

Association between Characteristics of Cats and Satisfaction of Owners who Adopted Cats from an Animal Hospital in Japan

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ABSTRACT. A follow-up questionnaire survey was conducted with 29 cat owners who adopted cats from an animal hospital in Japan. Physical characteristics were found to be important factors for the owners when choosing a cat. There were significant differences between impression of the cat for the owners at present and images of their ideal cats, and the levels of aggression and activeness of the cats at present were rated higher than their ideal cats. A significant negative correlation was found between the degree of satisfaction with the cat and occurrence of house soiling; thus, some behavioral problems may deteriorate the relationship between the owner and the cat.

KEY WORDS: adoption of cat, follow-up survey, house soiling, owners, questionnaire.

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In Japan, a significant number of cats are abandoned or relinquished to local governmental animal shelters each year. The total number was about 164,308 in 2010, and 93.0% of these cats were euthanized; the number has remained largely unchanged for a long time [1]. Since the Basic Guidelines for Comprehensively Promoting Measures on the Welfare and Management of Animals of the Japanese Ministry of the Environment requires promoting reduction of euthanization of cats and adoption of unowned cats by new owners [2], the national and local governments have been working harder. Not only major animal shelters in Japan run by local governments but also many privately run animal shelters are actively seeking new owners for cats that have been relinquished to them. However, these bodies do not necessarily have professional support and sufficient knowledge to ensure good management, and little research has been done to promote successful adoption.

A number of studies have been performed on animal shelters in other countries. A follow-up survey done in the US revealed that most of new owners were satisfied with their adopted cats, and few behavioral problems were reported for the cats [11]. Another study reported that the rate of repeated relinquishment of cats after adoption reached about 35% within a year [12]. Several studies have shown that relinquishment of dogs and cats and returning adopted animals is associated with lack of knowledge or experience, unrealistic expectation of owners and physical or behavioral character-

istics of animals [3, 7, 10, 13–15, 17]. These studies suggest that it is necessary to match the cats and their future owners during the adoption procedure to avoid return or repeated relinquishment of the cats. Although there have been several surveys on the cats and dogs returned to shelters after adoption, there have been very few follow-up studies for owners who adopted cats from animal shelters. In addition, the relationship between cats and new owners after adoption could vary among countries considering the differences in cultural background, social system and living environment. Thus, it is important for promoting further adoption of cats to investigate, if adopters experienced any gap between their images of ideal pet cats and the reality of the adopted cats and how and why adopters selected their specific cats in Japan. In this study, we aimed to reveal the present situation and issues in cat adoption in Japan by conducting a follow-up survey of owners who adopted a cat from an animal hospital that had a cat adoption program.

A questionnaire was handed directly or sent by post between August and December 2007 to each of 100 owners who adopted cats from an animal hospital located in Chiba Prefecture, Japan, between June 2001 and August 2007. The questionnaire was designed based on a previous study [11] and consisted of 29 question items divided into the following seven sections: profile of the owner, profile of the adopted cat, reason for adopting the cat, impression of the cat (7-point rating scale), behavioral problems of the adopted cat, degree of satisfaction with the cat (0–100 points) and willingness to receive follow-up support after adoption (detailed in Table 1).

Twenty-nine out of 100 owners responded, and the return rate was 29.0% in the end. The majority of the owners (69.0%) regarded their cat as a “part of the family.” The age of the cat when adopted ranged from one month to 13 years old, and the median was two months. Eighty-nine percent of the cats were kept indoors. Thirty-eight per cent of the owners had cats other than the adopted cat, and 56.3% of these

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Table 1. The main items asked and choices used in the questionnaire completed by the cat adopters

Items
Profile of the owner
Family structure (FA): member, age
Housing style (SA): house, apartment
Experience of keeping a cat (SA): yes, no
Feeling about the kind of existence of the adopted cat (SA): child, companion, family member, just a pet, nothing special, other
Profile of the cat
Name (FA), age at present and at the time of adoption (FA), breed (FA)
Living conditions (SA): outdoor only, indoor only, outdoor and indoor
Coat color (MA): black, white, orange, brown, gray, tortoiseshell, tabby, spots
Sex and neutering status (SA): male or female, intact or neutered
Relationship with other cat (s) (SA): very bad, bad, neither, good, very good
Reason for adopting the cat
Why adopted from the animal hospital (SA): reliable as to health of the cat, easy to get advice regarding the cat, other
The main reason (SA) and all reasons (MA) for adopting the particular cat: pretty, suited my taste, resembled to a popular cat in the media, for children or grand children, as a playmate for an already owned cat, resembled a previously owned cat, felt lonely after losing a cat, wanted to try having a cat, cheaper than buying at a pet shop, felt sorry for the cat, other
Criteria important for choosing the cat (SA): liked, did not like, did not care appearance (coat color, coat length, eye color, tail length, face, size, body weight), character (fearful, not fearful, active, not active, playful, not playful, aggressive, not aggressive, curious, not curious, affectionate, not affectionate), other (sex, health, age)
The impression of the cat (SA by 7-point rating scale; 1= minimum, 7= maximum): ideal, at present Fearfulness, activeness, aggression, affection demanding
Behavioral problems in the adopted cat (SA for each behavior): troubled very much, troubled, not troubled, not seen Inappropriate scratching, house soiling, escaping outside, destructiveness or excitability, getting on top of a table or furniture, loud noise, aggression, other
Degree of satisfaction with the cat (FA using a scale of 0–100 points)
Willingness to receive follow-up support after adoption Willingness to have interviews (SA): yes, no Preferred method (SA): telephone, e-mail, letter, at hospital, at home, other

SA: Single answer, MA: Multiple answer, FA: Free answer.

Table 2. Mean scores of impressions of cats with regard to fearfulness, activeness, aggression and affection demanding for their ideal cats and those they adopted at present (n=28)

	Mean \pm SD scores of impression of the cats			
	Fearfulness	Activeness**	Aggression**	Affection demanding
Ideal	2.9 \pm 1.4	4.5 \pm 1.4	1.8 \pm 0.8	5.5 \pm 1.1
Present	3.6 \pm 2.3	5.5 \pm 1.6	3.3 \pm 2.5	5.3 \pm 1.9

Scores were selected on a scale of 1 to 7. The scores for activeness and aggression were significantly higher for the adopted cats at present than for the ideal cat (** $P < 0.01$ by Wilcoxon signed-rank test, respectively).

cats got along well with each other, as their relationships were described as “good” or “very good.” More than half of the owners cited the reason why they adopted a cat from an animal hospital as “reliable as to the health of the cat.” The reasons most chosen for adopting their specific cat were “It suited my taste (24.1%)” and “It was pretty (20.7%).” The criteria considered to be important for the adopters in choosing their cats were? “coat color (58.6%),” “young kitten (62.1%),” “female (55.2%)” and “health (55.2%),” since these were answered as “liked.” The adopters were less concerned about character of the cats, as the rates of

those who answered “liked” were all lower and ranged from 24.1 to 44.8%. The most “liked” characters were “active” and “curious.”

Table 2 shows the results of scoring of owner impressions of their adopted cat at present and of an ideal cat. The average (\pm SD) degrees of activeness ($P=0.005$) and aggression ($P=0.003$) of the adopted cats at present were significantly higher than those of an ideal cat (Wilcoxon signed-rank test). The average (\pm SD) ratings for fearfulness and affection demanding at present were not significantly different from the scores for an ideal cat. The responses by owners regard-

Table 3. The results of responses regarding behavioral problems in the adopted cats (single answer, n=29)

	Troubled very much	Troubled	N (%)		
			Not troubled	Not seen	unknown
Inappropriate scratching	3 (10)	5 (17)	19 (66)	2 (7)	0 (0)
House soiling	2 (7)	4 (14)	13 (45)	8 (28)	2 (7)
Escaping outside	3 (10)	5 (17)	13 (45)	8 (28)	0 (0)
Destructiveness and excitability	0 (0)	5 (17)	18 (62)	4 (14)	2 (7)
Getting on top of a table or furniture	3 (10)	4 (14)	19 (66)	2 (7)	1 (3)
Loud noise	1 (3)	3 (10)	19 (66)	5 (17)	1 (3)
Aggression	2 (7)	6 (21)	16 (55)	5 (17)	0 (0)

Table 4. Spearman's rank correlation coefficients (Rs) between the degree of satisfaction with the adopted cat and the scores for impression of the cat at present and the occurrence of behavioral problems

	N	Rs	P
Impression of the cat at present			
Fearfulness	25	0.030	0.885
Activeness	25	0.274	0.144
Aggression	25	-0.103	0.837
Affection demanding	25	0.694**	0.008
Behavioral problems			
Inappropriate scratching	26	-0.150	0.463
House soiling	24	-0.474*	0.019
Escaping outside	26	-0.213	0.297
Destructiveness and excitability	24	-0.171	0.424
Getting on top of a table and furniture	25	-0.202	0.332
Loud noise	25	-0.251	0.216
Aggression	26	-0.167	0.419

*: significant Spearman's rank correlation coefficients ($P < 0.05$; ** $P < 0.01$).

ing occurrences of behavioral problems in the adopted cats are shown in Table 3. Less than 10% of the owners were troubled very much by inappropriate scratching, house soiling, escaping outside, getting on top of a table or furniture and aggression. Nearly half of the owners responded that they were "not troubled" as opposed to responding that the behavior was "not seen"; thus, behaviors that could be problematic were actually seen. The majority of the owners (72.4%) scored higher than 80 for their degree of satisfaction with the life with the cat on a 100-point scale; thus, they were rather satisfied. There was a significant positive correlation between the degree of satisfaction with the cat and the degree of affection demanding at "present" ($R_s = 0.694$, $P < 0.01$), while a significant negative correlation was found between the degree of satisfaction and the degree of being troubled with house soiling ($R_s = -0.474$, $P < 0.05$), as shown in Table 4. Most owners (89.7%) were willing to receive follow-up support from the animal hospital from which they adopted their cats.

This is the first study to reveal the attitudes of cat adopters towards adoption and their adopted cats and to show the occurrences of behavioral problems in cats after adoption

in Japan to the best of our knowledge. The present study revealed that cat adopters regarded their cats as part of their family rather than a child or a companion, and most of them showed a high degree of satisfaction with their adopted cats. A similar result was reported in a previous study in the US [11]. This is interesting because this fact reflects a feature that is common in these two countries with regard to the relationships of cat adopters and their adopted cats, although the meaning of "a member of the family" may not be the same for both countries. Adopters in Japan tended to select their new cats based on their coat color, age and health rather than their character, and this is also consistent with the results of previous studies conducted in other countries [5, 6, 16]. A more recent study [4] found an association of human perception of coat color of a cat and its personality and proposed that the risk that adopters may have misconceptions about the characters of their new cats should be considered.

The present study revealed that a cat owner tended to hold an ideal image for the personality of their pet cat and that it is likely to be different from the character of the actual cat they have. Karsh and Turner suggested that people are likely to have a prototype or idealized image of what a cat should

be or look like [6]. The satisfaction among new owners was relatively high in spite of the fact that adopters did not consider the character of the cat as important when they chose it, and their impressions of their actual cats were different from those of their ideal cats. The degree of satisfaction with a cat showed a positive correlation with the impression score for affection demanding of the cat. Cats with high levels of affection demanding may be likely to have frequent and intimate contact with their owners, such as touching or rubbing against the owner, and this may contribute to increasing owners' attachment towards them, resulting in a higher degree of satisfaction with the cats. The impressions owners had of their actual cats were different those of their ideal cats in terms of activeness and aggression, but not for affection demanding. Therefore, the degree of satisfaction with a cat may not be influenced very much. The association between the owners' expectations and the cats' temperament and its influence on the owners' satisfaction have already been noted by some animal shelters, and so they have developed and put into practice an adoption program that matches different types of cats and adopters by using temperament testing for cats and a questionnaire survey for potential owners [21]. Therefore, we believe that performing temperament assessment of cats and adopters would lead to higher satisfaction among new owners.

When owners were asked about behavioral problems, severe cases of house soiling, attempting to escape and inappropriate scratching were reported for some cats. Chewing objects and inappropriate scratching were reported as the most frequent behavioral problems both a week and month after adoption of cats in the US [9], and previous studies in the US and New Zealand showed that owners were troubled with house soiling by adopted cats [11, 20, 22]. The results of our study were consistent with these previous studies. Furthermore, a negative correlation between the degree of elimination problem and satisfaction with a cat was found in the present study, and this suggested that the owners were especially disappointed with cats exhibiting elimination problems. Behavioral problems are one of common reasons for relinquishment of pets to animal shelters [3, 8, 14, 15, 17, 18], and house soiling, in particular, is reported to be a determinant of relinquishment of cats to shelters [10, 14, 17]. Although many owners answered that their cats did not trouble them with behavioral problems despite the presence of problematic behaviors in this study, these problematic behaviors might develop into severe problems, leading to relinquishment in the future. Therefore, it is crucial for animal hospitals and animal shelters to advise owners with regard to prevention and solutions for such behavioral problems before and after adoption, as previously recommended [19]. It was interesting that many owners answered that their cats did not trouble them with behavioral problems as opposed to answering that they did not show problematic behaviors.

In conclusion, it is important for animal shelters and animal hospitals to implement cat adoption programs with careful consideration of attitudes of adopters and education and continuous support for new owners. The low return rate

of the questionnaire in this study is in line with the fact that follow-up surveys of adopters are often difficult to carry out, as pointed out in the literature [19], and suggests that the regular support from an early stage after adoption is also important in Japan. Because the results of the present study may be derived only from cooperative adopters from one facility, further research is needed to identify if the same tendency is found in different types of adoption systems and with a larger sample size. While understanding the fact that the adopters may have expectations for their new cats different from the reality of the actual cats, as shown in this study, providing professional advice on how to keep a particular cat based on their evaluation before adoption and substantial follow-up support with regard to the behaviour of cats will help adopters live with their adopted cats with satisfaction and lead to successful adoption.

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