

Community attitudes towards semi-owned cats – Opportunities for education

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Abstract

The intentional provision of food, medical treatment and shelter by humans towards a cat that is not considered to be owned is defined as 'semi-ownership'. The aim of this study was to explore the prevalence of such behaviours and the attitudes held by individuals who engage in them. Over 400 residents in rural and non-rural Victoria were surveyed in relation to their ownership status, practices and attitudes towards companion animals. The findings revealed that 22 percent of the sample engaged in one or more semi-ownership behaviours. Opportunities to engage cat semi-owners' in education programs that promote responsible pet ownership behaviour were evident.

Introduction

While cat abandonment and other similar actions contribute towards the creation of cat colonies, cat 'semi-owners' are a significant force in maintaining them (Webb 1995). Cat semi-ownership can be defined as the intentional provision of food or other benevolent actions which contribute towards the health and fitness of a cat, but that do not constitute 'ownership' as far as the person undertaking such actions is concerned. Studies suggest that such actions are common in the USA and Europe and contribute towards the overpopulation of cats in urban environments (Haspel & Calhoun 1990; Natoli, Ferrari, Bolletti & Pontier 1990). In Australia, there is a paucity of data on the prevalence of cat semi-ownership behaviours, although evidence of the indirect human contribution of food to cats via rubbish tips (Hutchings 2003) has been documented.

The underlying attitudes that drive cat semi-ownership behaviours remain speculative, but it has been hypothesised that they may rest on the belief that, ultimately, cats are able to fend for themselves. This problem was highlighted by Levy, Woods, Turick and Etheridge (2003), who studied residents of a college community in the USA. They found that 12% of the sample fed free-roaming cats but, of these, only 11% attempted to have these cats neutered. In addition, they estimated that around 44% of the cat population in the USA were semi-owned (Levy et al 2003). Natoli et al (1999) also studied semi-ownership of free-roaming cats in Rome and reported the characteristics of cat lovers who regularly supplied food, veterinary care and shelter for three colonies. The amount of food given to the cats was monitored and it was discovered that despite knowledge of food wastage, the 'cat lovers' consistently provided more food than was needed. Haspel and Calhoun (1990) also described semi-owners in New York as being 'devoted' to their semi-owned cats; providing them with food, shelter and medical attention. They found that 22% of the sample fed free-roaming cats, however, out of 154 participants, only one had a cat de-sexed. As in Natoli et al's (1999) study, the main concern of semi-owners was that the cats would go hungry without their intervention. As such, while clearly misguided, these actions were undertaken with a degree of benevolence in mind.

Research on attitudes towards cats has shown that cat owners and females tend to hold more favourable attitudes towards cats than do non-owners and males. For example, Perrine and Osbourne (1998) found that females (65%) were more likely to label themselves as 'cat persons' than males (23%). There was also evidence that people tend to display more extreme feelings towards cats than dogs, such that 18% of the sample said they did not like cats whereas only two participants (1.5%) reported that they disliked dogs, in addition to which these participants also disliked cats.

Reasons cited for owning a cat are ease of care, affection, companionship and the cat's personality (Zasloff & Kidd 1994) and evidence has shown that cats provide a source of social and emotional support (Stammach & Turner 1999).

With few exceptions, there seems to be a lack of research that specifically explores the attitudes of semi-owners towards cats. This has resulted in some controversy as to whether the attitudes that underlie cat semi-ownership behaviours are positive or negative and an argument can be made for both. For instance, in relation to negative attitudes, cat semi-ownership might be the product of cats being undervalued in the community; regarded as disposable and easily able to fend for themselves (Webb 1995). In support of this, Rochlitz (2000) speculated that pet owners are less likely to de-sex their cat than their dog because cats were perceived as having 'less value'. Conversely, the attitudes driving cat semi-ownership may be positive and largely benevolent; however, these are expressed in, what is ultimately, callous behaviour. To this end, Haspel and Calhoun (1990) found evidence to suggest that behaviours relating to cat semi-ownership were generally regarded positively, such that 39% of their sample stated that they would be happy if their neighbours fed stray cats.

Semi-ownership behaviours ultimately contribute towards the maintenance of stray and feral cat colonies and over-population problems. For instance, over 60 000 cats were relinquished to shelters in Australia in 1996, with 75% of these being euthanased (Rochlitz 2000). The complexity of the relationship between cat semi-ownership attitudes and behaviours should not be underestimated as a constellation of factors might be implicated. For example, it has been suggested that attitudes towards animals are also influenced by instrumental self-interest, empathy, identification and beliefs about the status of animals in relation to humans. These beliefs, in turn, may vary widely depending on the individual's economic and political stance; for example, animal rights supporters versus farmers (Hills 1993). In addition, many variables other than attitudes can direct behaviour (Fishbein 1967).

The aim of this study was to measure the prevalence of behaviours related to cat semi-ownership and the underlying attitudes that may drive such behaviours. Previous surveys on community attitudes to cat management have been successful in identifying areas in which the public are knowledgeable and their attitudes towards issues such as de-sexing and containment (Grayson et al 2002; Scriggins & Murray 1997). Thus, an investigation into the attitudes which are associated with semi-ownership would be fruitful in order to identify which areas are in need of educative measures for responsible cat ownership.

Method

Participants

Participants were randomly recruited by phone from metropolitan and rural Victoria. The total sample comprised 424 respondents of which 300 were female and 124 were male.

Materials

Beliefs, attitudes and the level of awareness of issues about cats, such as registration, de-sexing, feeding, breeding, containment, wildlife predation, financial investment and personal responsibility were explored in the Community Attitudes Toward Companion Animals survey, which was developed in conjunction with key government and research representatives.

The final questionnaire comprised five sections:

- Section A: Demographics
- Section B: Animal Ownership
 - Dog ownership
 - Cat ownership
 - Cat Semi-ownership
- Section C: Companion Animal Containment
- Section D: Wandering Cats
- Section E: Attitudes Towards Companion Animals

Procedure

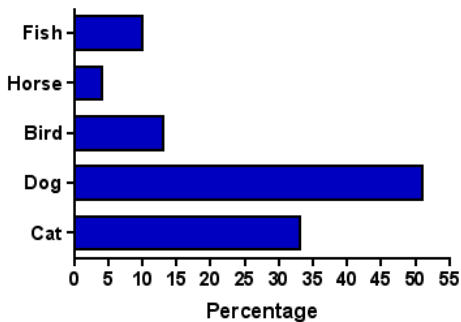
After receiving project approval from the Monash University Standing Committee on Ethics for Research involving Humans, participants were recruited by phone during daytime and early evening hours, using telephone numbers randomly generated from the April 2003 release of Marketing Pro (DtMS systems). Respondents were provided with a verbal description of the project and asked if they would like to participate in a survey on people’s attitudes towards domestic pet ownership and management. Where consent to participate was granted, responses were entered directly into a digitised version of the questionnaire. Participants were thanked for their time and their contact details were deleted from the records.

Results

Prevalence of companion animal ownership

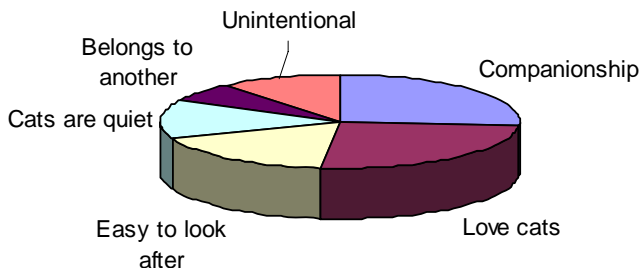
The majority of the sample (70%) indicated that they own companion animals. This figure is consistent with the findings reported by the Australian Companion Animal Council (2003), indicating that the sample was reasonably representative. Figure 1 shows the relative proportion of companion

Figure 1. Percentage respondents that own various companion animals



As can be seen in Figure 2, when asked the reasons for their being a cat in the household, the majority of respondents agreed that it was for companionship (59%) and/or because they ‘love’ cats (56%).

Figure 2. Reasons for there being a cat in the household



As can be seen in Figure 3, the majority of cat (N=142) and dog (N=218) owners were responsible for most of the behaviours relating to ownership. In relation to cats, actions that were under-represented were micro-chipping and registration (55%) and walking/exercise (39%).

Figure 3. Percentage of cat and dog owners responsible for actions relating to ownership

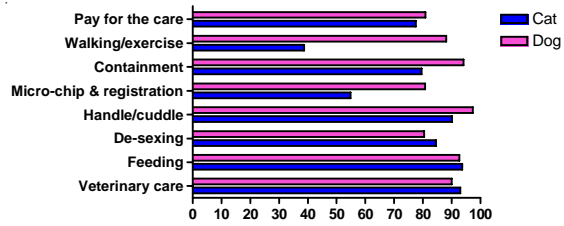
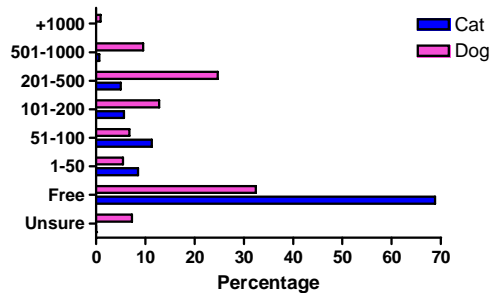


Figure 4 displays the amount of money that respondents paid to purchase their cat or dog. As can be seen, almost 70% of cat owners did not pay for their cat. In contrast, less than 35% of dog owners received their pet for free.

Figure 4. Amount of money paid to purchase a cat or dog



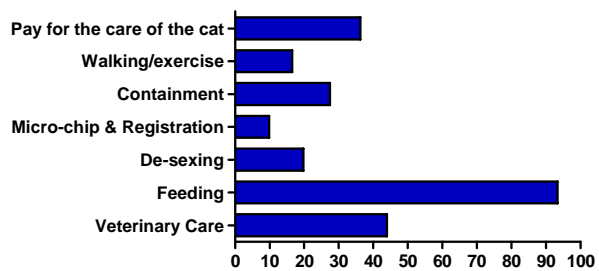
Prevalence of cat semi-ownership

Cat semi-ownership was defined as having made any contribution towards the health or fitness of a cat/s that respondents did not own. This included actions such as: veterinary care; feeding; micro-chipping and registration; de-sexing, containment, walking/exercise, and; payment for its care.

The results indicate that 22% (N=91) of the sample engaged in at least one or more cat semi-ownership activities. This number does not include respondents who only handle/cuddle a cat they don’t own or those who only care for a cat on behalf of a friend or family member while they are away. Figure 5 shows the percentage of cat semi-owners who engage in each of the behaviours. As can be seen, 93% of semi-owners fed cats they didn’t own; generally within their property boundary (59%) or inside their house (19%).

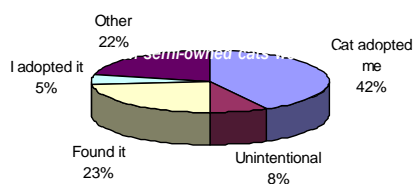
In contrast, however, only 20% of semi-owners de-sexed cats they ‘didn’t own’. This was despite the fact that most respondents (65%) did not believe their semi-owned cat to have already been de-sexed.

Figure 5. Percentage of cat semi-owners that engage in each action



In relation to the means by which semi-ownership came about, as can be seen in Figure 6, 42% of respondents indicated that the cat adopted them, and 23% indicated that they found the cat.

Figure 6. The means by which semi-owned cats were acquired

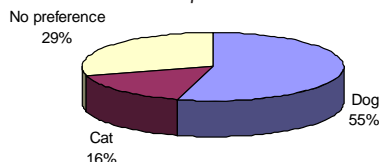


In relation to the reasons why people feed cats they do not own, 63% of respondents indicated that it was because they are concerned for the welfare of the cat/s. These findings seem to relate to semi-owner beliefs regarding the quality of life for semi-owned cats in comparison to owned cats, with 47% believing them to have the same, 13% believing a semi-owned cats' life to be better, and 40% believing it to be worse than an owned cat. However, only 30% of the sample indicated that such individuals are actually improving the welfare of the cats – the majority of respondents (57%) indicated that semi-owners who feed cats are creating a bigger problem.

Attitudes towards companion animals

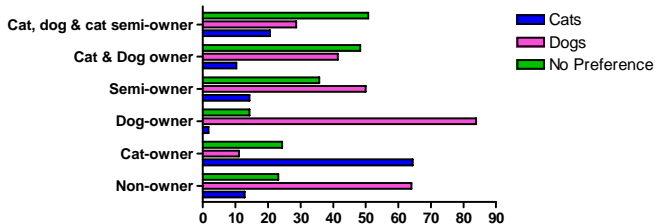
This section considered respondents' beliefs and attitudes towards companion animals. As can be seen in Figure 7, 54% of respondents indicated a preference for dogs, 29% indicated no preference and a substantially lower proportion of respondents (16%) indicated a preference for cats.

Figure 7. Preference for companion animals



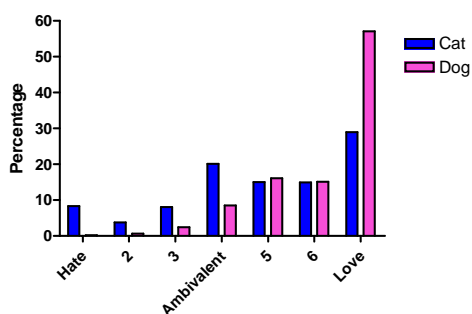
As can be seen in Figure 8, when preference was explored as a function of ownership status, cat owners revealed a strong preference for cats. All other respondents showed a preference for dogs or no preference for either companion animal

Figure 8. Preference for cats and dogs as a function of ownership status



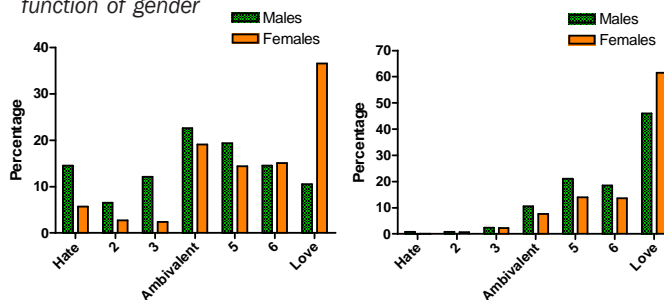
Using a 7-point Likert scale ranging from 'hate' (1) to 'love' (7), respondents' general feelings towards cats and dogs were explored. As can be seen in Figure 9, attitudes towards cats range from hate to love, with a fairly high proportion indicating ambivalence (20%). In contrast, attitudes towards dogs were much more skewed towards the positive (love) end. This is clearly illustrated by the fact that 29% of respondents indicated that they 'love' cats, whereas 57% of respondents indicated that they love dogs.

Figure 9. General feeling towards cats and dogs



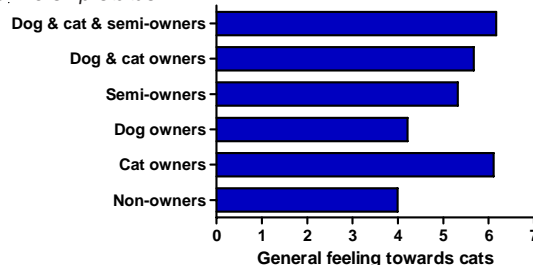
As can be seen in Figure 10, when these data were explored as a function of gender, attitudes towards cats were significantly more positive in females than in males. Similarly, attitudes towards dogs were significantly more positive in females than in males.

Figure 10. General feelings towards a) cats, and b) dogs as a function of gender



Using the same data derived from the 7-point Likert scale ranging from 'hate' (1) to 'love' (7), respondents' general feeling towards cats were explored as a function of ownership status. Figure 11 illustrates the group means for general feeling towards cats.

Figure 11. Mean general feelings towards cats as a function of ownership status



One-way ANOVA revealed a significant difference between categories of companion animal ownership and general feeling towards cats ($F(5, 416) = 26.67, p < .001$). Post hoc analyses revealed that non-owners and dog owners who did not own or semi-own cats held significantly less favourable attitudes towards cats in comparison to all other categories of owners and semi-owners.

The extent to which respondents agreed that a list of attributes (for example, 'loyal', 'independent', 'dirty') described cats was explored. Twenty-one attributes were rated by respondents on a 7-point Likert scale ranging from 'strongly disagree' (1) to 'strongly agree' (7). Data analysed using Principal Components Analysis (PCA) revealed that respondents rated the attributes on three distinct dimensions: 'positive attributes', 'negative attributes' and 'independence attributes'. Using the factor scores, the extent to which these attributes were thought to characterise cats was explored as a function of ownership status. These findings are presented below.

Table 1. A comparison of the positive, negative and independence factor scores for cat attributes as a function of ownership status

		N	Mean	Std. Deviation
positive cat attributes	non-owner	116	-.35	1.03
	cat-owner	45	.44	.72
	dog-owner	112	-.28	1.02
	cat semi-owner	28	.28	1.05
	dog & cat owner	58	-.31	.84
	dog & cat & cat semi-owner	63	.42	.79
	Total	422	.00	1.00
negative cat attributes	non-owner	116	-.17	.95
	cat-owner	45	-.38	1.02
	dog-owner	112	.23	.87
	cat semi-owner	28	.35	1.02
	dog & cat owner	58	-.35	.99
	dog & cat & cat semi-owner	63	-.28	1.08
	Total	422	.00	1.00
independence cat attributes	non-owner	116	-.12	1.11
	cat-owner	45	-.08	.84
	dog-owner	112	.00	1.03
	cat semi-owner	28	-.14	.97
	dog & cat owner	58	-.02	.88
	dog & cat & cat semi-owner	63	.36	.90
	Total	422	.00	1.00

One-way ANOVA revealed a significant difference in the extent to which positive attitudes towards cats were held as a function of ownership status ($F(5, 416) = 11.27, p < .001$). Post hoc analysis revealed that non-owners and dog owners who did not own or semi-own cats held significantly less positive attitudes towards cats in comparison to all other categories of owners and semi-owners.

In relation to negative attitudes towards cats, one-way ANOVA revealed a significant difference in attitudes as a function of ownership status ($F(5, 416) = 6.59, p < .001$). Post hoc analysis revealed that attitudes towards cats were significantly less favourable in non-owners and dog owners who did not own or semi-own cats in comparison to all other categories of owners and semi-owners.

Finally, one-way ANOVA revealed that there were no significant differences in the extent to which attributes related to independence were attributed to cats as a function of ownership status ($F(5, 416) = 2.15, p > .05$).

Predicting companion animal ownership

Logistic regression was performed to determine which variables best predicted cat semi-ownership. The variables used to predict semi-ownership included a) demographic variables (gender, age and residential location), b) knowledge variables related to companion animal behaviours, c) attitude variables relating to cats, and d) attitude variables relating to dogs.

The findings revealed that cat semi-ownership could be predicted on the basis of a belief that cats are independent in conjunction with positive feelings towards cats.

Discussion

The principle aim of this study was to explore the relationship between attitudes and behaviours towards semi-owned cats. The results revealed that 70 percent of the respondents owned companion animals. Notably, 33 percent of respondents indicated the ownership of cats, which is higher than the national average of 23 percent reported by the Australian Companion Animal Council (2003).

The current study revealed that cats were primarily kept by respondents for companionship, which is in support of past research (Bradshaw 1992; Turner & Bateson 2000; Zasloff & Kidd 1994). It is notable, however, that there was some evidence to suggest that cats were not as highly regarded and well liked by respondents as were dogs. For example, a larger proportion of respondents were found to prefer dogs (54 percent) in comparison to cats (16 percent). When preference was explored as a function of ownership status, the findings showed that cat owners preferred cats to dogs, but that all other respondents showed a preference for dogs or no preference.

Using a 7-point Likert scale that ranged from 'hate' (1) to 'love' (7), to further explore attitudes towards companion animals, respondents were found to rate their feelings significantly more favourably towards dogs than they did in relation to cats. When general feeling was explored as a function of ownership status, however, the findings revealed that attitudes towards cats by cat owners were significantly more positive than those held by dog owners who did not own or semi-own cats or respondents who did not own pets (non-owners). Moreover, when these feelings were explored as a function of gender, the findings revealed that general feelings towards cats were significantly more positive in females than males, which is in support of research conducted by Perrine and Osbourne (1998). Interestingly, females also held more positive attitudes towards dogs than did males. It is possible, however, that this reflects differences in the willingness of males and females to divulge their feelings towards animals. Taken together, these findings suggest that respondents as a whole tended to prefer dogs to cats, but that cat owners were as fond of their cats as dog owners were of their dogs.

Responsible behaviours that were expected to be linked to pet ownership included: veterinary care; feeding; de-sexing; handling/cuddling; micro-chipping and registration; containment; walking/exercise, and/or; payment for the animal. Notably, the findings revealed that respondents who indicated that they owned cats and/or dogs engaged in most, if not all, of these behaviours. Accordingly, the level of owner engagement in veterinary care, feeding, de-sexing, handling/cuddling and payment for the care of the animal was very similar for cats and dogs. Given that such behaviours are best predicted by cat and dog ownership, it can be speculated that such behaviours are likely to be linked to positive attitudes held by owners towards their respective pet/s.

Respondents were defined as being 'semi-owners' if they engaged in the veterinary care, feeding, de-sexing, micro-chipping and registration, containment and/or payment for a cat that they did not consider themselves to own. The results of this study showed that 22 percent of respondents engaged in one or more of these behaviours; principally feeding, which most semi-owners did daily or irregularly.

The findings of this study support those of Haspel and Calhoun (1990). Given that semi-owners most frequently engaged in feeding as opposed to de-sexing the semi-owned cats, it is likely that semi-ownership behaviours contribute towards the maintenance of stray and feral cat populations. Indeed, the findings revealed that approximately 65 percent of cat semi-owners knew that their semi-owned cat was not de-sexed.

It has been suggested that the phenomenon of 'semi-ownership' derives from negative attitudes towards cats in the community, such that cats are undervalued and considered able to fend for themselves (Webb 1995). Several researchers (for example, Rochlitz 2000) have speculated that negative attitudes are expressed by way of a reduced financial commitment made towards cats in comparison to dogs. In support of this hypothesis, the current study revealed a substantial difference in the amount of money paid to purchase cats in comparison to dogs. That is, the percentage of cat owners that received their pet for free was double that for dog owners.

The extent to which respondents believed that certain attributes characterise cats can best be described as a three factor model, namely 'positive attributes', 'negative attributes' and 'independence attributes'. A similar model was achieved for dogs, indicating that similar attributes are considered desirable or undesirable across the two species of companion animals. Notably, the highest ranking attribute for cats was 'independence', whereas the quality of being 'loyal' was the highest for dogs.

With regard to attitudes, cat semi-owners rated their general feelings towards cats somewhat lower than did cat owners, but higher than did dog owners who did not own or semi-own cats and non-owners. This is interesting as it indicates that individuals who have some contact with cats generally perceive them in a favourable manner. Indeed, the findings revealed that cat semi-ownership could be predicted on the basis of positive feelings towards cats, in addition to a belief that cats are independent.

The findings reported in this study showed that semi-owners' believed they were behaving in a way that benefited the semi-owned cat. That is, cat semi-owners were more likely to indicate that a person feeding a cat/s they did not own was improving the welfare of the cat, whereas other categories of owners and non-owners thought that cat semi-owners were creating a bigger problem. This would seem to indicate that the spirit of such behaviour is one of benevolence rather than callousness. As such, while cats may be somewhat undervalued by this population, and the related behaviours misguided, given that cat semi-owners appear to consider themselves to be acting benevolently, the underlying attitude towards cats is positive. It is not surprising then, that the majority of semi-owners indicated that they believed the quality of life of the semi-owned cat to be at least the same as that enjoyed by an owned cat.

Opportunities for re-education regarding the realities faced by semi-owned cats and the impact of this population in maintaining stray and feral colonies are, therefore, evident. Strategies for change should address the behaviours that semi-owners engage in, rather than the attitudes. Indeed, re-education strategies can appeal to the positive attitudes currently held by this population and emphasise behaviour change.

Conclusions

The phenomenon of cat semi-ownership appears to be one of misguided behaviour, rather than negative attitudes. Indeed, semi-owners demonstrated considerable regard for cats, and, overall, the attitudes held by semi-owners towards cats were positive. There does appear, however, to be some evidence that the sample was unaware of the welfare implications of cat semi-ownership and the harsh realities faced by cats in such situations.

Programs designed to educate community members about the welfare implications of semi-ownership should be implemented. These should make clear the realities faced by stray cats, including threats of disease, pregnancy, cruelty by humans and death. Semi-ownership behaviours towards cats should be linked to the maintenance of stray cat populations, given the propensity of semi-owners to feed, but not de-sex cats. Moreover, this information should hold as its objective the re-direction of current semi-ownership practices (ie. feeding) towards other, more constructive, actions such as de-sexing. A critical aspect of this program will be to acknowledge the positive attitudes of semi-owners towards cats and appeal to their 'benevolence' for behaviour change.

Acknowledgements

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Samia Toukhsati

Dr Samia Toukhsati has made a significant contribution to the understanding of the cognitive and physiological effects of exposure to auditory stimuli in laboratory-housed young chicks. This work engendered a strong research interest in animal welfare, which led to a Research Fellow position with Professor Grahame Coleman at the Animal Welfare Science Centre at Monash University in 2003. Since then, Samia has been involved in the coordination of numerous research projects, including exploration of consumer attitudes towards livestock industries; an evaluation of the Responsible Pet Ownership Program, and more recently; community attitudes towards cat semi-ownership.

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