

# Attachment to Pets and Interpersonal Relationships

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## Abstract

*The goal of the present research is to investigate pet attachment and measure the connection between owner-pet attachment and interpersonal attachment characteristics of dog owners and cat owners, social support and loneliness. From a sample of 268 dog and 97 cat owners, significant differences on pet attachment appeared between pet owners' gender, owners living location, kinds of pets and the length of ownership. The pedigree of pets influenced owner-pet attachment levels.*

**Keywords:** attachment, pets, social support, loneliness, relationship

## Introduction

Investigating connections between attachment to pets and interpersonal relationships is important for establishing a potential mediating role of pets in interpersonal relationships.

Evidence suggests that there are psychological, physical and social benefits in human-pet relationships, especially for cat and dog owners. Hirschman (1994) discovered that individuals decide to own animals as companions to satisfy their social needs. Pets can act as friends, exhibiting unconditional and nonjudgmental fondness for their owners (Hill, Gaines, & Wilson, 2008). This study focuses on the link between attachment to pets, attachment to people, social support and loneliness.

### Attachment to people and animals

Attachment to people is often described in Bowlby's theory (1991) that assumes individuals have mental working models of both themselves and others. Fraley, Waller,

and Brennan (2000) identified two dimensions of attachment, one dimension dealing with anxiety in relationships (connected with the inner working model of oneself), and the other dealing with avoidance in relationships (connected with the inner working model of others).

There have been assumptions about the human-animal bond having similar qualities as interpersonal relationships. Rynearson's (1978) study showed that humans and pets can be significant attachment figures for one another. The human-pet relationship can be simple and safe, with minimal risk (Nebbe, 2001). A pet can be accepting, openly affectionate, honest, loyal and consistent, which are all qualities that can satisfy a person's basic need to be loved and feel self-worth (Nebbe, 2001). Crawford, Worsham, and Swinehart (2006) propose that the term "attachment", used to measure human-companion animal relationships in their research, may share attributes of the traditional attachment theory (Bowlby, 1984), yet fails to reflect the attachment theory comprehensively. Despite instrumental

difficulties, some studies concerning the human-pet attachment and interpersonal closeness have been performed.

Beck and Madresh (2008) tried to extend the application of the standard model of adult attachment to the relationship with pets. The structure of the dimensions of insecurity measured with the Experience in Close Relationships – Revised questionnaire (ECR-R; Fraley et al., 2000) and Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991) was similar for pet and partner relationships, but ratings of pet relationships correlated little or not at all with the ratings of partner relationships. Relationships with pets were more secure on every measure. The research of Quinn (2005) has shown similar results – the pet attachment construct measured with the Companion Animal Bonding Scale (CABS; Poresky, Hendrix, Mosier, & Samuelson, 1987) was not significantly correlated with attachment anxiety, attachment avoidance, anxiety, or depression.

Because dogs and cats comprise the vast majority of animals kept as pets, instruments for assessing attachment primarily reflect the types of interactions possible with these two species. A study of pet attachment in the general population reported no differences between dog owners and cat owners, although dog owners and cat owners as individual groups scored significantly higher than owners of other pets (Vizek Vidović, Vlahović Stetić, & Bratko, 1999). Other previous studies (Zasloff, 1996; Winefield, Black, & Chur-Hansen, 2008) showed that dog owners are more attached to their pets than cat owners. Those results could be a consequence of the fact that in pet attachment instruments, some items only described activities typical of dogs. When items more descriptive of dog behavior were eliminated, dog owners and cat owners showed similar scores on the Comfort from Companion Animals Scale (CCAS; Zasloff, 1996). Winefield et al. (2008) reached similar conclusions – on a scale measuring the emotional aspect of the owner-pet relationship there were no significant differences between cat owners and dog owners. Notably, the alternative explanation of emerging differences on pet attachment scales between cat owners and dog owners, which claims that cat owners and dog owners have different personalities or expectations of their pet is

contradicted in Serpell's research (1996), where participants showed no differences in describing the ideal despite whether if they described a dog or a cat. Conversely, Serpell (1996) found differences in cat and dog behavior – he describes cats as more unpredictable and distrustful. Other authors like Valentinčić (2003) note that dogs demand more individual care than other companion animals.

A study of veterinary hospital clients reported significantly higher scores among dog owners on the Relationship Maintenance subscale of the Pet Attachment Survey (PAS; Holcomb, Williams, & Richards, 1985), but found no differences between dog owners and cat owners on the Intimacy subscale of the same instrument. 'Relationship maintenance' was defined by various types of physical and interactive behaviors such as training, grooming, and obedience of the animal, while 'intimacy' was defined by attitudes and feelings such as regarding the pet as a family member, enjoying physical closeness, and seeking comfort in the animal. Similar results on the PAS subscales were obtained in a study of pet ownership and generativity (concern for the next generation) among young adults (Marks, Koepke, & Bradley, 1994).

In the study of Winefield et al. (2008) and Quinn (2005) women reported higher attachment levels to pets than men. Vizek Vidović et al. (1999) also found higher pet attachment levels in girls (based on a study on a population of primary school students from Zagreb).

### **Social support**

According to Van Houte and Jarvis (1995) pet-owner relationships can serve as a substitute for other social relationships. Companionship – a commonly stated reason for pet ownership – is regarded as theoretically distinct from social support because it does not offer extrinsic support but provides intrinsic rewards, such as shared pleasure in recreation, relaxation, and uncensored spontaneity, all of which add to quality of life (McNicholas et al., 2005). There is some evidence that people who score high on pet attachment indices have fewer social networks (Stallones, Marx, Garrity, & Johnson, 1990) and more prevalent negative life events, such as bereavement (Nynke, 1990,

as cited in Brown & Katcher, 1997). Another study found that cats appear to be an additional source of emotional support, especially for those participants who are strongly attached to their animals (Stammbach & Turner, 1999). According to Melson (2003) many pet-owning children derive emotional support from their pet because of the lack of human social support.

The socializing effects of animals are also important to elderly people who have lost friends and family members, especially if they have no children or employment to draw them into community activities (Hart, 1995). Nonetheless, Stallones et al. (1990) demonstrated that older owners highly attached to their pets also have less human social support.

However, considering relationships with animals as substitutes for human relationships is not the only possible explanation for seeing animals as sources of social support. Dogs, for example, offer physical activity benefits, by virtue of a dog's own needs and desires for walking. Based on a qualitative research study, dogs also have a great capacity to facilitate social interaction and contact, as they are the type of pet most likely to venture with their owners into the broader community (Wood, Giles-Corti, & Bulsara, 2005). Dog walkers are more likely to experience social contact and conversation than people walking alone (McNicholas & Collis, 2000). But dogs can also serve as a topic of casual conversation for walkers, even when not accompanying their owner, as found in the conversation analysis of a dog-walking experiment (Rogers, Hart, & Boltz, 1993). Another positive effect of pets is seen when familial relationships grow even stronger as a consequence of striving to meet the daily requirements of their beloved pets. The best example of such bonding occurs during the evening walk, a regular event that can bring many or all family members together for the benefit of their canines, while simultaneously encouraging contact with each other as well as with members of their communities (Hill et al., 2008). Contrary to the studies mentioned above, Winefield et al. (2008) did not find a statistically significant correlation between social support and attachment to pets.

## **Loneliness**

Satisfaction in interpersonal relationships is also associated with loneliness. Various hobbies are suitable for overcoming loneliness (Birsa, 1992), such as interacting with animals and taking care of them (Marinšek & Tušak, 2007).

Research focused on the connection between relationships with animals and loneliness found that attachment to pets may substantially lessen emotional distress (Garrity et al., 1989). Stallones et al. (1990) also showed that strong attachment to a pet is linked to less depression and loneliness, but only when pet owners had few human confidants. Similar findings were established in the case of cats by Mahalski, Jones, and Maxwell (1988). Goldmeier (1986) performed a correlational study which showed that older women living with pets were less lonely, more optimistic and more interested in making plans for the future, as well as less nervous compared to women that lived entirely alone. Contrary to the studies listed so far, Keil (1995) reports a positive correlation between attachment to pets and loneliness, which suggests deeper loneliness is connected with stronger attachment to pets, and vice-versa.

## **Problem and hypotheses**

The purpose of this research is to investigate the connection between attachment to pets, attachment to people, loneliness and social support, examining cat owners and dog owners as the most common animals owned as pets. The following hypotheses are proposed:

1. Demographic variables like pet owner gender and type of pet will influence the strength of pet-owner attachment. Furthermore, other potential influential demographic variables, such as living location, pet information, length of ownership will be analyzed.
2. Participants with higher scores on the dimensions of avoidance and/or anxiety (based on the ECR-R questionnaire) will be more attached to their pets.

3. Participants who are lonely and/or do not receive enough social support will be more strongly attached to their pets.

## **Method**

### **Participants**

Participants were 365 pet owners (268 dog and 97 cat owners), aged between 17 and 68 years ( $M=28.4$ ;  $SD=9.33$ ). Among them 330 were female and 35 male. From 128 participants who are owners of both species the majority ( $N=109$ ) decided to answer the questions in relation to their dog, and only 19 to the cat.

### **Instruments**

The Experience in Close Relationships – Revised questionnaire (ECR-R; Fraley et al., 2000) is a 36-item self-report adult attachment measure. ECR-R includes two subscales: avoidance and anxiety. The combination of results on both dimensions represents different styles of attachment (Bartholomew & Horowitz, 1991). Fraley et al. (2000) reported coefficient alphas of .94 for the anxiety subscale and .95 for the avoidance subscale based on an undergraduate sample.

The Multi-Dimensional Support Scale (MDSS; Winefield et al., 1992) measures the availability and adequacy of social support from various sources (family, closest friends and acquaintances). MDSS includes emotional, practical and informational support. In the present research the availability and adequacy of social support only from family and closest friends were included. A maximum of 10 to 40 points can be scored on the Availability Scale, items are rated on a 4-point Likert Scale (*1-never, 4-always*). The Adequacy Scale ranges from 10 to 30 points, where 1 indicates a higher desire for social support, 3 a lower desire and 2 means the person is satisfied with the received social support. In the present study coefficients for internal consistency ranged between .83 (Adequacy Scale; Cronbach's Alpha) and .87 (Availability Scale; Cronbach's Alpha).

The Owner-pet Relationship Scale (OPRS; Winefield et al., 2008) contains items derived from the attachment theory and focuses on the

owner's desire to maintain proximity to pets and his or her perception of the relationship as emotionally supportive and mutual. It includes 15 items that are rated on a scale from 1 to 4, with the exception of item number 3 where *True* is scored 4 and *Not true* is scored 1. The range is thus 15-60. Participants who own more than one animal were asked to choose answers according to the pet they felt closest to. In the present study the coefficient for internal consistency was .85 (Cronbach's alpha).

The Differential Loneliness Scale (DLS; Schmidt & Sermat, 1983) is used to measure the feelings of deprivation and dissatisfaction with certain social relationships. It is divided into four scales according to the type of relationship: friends, love, family, and community. It contains 60 items relating to the presence of a relationship, approximation or avoidance, cooperation or the degree of support, respect, and communication. The overall scale has high a Kuder-Richardson Formula 20 internal consistency (above .89), with subscale estimates above .70 (Schmidt & Sermat, 1983).

Demographic information about participants (sex, age, living location, relationship status), pet information, and length of ownership were also added to the above mentioned questionnaires.

### **Procedure**

Programming language PHP and MySQL database management systems were used for creating and publishing the questionnaires and automatically collecting data in online form, from January 6<sup>th</sup>, 2009 to February 13<sup>th</sup>, 2009. The chosen questionnaires were published on several Slovenian internet forums, mainly those intended for animal lovers. We also contacted the Feline club Ljubljana to forward the survey to its members. Fully completed questionnaires were required for sending the individual's responses. There were no time limitations.

### **Statistical Analyses**

All statistical analyses were conducted in SPSS v. 18. We examined bivariate correlations between all variables of interest. The sample data required the use of nonparametric tests because of significant

Table 1

Statistics and differences by demographic variables between pet owners on the OPRS questionnaire

Demographic variables		N	M	SD	Mann-Whitney U	Z	Cohen's d
Owners' gender	Male	35	41.34	6.825	3846.5***	-3.253***	0.62
	Female	330	45.45	6.505			
Length of ownership	< 3 years	167	45.94	6.350	14228.5*	-2.297*	0.25
	> 3 years	198	44.31	6.790			
Location of living	Countryside	175	45.92	6.920	14415.5*	-2.197*	0.15
	Town	190	44.92	6.270			
Chosen pet	Dog	268	46.20	6.134	8524.0***	-5.030***	0.65
	Cat	97	41.90	6.980			
Pedigree	With	157	47.04	5.870	11654.5***	-4.666***	0.52
	Without	209	43.57	6.870			

Note. \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$

deviations from the normal distribution on all measures (see Appendix, Table 4).

## Results

The analysis of the results on the OPRS revealed that participants differ on test results by demographic variables. OPRS mean values are significantly higher for female compared to male owners ( $d=0.62$ ). Also, owners who had owned their pet for more than three years have higher OPRS mean values compared to those whose ownership lasted for less than three years ( $d=0.25$ ) and owners living in a town have lower scores compared to owners living in the countryside ( $d=0.15$ ), although the difference in means is small. Also, dog

owners are more attached to their pets than cat owners according to OPRS results.

Participants who own pedigree pets are more attached to their companion animal than owners of pets without pedigrees. Further analyses show that owners of a pedigree dog are more attached to their pet than those with a non-pedigree dog (Mann-Whitney U:  $z=-3.132$ ;  $p=.001$ ). For cat owners, pedigree does not play an important role in the strength of attachment (Mann-Whitney U:  $z=-1.622$ ;  $p=.105$ ). Nevertheless, the participants with non-pedigree dogs are significantly more attached to their pet than cat owners, regardless of pedigree (Table 2).

Table 2

Participants' OPRS statistics based on pet species choice and pet pedigree

Pet	Pedigree	N	M	SD
Dog	With	143	47.25	5.680
	Without	125	44.99	6.429
Cat	With	13	44.69	6.343
	Without	84	41.46	7.009
Both	With	156	47.00	5.760
	Without	209	43.57	6.874

Table 3

*Bivariate correlational analysis between OPRS and interpersonal relationship questionnaires*

Bivariate correlations with OPRS	Kendall's Tau
ECR-R anxiety	-.071 *
ECR-R avoidance	-.008
MDSS - real SS – family	.076 *
MDSS – real SS - friends	.042
MDSS – ideal SS - family	.045
MDSS – ideal SS friends	.015
DLS community	.005
DLS friends	-.015
DLS family	-.040
DLS partner	-.024
DLS overall (generally)	-.026

*Note.* \*  $p < .05$

No relevant correlations have been found between attachment to a pet (OPRS) and interpersonal relationship questionnaires (Table 3).

## Discussion

This study showed that pet-owners differ in pet attachment according to different owner demographic characteristics. With reference to the conclusions of Winefield et al. (2008) the occurrence of gender differences in attachment to pets has been anticipated. As assumed, women reported higher attachment levels to their pet (cat or dog) on the OPRS scale than men.

Differences in pet attachment levels were also visible between owners living in the town and in the countryside, where the latter reported stronger attachment to pets. But the difference, although statistically significant, is small; therefore it is not possible to draw any conclusions.

Length of ownership also had an important influence on pet attachment. Owners who had owned their pet for more than three years reported stronger attachment to their pets. It is possible that the difference between those that had owned their pet for less than three years and those that had had them for a longer period of time occurred because through time,

people become more attached to their pets (Wood et al., 2005).

The previous results of Zasloff (1996), Winefield et al. (2008), and Vizek Vidović et al. (1999), who have reported that dog owners are more attached to their pets, are confirmed in this study. The higher attachment levels of dog owners can be linked to dogs requiring more individual care (Valentinčič, 2003) and variegated interactions, for example, walking or training (Zasloff & Kidd, 1994), which can result in stronger affection. Out of 128 participants that own both a cat and a dog, the cat was the chosen attachment object of only 19 participants, which can be linked to behavioral characteristics of cats that lead to attachment differences.

According to Serpell's (1996) research, attachment level differences cannot be explained by personality differences between dog owners and cat owners, based on findings that showed no differences in describing the ideal pet, no matter whether the animal described was a cat or a dog. Therefore, it has been assumed that the measured differences in attachment could be ascribed to different behaviors of cats and dogs. Authors like Zasloff (1996) assumed differences could appear due to the inclusion of items typical of a dog's behavior in the instruments, but in the present research differences cannot be linked to this hypothesis, because the OPRS scale employed did not include such items. Besides,

the authors of this study assume that cultural or stereotypical perception of cats could influence these measures.

Furthermore, differences in attachment to pets between pedigree and non-pedigree dog owners have been found. Higher price and longer planning of purchase, better care and concern and involvement in canine activities, could affect higher attachment to pedigree dogs. But these variables were not included in the present research. Cat owners did not show the same characteristics. These findings provide evidence that pedigree can contribute to differences in attachment to pets among owners of the same species, but does not impact the attachment among owners of different species.

A relationship with a pet, according to Nebbe (2001) can be described as safer and with minimal risk. Based on this argument lies the assumption that participants who had problems with attachment in interpersonal relations are more attached to their pets. But analysis showed that there is no significant correlation between attachment to a pet and either avoidance or anxiety on the ECR-R questionnaire. No statistically significant correlation has been found between social support and attachment to a pet.

Assumed differences between loneliness and attachment to a pet did not appear in the present study, although other authors have found connection between strong attachment to pets and a lower degree of loneliness (Mahalski et al., 1988; Goldmeier, 1986).

The present research has a number of limitations, which are related to the non-homogeneity of samples. There were more women than men and more dog owners than cat owners included – particularly lacking were cat owners with a non-pedigree cat. Selective sampling of participants from forums related to animals means that the sample of participants was generally more interested in animals and research of this kind. For this reason this research cannot be fully generalized. Also, the construct of pet-attachment is due to various cultural and individual perceptions of animals which can cause qualitative differences difficult to define. This shows the need for further construct investigations of pet attachment and

comparison between different pet attachment measures.

The results of this study do not indicate connections between interactions with pets and interpersonal relationships. It would be interesting to carry out a longitudinal study or investigate the attachment to a pet in different groups of people, for example in those who engage in some pet related activity (dog or cat shows, agility, rescue etc.) to achieve comparable qualitative results.

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## Appendix

Table 4

*Tests of normal distribution for the scales*

Questionnaire scale	<i>M</i>	<i>SD</i>	<i>z</i>	
anxiety (ECR-R)	41.77	19.177	2.284	***
avoidance (ECR-R)	41.33	17.742	2.377	***
attachment to a pet (OPRS)	45.05	6.638	1.581	***
real social support - family (MDSS)	18.50	4.302	2.856	***
real social support - friends (MDSS)	18.53	4.133	2.180	***
ideal social support - family (MDSS)	13.38	1.994	5.059	***
ideal social support - friends (MDSS)	13.08	1.830	6.493	***
loneliness – community (DLS)	2.36	1.725	3.980	***
loneliness – friends (DLS)	5.07	4.599	3.075	***
loneliness – family (DLS)	4.20	4.492	4.023	***
loneliness – partner (DLS)	2.49	3.079	4.879	***

*Note.* \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$

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