



Impact of Pet Ownership and Relationships on Human Psychological Health and Function

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ABSTRACT

Numerous studies have examined the effects of “pet /companion ownership and pet interactions on human psychological health and function”. Recent study on “the benefits of pets and human-animal interaction for mental health has discovered new benefits for managing stress, depression, and post-traumatic stress, as well as for stress reduction”. Interacting with animals has been demonstrated to reduce cortisol levels (a hormone associated with stress) and blood pressure. Other studies have discovered that pets help alleviate feelings of isolation, promote emotions of social support, and improve your happiness. “The biopsychosocial model has been widely used for over 40 years to describe how biological, psychological, and social processes interact to affect human health and wellbeing. Biological impacts are physiological changes, including blood pressure, cortisol, and heart rate, among others. Among the psychological influences are personality, disposition, and emotions. The term social influences refer to cultural, socioeconomic, and social ties with others, as well as family dynamics and aspects related”.

This research paper aims to investigate how owning or interacting with a pet / companion may affect psychological, biological, and social (mental, physical, and social well-being) determinants of human health as well as to structure and direct future research issues and projects.

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Introduction

When asked what they get from their pets, most individuals say they satisfy a need for companionship, a desire to have a playmate, and the satisfaction of providing love and care to another creature. However, “the public has come to accept as fact the idea that pets can also serve as substitutes for physicians and clinical psychologists, thanks to media reports and books like *The Healing Power of Pets: Harnessing the Amazing Ability of Pets to Make and Keep People Happy and Healthy* (Becker, 2002)”. The “pet effect” is the idea that having a pet in your home is good for your physical and mental health and makes it more likely that you will live a long and happy life (Allen, 2003).

There is a widespread perception that having a pet is beneficial to their health. However, one’s own opinions do not qualify as scientific proof. Similarly, to the development of a new medicine, medical technology, or psychotherapy, claims regarding the health and psychological advantages of sharing a home with an animal should be submitted to rigorous scientific scrutiny. There have been hundreds of studies over the last 30 years that have looked at the benefits that having a pet may have on a person’s health and happiness.

Companion Animal Interaction Theories

Human-animal relationships are the subject of several hypotheses. Brickel argued in 1982 that the presence of a pet may alleviate anxiety by diverting one’s focus away from the source of the worry. Human-animal interactions, according to a theory put out by Kidd and Kidd in 1987, may be compared to human-human and animal-animal interactions under certain conditions. In 1988, psychologist Michael Bergler proposed that having a pet might have positive effects on a person’s mental health. Humans get more mental health benefits from interacting with animals than they do from caring for them, and this has a positive effect on both their well-being and the quality of their lives. Odendaal found in 1988 that individuals engage with companion animals for both psychological (mainly attention requirements) and practical (such as basic care) reasons. Hills created this concept in 1993 to explain the

effect that people’s motivational stances have on their animal companions. There were three reasons why people interacted with animals: (a) the practical utility of animals, (b) an emotional connection to the animals, and (c) a set of core ideas and values regarding the nature and position of animals. According to Costall (1996), a pet and its owner have a mutually beneficial connection. As proposed by Cameron in 1997, pets, like people, have an innate need to be acknowledged as individuals. Wilson proposed the social exchange hypothesis in 1994 to explain how humans and other animals interact. People who take care of animals may experience both good and bad effects (Odendaal, 2002).

The human-animal link was explained by Lasher’s (1998) relational theory. The relational model proposes that the quality of one’s interpersonal relationships determines how much they contribute to one’s mental and emotional well-being and how much they help one develop as a person. The author believes that atonement is the primary mode of communication between humans and their domesticated animal companions. People who share their lives with pets report increased self-awareness, more trust in others, and a wider viewpoint. These interactions between people and animals help both parties develop personally.

The human-animal link may also be understood via the lens of attachment to a pet. The health advantages of human-animal interactions have been shown to be more strongly correlated with a person’s level of connection to their pet than with their level of pet ownership. Reduced anxiety and aggressiveness were among the advantages of having a connection to a pet, which may have resulted from the creature’s ability to function as a stress buffer, provide social support, instil a feeling of control, or (Staats et. al., 1999). Increases in both subjective well-being and mental health have been linked to stronger bonds with one’s pets (Garrity et. al., 1989). It has been proven that the effects of developing a connection with a pet may vary, especially for people of different ages. In older people, a strong connection to a pet has been linked to improved health; in young adults, however, it has been linked to mental discomfort, probably due to a lack of human social support (Staats et al.).

It has also been suggested to mimic the beneficial health impacts of human-animal interactions through

several routes. Pet attachment, pet care, and human self-care are all proposed to contribute to the beneficial impacts of having a pet, along with pet commitment, which is the cognitive desire to behave in ways that improve the well-being of the pet (Staats et al., 1999). “Many theories have been proposed to account for the human-animal bond; however, due to the complexity of human-animal interactions, the theoretical foundation for the human-animal bond is still not fully understood”.

Reasons Why Pets Are Beneficial to Their Owners

An early study of 92 heart-attack patients showed a correlation between pet ownership and an increased likelihood of survival; the survival rate was 28% for pet owners compared to 6% for those who did not have dogs (Friedmann et. al., 1980). As a result of these discoveries, studies on the benefits of having a pet as a friend have proliferated (see review by Wells, 2009a). Petting an animal, whether it's a dog, cat, fish, or even a boa constrictor, has been linked to lower blood pressure and stress levels. The clinical research using hypertensive stockbrokers as subjects was the most compelling of these trials. Six months later, when exposed to stress, individuals in the pet group exhibited less of a rise in blood pressure compared to those in the non-pet control condition (Allen et. al., 2001). Scientists have shown that sharing your home with pets might have positive psychological effects. A number of studies have shown that having a pet may improve a person's mental health and well-being (El-Alayli et.al., 2006).

Even epidemiologists have found a link between having a pet and improved health and happiness (Headey & Grabka, 2011). A study of 11,000 people in Germany and Australia found that pet owners had a 15% lower number of medical visits than those who did not have pets, which could translate into billions of dollars in healthcare savings. Furthermore, Chinese epidemiological research indicated that pet owners exercised more, slept better, reported feeling physically fitter, and missed fewer workdays than women who did not have dogs. More importantly, those who reported feeling an especially deep bond with their dogs saw the strongest of these impacts.

Aim and Objectives

Research in this study is aimed at determining whether or if the “psychological, biological, and social aspects of human health” can be affected by the presence of a pet / companion.

1. To study the impact of pet/ companion ownership and pet / companion interactions on human psychological influences.
2. To study the impact of pet/ companion ownership and pet / companion interactions on human biological influences.
3. To study the impact of pet/ companion ownership and pet / companion interactions on human social influences.
4. To understand the health and well-being of human-animal interaction (HAI) because of the dynamic nature of the relationship between humans and animals.

Sample Population: Our targeted participants will be the pet owners and Companion animal caretakers(workers) in Delhi & Delhi NCR.

Sample Size: “Sample size was calculated using Rao soft sample Calculator with Confidence Level is 95%. Margin of Error is 5%”.Sample size of 101 was taken for this study.

Sampling Technique: To facilitate the objectives of this research, we needed a random sample consisting of unbiased and diverse individuals. Therefore, we used the “Simple Random Sampling method. Each element of the population has an equal probability of getting chosen in a simple random sampling. This approach is the simplest of all probability sampling techniques since it just includes a single representative sample and needs little previous information of the population. Because it employs randomization, any research conducted on this sample must have a high degree of internal and external validity”.

Research Instrument: To fulfil the objectives of this research we will be using primary & secondary data collection sources including interview, questionnaire, case study and research papers. “Self-administered structured questionnaire containing close-ended and open-ended questions and web survey methods will be used for data collection. In the web survey, questionnaires will be sent to pet owners and Companion

animal caretakers(workers) through mail and social media. The questionnaire contains multiple choice questions, ranking questions and five-point Likert scale questions. Likert scale, named after its developer - Rennis Likert, is a widely used scale of rating that needs the participant to state a degree of agreement or disagreement with each of a series of the statements starting by 1=strongly disagree to 5=strongly agree”.

Data Analysis tools: We will be using Excel as our data analysis tool. Microsoft Excel is amongst the most widely used data analysis software. They are by far the one of the most sought-after analytical tools accessible, as they have built-in pivot tables. It is an exclusive data management system that lets you acquire, examine, clean, analyse, and display your data with ease.

Financial Impact: Financial aids needed for travel, survey and analysis can be self-funded or as per discretion of School management.

Project Impact / Future Scope: The project aims to validate both existing studies and people’s opinions/ perceptions of the benefits of Pet-human relationships. Such theory-driven study may assist pet practitioners and health care policymakers in determining how to seamlessly engage dogs into therapeutic facilities and households.

Analysis

Tables 1 provide an overview of the sample’s demographics, health status characteristics, and other demographics. The 101 participants ranged in age from 25 to 87 years old and had a mean age of 69.61 (+ 7.95) years. The sample had a higher percentage of females (76.7%) than males (23.3%). Pet owners made up 53.9% of the sample.

Table 1. “Demographic and Health Characteristics”

Variable	n	%
“Gender (n=101)		
Male	24	23.3
Female	79	76.7

(table continued)

(table continued)

Variable	n	%
Age (n=101)		
25 to 64	30	28.2
65 to 74	46	45.8
75+	25	26.0
Marital status (n=101)		
Married	55	52.9
Single	32	31.4
Divorced	14	13.7
Pet ownership (n=101)		
Pet in household	55	53.9
No pet in household	47	46.1
Self-perceived health (n=101)		
Excellent	8	8.4
Very good	36	31.6
Good	37	38.9
Fair	17	17.9
Poor	3	3.2
Social functioning (n=101)		
Often	16	7.2
Sometimes	22	22.9
Rarely	17	16.9
Never”	46	53.0

Table 2. “T-test Analysis”

“Item	Depres- sion	n	Mean (+ SD)	t	p-value”
“Psycho- logical Influence”	No	81	3.39 (+0.95)	3.289	0.001
	Yes	20	2.56 (+0.73)		
“Biological influence”	No	84	2.95 (+1.96)	0.326	0.005
	Yes	17	3.12 (+1.65)		
“Social function- ing”	No	76	1.58 (+0.84)	5.146	0.000
	Yes	23	2.88 (+1.15)		

The overall mean Health Variables score and the item score between men and females were compared using the t-test to see if there was a statistically significant difference.

The participants' assessments of their health were favourable (p0.05), and they said that pet/ companion ownership and pet / companion interactions on psychological influences had positive impact on their psychological health. The biological effect of pet/companion ownership and pet/companion interactions on human biological influences was perceived statistically favourably (p 0.05). Positivity and statistical significance in regards to pet/companion ownership and pet/companion interactions on human social influences were observed (p 0.05).

Health and well-being of human-animal interaction

The study group's mean score (n=101) ranged from 8 to 40 and was 32.14 + 8.32. The emotional or informational support items had a mean score of 12.19 + 3.28, the tangible support items had a mean score of 7.50 + 2.91, the affectionate support items had a mean score of 4.45 + 0.96, and the positive social interaction items had a mean score of 8.01 + 2.26, the range for which was 0-10.

A statistically significant positive relationship between Health and well-being of human-animal interaction and the overall mean social support score was found using the t-test for all of the following items: a) emotional or informational support (p=0.008), b) tangible support (p=.045), c) affectionate support (p=.003), and d) positive social interaction (p=.040).

Conclusion

The results of the study show a “substantial relationship between pet ownership and human psychological, biological, and social influences, as well as a considerable effect on human health and wellbeing”. Due to the dynamic nature of the connection between humans and animals in people with low levels of social support, pets are an important source of social support as well as health and well-being in human-animal interaction (HAI). Pet ownership was an important factor in fostering positive attitudes and a connection to companion animals. Future studies should examine the “long-term health advantages of pet ownership and determine how human-animal interactions impact people's psychological well-being using large longitudinal studies with more participants from more varied backgrounds”. Even though more study is needed to determine the connection between “pet ownership, human-animal

Table 3. “T-test Analysis”

“Item	Depression	n	Mean + (SD)	t	p-value”
Health and well-being of human-animal interaction					
	No	82	33.21 + (7.27)	2.147	0.034
	Yes	17	28.59 + (11.25)		
1.	“Emotional or informational support items”	No	12.65 + (2.86)	2.725	0.008
		Yes	17		
2.	“Tangible support items”	No	7.70 + (2.83)	0.911	0.045
		Yes	17		
3.	“Affectionate support item”	No	4.57 + (0.77)	1.645	0.003
		Yes	17		
4.	“Positive social interaction Items”	No	8.28 + (2.00)	2.081	0.040
		Yes	17		

relationships, and psychological health”, it seems that having a pet or companion and engaging in pet-related activities are positive experiences for people.

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