The statistical analysis revealed significant gender differences in veterinary surgeons for most of the attitude measures. In detail, women showed a higher AAS total score (78.8 ± 11.4 vs 72.1 ± 13.7 ; $U = 7062.00$; $p < 0.001$) (Fig. 1). This confirms previous studies using the same questionnaire (e.g. in the general and in the animal protection community: Signal & Taylor, 2007). However, no difference was found between women and men for the items of AAS regarding pets, specifically where dog-fighting and dog shelters were mentioned. Herzog (2007) suggests that the overlap between genders on specific issues related to attitudes and behavior towards animals is higher than expected.

In the current study, other measurements were used. Women were found to consider more important, for the well-being of pets, the provision of an appropriate physical environment ($U = 7574.00$; $p < 0.001$), the freedom from fear and distress ($U = 8432.00$; $p = 0.012$), and the freedom to express normal behaviour ($U = 8400.00$; $p = 0.012$) (Fig. 2). Males were instead found to consider their patients more protected in their need to express normal behavior ($U = 8222.50$; $p = 0.012$) (Fig. 2). These findings also reflect previous studies assessing veterinary students (Serpell, 2005) and veterinary practitioners involved in different fields and dealing with different species (Ozen et al., 2004), in which females were found to display greater concern for animal suffering and welfare issues.

It is noteworthy that no difference was found for the very basic and physical-related freedoms, i.e. freedoms from hunger, thirst, pain, injury and disease. These freedoms were equally important for the two genders, maybe due to the fact that respondents were educated on these points during their veterinary career.

Female veterinary surgeons seem to be more sensitivity than males about psychological aspects, i.e. fear, distress and normal behavior. It is also remarkable that women considered their patients less protected in their need to express normal behavior. It is possible that women tend to express more concern for the welfare of individual animals (Kellert & Berry, 1987), and it may be related to a gender difference in rating the dogs' level of stress (Mariti et al., 2012). Such difference is likely to be relevant when veterinarians are called to assess and provide advice about their patients' welfare.

Tab. 1. Items on the importance and protection of the five freedoms listed in Brambell' Report (1965) and the relative Likert scales used.

	Likert scale	Five freedoms
In your opinion, how much important are the freedom listed in the Brambell Report 1965 for the welfare of a companion animal?	1 = not important at all	Freedom from hunger or thirst
	2 = slightly important	Freedom to have an adequate physical environment
	3 = moderately important	
	4 = very important	Freedom from pain, injury or disease
	5 = extremely important	
In your opinion, how much guaranteed are the freedom listed in the Brambell Report 1965 in your patients?	1 = not protected at all	Freedom to express (most) normal behavior
	2 = slightly protected	
	3 = moderately protected	
	4 = very protected	Freedom from fear and distress
	5 = totally protected	

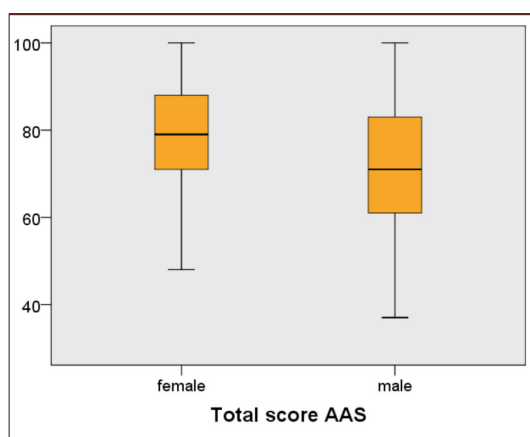


Fig. 1. Total scores obtained by female and male vets for the Animal Attitude Scale.

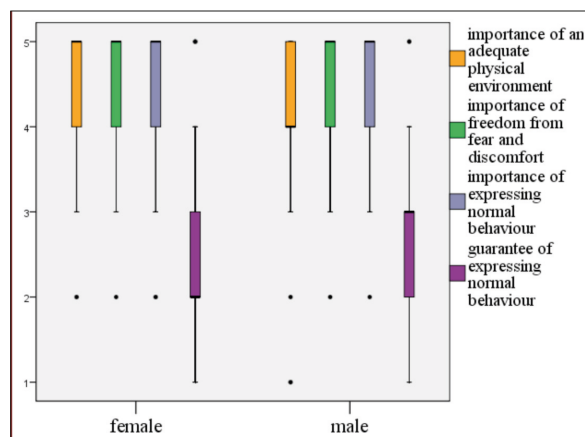


Fig. 2. Scores obtained by female and male vets which result in a statistically significant difference ($p < 0.05$).

Conclusions

These findings confirm a strong influence of the gender on the attitude towards non-human animals: female veterinarians showed more concern for animal welfare issues than did males both in terms of sensitivity to animal use by humans and in importance given to the five freedoms for the welfare of pet animals.

Further research should clarify whether such gender dissimilarity may imply relevant differences in the care of animal patients and in the suggestions provided to owners.

References

- Herzog H.A. Jr, Betchart N.S., Pittman P.B. Gender, sex role orientation, and attitudes toward animals. *Anthrozoös*. 1991; 3: 184-191.
- Herzog H.A. Gender Differences in Human-Animal Interactions: A Review. *Anthrozoös*. 2007; 20: 7-21.
- Kellert S.R. & Berry J.K. Attitudes, knowledge, and behaviors toward wildlife as affected by gender. *Wild. Soc. Bull.* 1987;13: 363-371.
- Mariti C., Gazzano A., Moore J.L., Baragli P., Chelli L., Sighieri C. Perception of dogs' stress by their owners. *J. V. B. Clin. Appl.* 2012; 7: 213-219.
- Ozen A., Ozturk R., Yasar A., Armutak A., Basagac T., Ozgur A., Seker I., Yerlikaya H. An attitude of veterinary practitioners towards animal rights in Turkey. *Vet. Med. - Czeck.* 2004; 49: 298-304.
- Sabuncuoğlu N., Cabon O. Attitudes of Turkish veterinarians towards animal welfare. *Anim. Welfare.* 2008;17: 27-33.
- Serpell J. Factors influencing veterinary students' career choices and attitudes to animals. *J. Vet. Med. Educ.* 2005; 32: 491-495.
- Signal T.D. & Taylor N. Attitude to animals and empathy: comparing animal protection and general community samples. *Anthrozoös*. 2007; 20: 125-130.
- Wu Y.S., Lai Y.T., Fei C.Y., Jong D.S. Attitudes of Taiwan veterinarians towards animal welfare. *Anim. Welfare.* 2015; 24: 223-228.

L'attitudine per gli animali da compagnia nei veterinari: un confronto tra i veterinari di sesso maschile e femminile in Italia

Chiara Mariti^{1*}, Sabrina Giussani², Simone Moreira Bergamini³, Angelo Gazzano¹

¹ *Dipartimento di Scienze Veterinarie, Università di Pisa, Italy*

² *SISCA, Società Italiana Scienze del Comportamento Animale, Cremona, Italy*

³ *Medico veterinario esperto in comportamento, libero professionista*

Sintesi

Lo scopo dello studio è stato quello di indagare sull'esistenza di possibili differenze attribuibili al sesso, nei veterinari di animali da compagnia.

È stato scelto un campione di 337 veterinari (261 donne), che esercitavano la professione nella clinica dei piccoli animali in diverse regioni italiane. L'età media è risultata essere di $41,9 \pm 9,4$ anni ed il conseguimento della laurea nel periodo compreso tra il 1974 ed il 2015.

I partecipanti hanno compilato un questionario che includeva domande riguardo la propria situazione anagrafica e concernenti le loro opinioni circa il benessere degli animali da compagnia.

Nello specifico, ai partecipanti era chiesto di esprimere l'importanza che attribuivano alle 5 libertà proposte da Brambell, usando i punteggi previsti dalla scala Likert. Il questionario includeva inoltre 20 domande a sfondo etico, appartenenti alla Animal Attitude Scale (AAS).

Le donne hanno mostrato un punteggio più alto di AAS ($78,8 \pm 11,4$ vs $72,1 \pm 13,7$; $U=7062,00$; $p<0,001$). Nessuna differenza è stata riscontrata nei punteggi di AAS riferiti agli animali da compagnia, specialmente quando erano menzionati i combattimenti tra cani e i canili.

Le donne considerarono più importante, per il benessere dell'animale, il fornire un ambiente fisico appropriato ($U=7574,00$; $p<0,001$), la libertà dalla paura e dallo stress ($U=8432,00$; $p=0,012$) e quella di poter esprimere un comportamento normale ($U=8400,00$; $p=0,012$).

Questi risultati, seppur preliminari, confermano l'esistenza di una forte influenza di genere nell'attitudine dei veterinari nei confronti degli animali. I veterinari di sesso femminile hanno riconosciuto una maggior importanza alle 5 libertà nel tutelare il benessere dell'animale.