

The Comparison of Personality characteristics and Clinical syndrome owners Pets keeper and People without Pets

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Abstract

Introduction: The aim of this study was to evaluate the Comparison of Personality characteristics and Clinical syndrome owners Pets keeper and People without Pets. **Methodology:** The research method was causal-comparative. The statistical population included all pets and non-domestic animal's resident in the 20th district of Tehran in 2018. The sample consisted of 160 individuals with pets (80) and non-pets (80) who were selected based on available sampling. Measurement tool was McCrae and Costa's Personality characteristics questionnaire (1992) and clinical checklist Derogates and colleagues (1973). Data analysis was carried out through questionnaire implementation through spss22 software in two descriptive and inferential sections (Multivariable Analyze of Variance). **Findings:** The results showed that the difference between the two groups was significant in all personality traits, except for neuroticism. According to the comparison of the averages, it is evident that pet owners and owners have extraversion, less openness to experience, duty, and acceptability than non-pet animals. Also, the results of multivariate analysis of clinical syndrome showed that the difference between the two groups in all clinical syndromes was significant except for obsessive-compulsive disorder. **Conclusion:** Regarding the comparison of the averages, it was found that pets owning and having pets have higher levels of physical complaints, interpersonal sensitivity, depression, anxiety, aggression, paranoid thoughts, and psychosis.

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1. Introduction

For many people, pets play a vital role in their lives; pets can be considered honorable as family members or friends. According to the American Society of Sociology (2011), 39 percent of American households have dog and 33 percent have cat. Despite their widespread outbreak, the various aspects of pet owners have been relatively studied. It is important to consider the study of human-animal interactions and benefit from it. There are many studies that refer to the benefits of animal owners; for example, the health benefits of pet owners are well documented. The pet's connection is associated with less cardiovascular problems, lowering blood pressure and lowering cholesterol levels (McConnell and Brown, 2011). There are not many studies about the psychological consequences of keeping animals and the personality traits of these people. The results of researches have indicated that the pet owners can more easily deal with severe emotional problems such as death of their close friends, family, and relatives (Akiyama et al., 2011), and have higher emotional health (Garrity et al., 2014). Of course, in all studies, there is no positive relationship between keeping animals and mental health. For example, Stallones et al. (2015) argue that such a connection is not always observed.

In a study, Han (2016) investigated the issues improving interpersonal communication with the mediation role of animal attachment, and concluded that the personality traits of pet owners with the exception of psychosis, affect the interpersonal communication skills and animal attachment. The results indicated that keeping animals may be a way to strengthen social interactions and communication among people who are afraid of social conflict with the others. Animal owners can also restore their own self-esteem, restore their independence and increase their interaction with the others through pets. Therefore, the result was that attachment to animals is the intermediary between personality traits and the strengthening of interpersonal communication (Han, 2016).

2. Literature Review

Castta and McKinney described the personality along five dimensions or five main factors, including psychoanalytic (tendency to experience anxiety, tension, self-harm, hostility and impulsivity, shyness, depression and low self-esteem), extroversion (tendency to be positive, decisiveness, mobility, kindness and sociality), openness (tendency to curiosity, performance, reasoning, flexibility, intellectuality and innovation), pleasure (willingness to forgive, kindness, generosity, trust, empathy, obedience, sacrifice and loyalty), and conscientiousness (desire for organizing, efficiency, reliability, self-restraint, rationalism, and meditation), (Mansourirad, 2015).

Sibley & Overall (2010), in a study, showed that the personality traits of agreeableness, conscience, anxiety and openness to experience have a positive relationship with the communication tendency among pet owners. It is likely that pet owners with low self-esteem and anxiety, sense of responsibility, thinking for others and more open-mind, establish friendly communication with the others. The relationship tendency among pet owners depends on personality traits. However, pet owners are suffering from neuroticism, anxiety, depression or hostility more than the others, and they suffer from a weak tendency to interpersonal relationships. Keeping a pet may improve the tendency of interpersonal relationships. Therefore, personality traits such as agreement, conscience, emergency, and openness have a positive effect on the pet owners' attachment. Also, owners of animals with a personality trait of neuroticism do not have a particular attachment to their animals and have a limited attachment on their pets (Sibley & Overall, 2010).

Iris et al. (2012), in a study, examined and measured the owners' attachment to pet. They concluded that the obvious reasons for the interpersonal attachment of dog owners and cat owners are social support and loneliness. Among 268 dog owners and 97 cat owners, it was obtained the significant differences in the type of animals, the owners of the animals, the residence of the owners and the long of ownership. In the study

done by Paden-Levy (2014), the relationship between extroversion and having pet was not achieved, but emotional stability was related to having a pet, and those with pet had a less neuroticism. The results of the study done by Kari (2015), aimed at identifying pet owners' characteristics, showed that pets are part of the lives of many people in the world today, and most pet owners have characteristics such as compliance, levels of neural avoidance, complete domination, sympathy, optimism, social satisfaction, avoidance of humiliation, emotional satisfaction, self-confidence and empathy, optimism, and also dominance.

The studies have indicated different differences in the personality traits and clinical syndrome of pet owners, and the results cannot be identified in a specific direction (Gosling et al., 2010). On the other hand, almost all of these studies have been conducted in countries with different cultures than Iran, which could have different results from what is happening in Iran. There are people or families that keep pets in Iran. Many studies on the effects and consequences of pet keeping on the physical condition of individuals, as well as the transmission of animal-to-human illness, have been carried out, but there are not yet many studies done in the field of animal health and personality traits and clinical syndrome of their owners; in addition, such a study has been less common in Iranian society. Accordingly, the necessity and importance of this research is to compare the personality traits and clinical syndrome of pet owners with people without pet in Iranian culture, which will be examined and compared more precisely. Therefore, the main question in the present study is whether there is a difference between the personality traits and the clinical syndrome of the pet owners with people without pet in Iranian culture.

3. Methodology

The method of this study was a causal-comparative post-event type comparing the personality traits and clinical syndromes of pet owners with people without pet. The statistical population of this study was all individuals with pets and ones without pet residing in the 20th district of Tehran City. In order to select the sample size, 160 individuals (80 ones with pet and 80 ones without pet) of 20th district of Tehran, refereeing to three veterinary clinics in 2018, were randomly selected and randomly.

The measurement instrument was Personality Traits Questionnaire by Neo (1989), and Clinical Syndromes Checklist by Derogatis et al. (1973). 60-item from of the Five Basic Personality Factors Questionnaire, by Costa & McCrae (1989), was used to measure the five major factors of personality. The questionnaire has a five-point accountability scale (totally agree to totally disagree), and five factors of neuroticism (versus psychological and emotional stability), extraversion (versus introversion), experiencing (against inflexibility), agreeableness (against narcissism), and responsibility (against negligence). Costa & McCrae (1992) reported the Cronbach's alpha of scales of this questionnaire as follows: neuroticism is equal to 0.93, extroversion is equal to 0.99, experiencing is equal to 0.89, agreeableness is equal to 0.95, 0 and responsibility equal to 0.92. They also reported the validity coefficients of this questionnaire from 0.56 to 0.62. Various versions of this questionnaire have been translated and prepared in Iran (Grossi Farshi, 2001). Kiamehr (2002), who translated and implemented a version of this questionnaire among the students, reported the concurrent validity of the short and long forms of the questionnaire for five factors between 0.41 and 0.71, the retest reliability between 0.65 to 0.86 and Cronbach alpha of the subscales between 0.54 and 0.79 (Kiamehr, 2002). Clinical syndromes checklist was drafted by Derogatis, Rickels and Rock (1973) and revised based on clinical experiences and psychometric analyses; its final formulation was published in 1976, including 90 five-point questions that measure the degree of inconvenience from zero (none) to four (severely) (Derogatis & Savitz, 2010). The content of this test is nine dimensions of physical complaint, obsession, hypersensitivity, depression, anxiety, aggression, fear, paranoid thoughts, and psychosis. This questionnaire is one of the most widely used questionnaires. In Iran, it has been used in many courses to determine the validity and reliability as well as screening and diagnosis of mental disorders. Different researches have reported the highest correlation for depression dimensions (0.73) and the least correlation

for the dimension of fear (0.36). Also, in order to increase the validity of the participants' responses, 10 polygraph questions were added to it. The score greater than 30 in these 10 questions will undermine the validity of the test results. In addition, the questionnaire has the concurrent narrative and structure validity (quoted by Fathi Ashtiani, 2012). Saatchi, Kamkari and Asgarian (2010) have also reported the reliability of the retest test between 0.78 and 0.90. Also, Rashvanloo and Saadati (2015) predict a positive and significant relationship between SCL-90-R subscales, Cronbach's alpha coefficients ranged from 0.71 to 0.95, and split half coefficient from 0.65 to 0.96 for the subscales and the whole test. Data analysis was performed by SPSS-22 software, and using the inferential statistics (multivariate analysis of variance (MANOVA)).

4. Findings

The homogeneity test of groups variances (Levin) in relation to clinical syndrome variables was investigated before multivariate variance analysis test.

Table 1. Levine variances equivalence test

Indices	variable	F	Df1	Df2	Sig
	Physical complaint	1.488	1	158	0.225
	Obsession	3.248	1	158	0.075
	Sensitivity to interactions	8.034	1	158	0.063
	Depression	.197	1	158	0.609
	Anxiety	1.488	1	158	0.105
	Aggression	3.248	1	158	0.075
	Fear	8.034	1	158	0.060
	Paranoid thoughts	.197	1	158	0.508
	Psychosis	1.488	1	158	0.205

Following the Levin test, a multivariate analysis of variance was performed. The first hypothesis test was performed after Levine test for studying normality, linearity, single-valued and multivariate flops, homogeneity of variance-covariance matrices and multivariate linearity, and no serious violations were observed. Therefore, the variances of groups were homogeneous. In table 2, the results of multivariate analysis of variance of the variables in two groups of pet owners and people without pet, were presented.

Table 2. Multivariate analysis of variance (MANOVA) of clinical syndromes in two groups of pet owners and people without pet

	Variables/statistical index	MS	df	F	sig
clinical syndromes	Physical complaint	5168.151	1	24.318	.000
	obsession	39.293	1	0.141	0.708
	Sensitivity to interactions	16347.645	1	96.624	.000
	depression	13341.735	1	68.557	.000
	anxiety	33270.621	1	175.395	.000
	Aggression	29.165.297	1	78.505	.000
	fear	62.194	1	0.182	0.670
	Paranoid thoughts	26731.522	1	178.399	.000
	Psychosis	15805.579	1	99.360	.000

As presented in table 2, the results of multivariate analysis of variance for clinical syndromes showed that the difference between two groups in all clinical syndromes was significant except for obsession and fear. Regarding the comparison of the means, it was found that pet owners have higher level of physical complaints, sensitivity to interactions, depression, anxiety, aggression, paranoid thoughts, and psychosis.

Table 3. Results of multivariate analysis of variance (MANOVA) on personality traits of two groups of pet owners and people without pet

Test name	value	hypothesis DF	error DF	F	significance level P
Pillai's Trace	0/065	4	155	3/40	0/010
Wilks' Lambda	0/935	4	155	3/40	0/010
Hotelling's Trace	0/070	4	155	3/40	0/010
Roy's Largest Root	0/07	4	155	3/40	0/010

As observed in table 3, the significance levels of all tests indicate that there is a significant difference between two groups of pet owners and people without pet at least in terms of one variable of personality traits ($P=3.40$ and $P>0.010$). one-variable analysis of variance was performed in Manawa text to find out the difference, which is presented in table 4.

Table 4. results of multivariate analysis of variance for personality traits of pet owners and people without pet

	Variables/statistical index	MS	df	F	sig
personality traits	neuroticism	329.634	1	0.978	.324
	Extraversion	11582.087	1	48.307	0.000
	Openness to experience	15372.229	1	66.742	.000
	Responsibility	16788.580	1	76.172	.000
	Acceptability	31198.548	1	112.951	.000

The results of multivariate analysis of variance for personality traits are presented in table 4. According to this table, the difference between two groups is significant in all personality traits except for neuroticism. According to the comparison of means, it is evident that pet owners have less extraversion, openness to experience, responsibility, and acceptability than people without pet.

5. Discussion

The results of the research on personality traits showed that the difference between two groups was significant in all personality traits, except for neuroticism. According to the comparison of the means, it is evident that pet owners have less extraversion, openness to experience, responsibility, and acceptability than people without pet. The results of this study were in line with the findings of the research done by Han (2016), aimed at examining the issues of improving interpersonal communication with the mediation role of animal attachment, and concluded that the personality traits of pet owners with the exception of psychosis, affects the interpersonal communication skills and attachment to animals. Also, these results were consistent with the findings of the research done by Sibley & Overall (2010) that showed the personality traits of agreeability, conscientiousness, anxiety and openness to experience have a positive relationship with the communication tendencies among pet owners; that is, pet owners with low self-esteem and anxiety, sense of responsibility, thinking for others and more open minds are likely to make friendly communication with the others. The communication tendency among pet owners depends on personality traits. However, pet owners are suffering from neuroticism, anxiety, depression or hostility more than the others, and they suffer from a weak tendency to interpersonal relationships. Also, owners of animals with a personality trait of neuroticism do not have a particular attachment to their animals and have a less attachment to their pets. Studies have indicated different differences in the personality traits of pet owners and their outcomes cannot be identified in a specific direction. On the other hand, almost all of these studies have been conducted in countries with different cultures than Iran, which can have different results from what is happening in Iran. Therefore, unlike the other countries, in Iran, having a pet may reduce the mental health of individuals. Of course, it should be noted that the study of pets' keeping in relation to personality traits and clinical syndromes of individuals showed that the difference between two groups in all clinical syndromes was significant except for obsession and fear. Regarding the comparison of means, it was found that pet owners

have higher level of physical complaints, sensitivity to interactions, depression, anxiety, aggression, paranoid thoughts, and psychosis. The findings of research done by Kajbaf et al. (2010), aimed at comparing family performance and mental health in pet owners and people without pet, showed that there was a significant difference between two groups of pet owners and people without pet in subscales of anxiety symptoms, sleep disorders, emotional affection and communication. It was concluded that people without a pet have more symptoms of anxiety and sleep disorders, and pet owners show more problems than those without pet in relation to emotional involvement. According to the results, cultural factors should be taken into account in having or not having a pet, and having pet is recommended in situations that reduce anxiety and increase the sense of security and relaxation in people. In explaining the results, it can be stated that many people all over the world suffer from harmful effects of psychiatric illnesses such as loneliness, depression and anxiety. Kessler et al. (2005) reported that nearly 30% of the population suffer from anxiety. In addition, the prevalence of mood disorders is more than 20%. Several researchers have indicated that human interaction with animals with the potential of helping to reduce these problems, as well as the result of many cases, leads to increase happiness and empathy (Banks & W. A. Banks 2002; Daly & Suggs 2010; Le Roux & Kemp 2009; Shiloh, Sorek & Terkel 2003). Considering the beneficial nature of pet ownership, it can have a positive impact on human mental health issues. However, attempts to increase pet ownership have raised questions about motivations related to personality traits that people may have to keep pets. The findings of previous studies have suggested that, while the personality is related to the priority of different types of pet, it also correlates with the levels of attachment for each pet (Begley and Gonsman, 2005). This may indicate that some characters may benefit from interacting with pets.

We all know well that Islam's religious teachings refer to the preservation, protection and non-harassment of animals. On the other hand, some Iranian families have traditionally been interested in keeping pigeons, which of course, extremism in this issue has caused harms, including the persecution of neighbors. On the other hand, keeping some types of pets in rural areas of Iran is obvious and even economical. In Iran, as the other societies, dogs may also be used as home guard. Given these issues, it seems necessary to pay more attention to these particular aspects of keeping animals in Iranian society in future studies; perhaps, the effect of keeping pets on mental health in rural areas is different with the urban areas. It is suggested that future research considers the other psychological factors and the effect of these animals on the owners.

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