

DOI: 10.5281/zenodo.11032593

## PET OWNERSHIP IN URBAN FAMILIES IN THE UAE

Osman Sirajeldeen Ahmed<sup>1\*</sup>, Al- Rawashdeh, Alaa, Zuhir<sup>2</sup>, Mohd. Elmagzoub Eltahir<sup>2</sup>,  
Saeed Ameen Nasef<sup>2</sup>

<sup>1</sup>University of Khorfakkan, College of Arts, Humanities and Social Sciences, United Arab Emirates.

[osman.siraj@ukf.ac.ae](mailto:osman.siraj@ukf.ac.ae), ORCID: 0009-0007-3813-2358

<sup>2</sup>College of Humanities and Sciences, Ajman University, Ajman, UAE.

Received: 25/08/2025

Accepted: 21/09/2025

Corresponding Author: Osman Sirajeldeen Ahmed

([osman.siraj@ukf.ac.ae](mailto:osman.siraj@ukf.ac.ae))

### ABSTRACT

*This study investigated the relationship between particular demographic characteristics and pet ownership among urban families in the Emirates. Participants consisted of 299 parents from households with either cats or small dogs in Ajman, recruited via convenience selection from both Emirati citizens and expatriates. The data collection was executed by an online questionnaire disseminated via WhatsApp, available from October 25, 2024, to March 1, 2025. The questionnaire had a query evaluating participants' views on pets as family members, offering 13 response possibilities. Statistical analysis employed Analysis of Variance (ANOVA) to investigate the relationship between demographic characteristics and pet ownership, with the Scheffe test utilised for post hoc comparisons. Statistical significance was determined with a p-value of less than 0.05, and analyses were conducted using SPSS. The results revealed that 53.2% of the participants were dog proprietors, whereas 46.8% own cats. The ANOVA results indicated no statistically significant differences in pet ownership among the majority of demographic variables. The Scheffe test revealed substantial disparities related to monthly family income, favouring households with earnings of < 38,000, as well as social position, indicating that moms were more inclined to own pets. A significant gender-based preference was observed females favoured cats, while males preferred dogs, indicating possible underlying social or cultural influences.*

---

**KEYWORDS:** Pet Ownership, Family, Pet Owners, Cat, Dog, Demographic.

---

## 1. INTRODUCTION

There is increasing interest in examining the existence of pets within families, as well as the categorization and ownership of pets, particularly due to their role as a source of social support for familial connections. Previous research has shown that pet owners perceive their animals as integral family members and recognise their contributions to the household, while also differentiating this role from that of humans (Susan Phillips Cohen, 2002; Johnson, E.; Volsche, S., 2021; Johnson et al., 2021; Finka, L.R. et al., 2019; Foreman-Worsley et al., 2021; Sueur et al., 2020; Cain, Ann Ottney, 1991). Recent work elucidates the relationship between mental health and pet ownership (Kristel J et al, 2021). In Arab communities, the family maintained a presence of animals, understanding animal husbandry from an economic standpoint inside the household subsistence economy, particularly with cows, camels, and goats. The family was disinclined to rear or possess cats, dogs, or birds. Due to alterations in the social structure, particularly within the family system, pet ownership has assumed greater social significance than economic value (Ahmed, O.S, Eltahir, M.E, 2023). The transformations in family structure and social relations, along with alterations in housing types and family size, have resulted in a novel approach to pet ownership, particularly concerning fur-bearing animals (such as dogs and cats), which transitioned from utilitarian roles in the household economy to becoming financial liabilities for families. The recent changes have revealed that families in the Emirates, both Emirati and expatriate, have a distinct enthusiasm for pet ownership, particularly of cats and dogs, and for having them live within the household (Osman. S. Ahmed, Elsayed Abdelrahman, 2022). Pets grew progressively prevalent in households in the UAE towards the conclusion of the twentieth century, particularly throughout the 1990s and the onset of the new millennium. Furthermore, the concept and composition of the urban family were evolving during this period, and perceptions of pets mirrored these transformations (Elsayed Abdelrahman et al, 2023). The pet trade in the United Arab Emirates (UAE) is flourishing; however, due to the severe climate, it is predominantly limited to indoor species such as birds, reptiles, and freshwater and marine aquarium species (Soorae, A et al., 2008). Historically, pet markets in the United Arab Emirates have predominantly featured pet

boutiques that provide both exotic and domesticated animals. Independent pet boutiques have increasingly emerged in affluent shopping centres and urban areas recently. Most prominent cities in each emirate of the UAE feature pet stores, mostly catering to UAE locals and the expatriate community (Soorae, A et al., 2008). This study offers initial insights into pet ownership within the Emirati urban community, taking into account the diversity and cultural variations among households in the Emirates, which hosts individuals from many cultures.

### 1.1. Study Hypothesis

This study hypothesizes a correlation between pet ownership and participant demographics. To explore this, the subsequent issues were addressed.

Q1: How does family size influence the likelihood of pet ownership in urban households?

Q2: What is the relationship between housing conditions (size/type of residence) and pet ownership in urban areas?

Q3: How does monthly family income affect the likelihood of pet ownership in urban households?

Q4: Is there a gender-based preference for dog versus cat ownership among urban families?

Q5: Do gender roles influence the likelihood of pet ownership in urban families?

Q6: What is the influence of family members' roles (e.g., mother, father, and children) on decisions regarding pet ownership in urban households?

Q7: To what extent does age influence pet ownership within urban families?

Q8: How does the duration of pet ownership influence attitudes toward pet ownership in urban families?

## 2. MATERIALS AND METHODS

### 2.1. Recruitment and Procedure

Participants were urged to complete an online survey developed using Google and disseminated to them over WhatsApp. The participants were provided access to an online survey created with Google, and the link was disseminated over WhatsApp. The study, conducted in Arabic, enquired about the correlation between pet ownership and demographic factors such as family size, housing type, monthly family income, type of pet, type of pet owner, age of pet owner, and duration of pet ownership. The survey was available on October 25, 2023, and February 1,

2024.

## 2.2. Pet Ownership

Participants were enquired, how would you define a pet as a family member? By use of one of the subsequent thirteen alternatives "A pet constitutes a familial member." "A pet is merely an animal." "A pet is a familial companion." "A pet is regarded as a child within the family." "A pet fortifies familial bonds." "A pet enhances familial relationships beyond the immediate family unit." "Family members invest much time with the pet." "Family members derive happiness from the presence of the pet." "The pet offers social assistance to family members." "The inclusion of a pet in the household guarantees companionship and amusement." "The pet resides in the private quarters of family members." "The pet is designated specific dwelling areas within the residence." "The existence of the pet At home, in accordance with the children's desires."

## 2.3. Participants

The present study comprised 299 parents from households with furry pets (cats and dogs) in the city of Ajman, randomly selected from families of both nationals and expats, as detailed in Table 1. When evaluating the results, it is crucial to consider the limitations of this sampling method. The reliance on convenience and snowball sampling methods constitutes a notable limitation of the study, potentially affecting the generalisability of the results. Convenience sampling frequently selects participants from demographic categories, particularly middle- to upper-income households, who possess the financial means to buy pets. This may result in an over-representation of pet ownership among higher-income groups, potentially indicating ownership rates that exceed those observed across a more varied income spectrum.

Moreover, the application of snowball sampling may exacerbate this bias by enlisting individuals from the social networks of initial respondents, so producing a more homogeneous sample and constraining the diversity of opinions obtained

**Table 1: Demographic Information of Participants.**

Study Variables	Variables Levels	Frequency (f)	Percentage (%)
Family Member Number	3	122	41
	4	93	31
	≤ 5	83	28
	Total	299	100
Family Monthly Income(AED)	5-15 thousand	98	32.7
	16-26 thousand	72	24.1
	27-37 thousand	64	21.4
	≤38 thousand	65	21.8
	Total	299	100
Living	Small apartment	46	15.4
	Big apartment	53	17.8
	Villa	125	41.8
	Public house	75	25
	Total	299	100
Type of Pet Owned	Cat	140	46.8
	Dog	159	53.2
	Total	299	100
Gender	Male	153	51.2
	Female	146	48.8
	Total	299	100
Pet Owner	Father	78	26.1
	Mother	58	19.4
	Son	88	29.4
	Daughter	75	25.1
	Total	299	100
Pet Owner Age	5-15	86	28.8
	16-26	97	32.4
	27-37	79	26.4
	≤ 38	37	12.4
	Total	299	100
Number of Years Pet Ownership	≤ 1	88	29.4
	1-3	104	34.8
	4-6	68	22.7
	≤ 7	39	13.1
	Total	299	100

## 2.4. Statistical Analysis

Variations among categories on the association between pet ownership and several demographic factors were analysed using analysis of variance (ANOVA). In the event of substantial disparities between groups, the Scheffe test was employed to discern categories that exhibited significant differences through multiple comparisons. We employed the SPSS software suite for data analysis and established a significance threshold of  $p < 0.05$ .

## 3. LITERATURE REVIEW

Allen (2019) posited that recognising pets as significant social entities enhances their social support attributes, thereby augmenting their perceived ability to provide social support to their owners, and examined how viewing a pet as a family member contributes to enhanced well-being. The poll also examined the degree to which individuals perceived their pets as family members.

The study indicated that advocating for pets as family members resulted in enhanced well-being and showed positive correlations between this perspective and improved assessments of social support characteristics. Pets can provide essential social support, improving both physical and emotional health (Allen R et al, 2019). Tague (2021) presented an analysis employing literary, archival, and visual resources to examine various representations of domestic animals in eighteenth-century British society, focussing on continuity and change over time, as animals constituted the basis of a patriarchal political family. During the eighteenth century, animals served as subjects, servants, and companions.

The rise of sensitivity and familiarity in the late eighteenth century reinforced the concept of pets as family members, thereby enhancing their emotional significance within familial relationships characterised by strong emotional bonds (Ingrid H. Tague, 2021). Paul et al. (2001) established a theoretical foundation and framework for understanding human-pet relationships from a life course perspective, delineating the roles of pets at various life stages, including companionship, support for individuals with disabilities, and their significance in bereavement (Paul et al., 2001).

Onyskiw (2007) summarised empirical evidence linking domestic violence to the mistreatment of family pets and analysed the implications of these correlations for professionals working with women, children, families, or animals. Onyskiw, J. E. (2007). Blouin (2013) analysed the differing

viewpoints of dog owners concerning their treatment and contact with animals, identifying three distinct orientations in pet relationships dominance, humaneness, and protectionism.

This study revealed that pets play a substantial part in the lives of many individuals, often providing companionship, amusement, and meaningful connections (David D. Blouin, 20013). Carlisle and Nielsen (2004) provide a thorough examination of the attitudes, views, and behaviours displayed by pet abusers versus non-pet abusers. The data indicated that pet abusers often demonstrate sympathy towards their pets; yet, their communication primarily consists of orders and threats. Moreover, they frequently perceive pets as mere commodities (Pamela Carlisle-Frank et al, 2004).

Pavol and Sue (2010) examined children's perceptions of domestic pets, positing that these perceptions correlate with more favourable attitudes towards popular animals. Their research indicated that girls exhibited a lower propensity to like creatures that could be perilous, intimidating, or detrimental to their well-being (Pavol Prokop, Sue Dale Tunnicliffe, 2010).

Grey et al. (2015) examined the role of family pets, particularly cats and dogs, as integral family members, which may substantially affect mate selection. They suggested that single women would place greater importance on a prospective partner's interaction with their pets than single men would, and that dogs would be more prominent in the dating landscape than cats, due to dogs' inherently gregarious nature. Consequently, dogs may serve as a superior indicator of prospective spouses' capacity for caregiving.

The study's results revealed that women are generally more discerning about a possible partner's relationship with pets than men, with dogs serving as more significant social indicators in the dating sphere than cats. The findings also pertain to changing family arrangements, which include declining fertility rates and the growing importance of companion animals, similar to extended family members. (Grey, P. B. et al., 2015). A series of studies has focused on the human contact between owners and their pets.

The owner's behaviour towards the type of pet may be evident in the portrayal of this relationship. For instance, cat owners subjectively categorise their relationship with their pets as a family member, a kid, a closest friend, or just a pet (Esther M et al, 2022). Studies suggest that persons in human-animal partnerships may encounter

reduced emotional support while grieving the loss of a beloved pet. The grieving process closely resembles that of mourning a family member, primarily because pet owners frequently ascribe anthropomorphic characteristics to their animals (Anna Maria et al, 2020).

(Osman Ahmed et al., 2025). In the context of human-animal relationships, Vidović et al. (2015) identified significant main effects concerning empathy, prosocial orientation, and attachment to pets, revealing that dog owners displayed heightened empathy and social orientation relative to non-owners, whereas both dog and cat owners showed a more profound attachment to their pets. Vlasta Vizek Vidović et al., 2015.

A multitude of experts have examined demographic variables related to pet ownership. Sarah and Forsyth (2015) conducted a study examining the demographic parameters linked to pet ownership among families in New Zealand.

They analyzed the familial structure, the motivations for pet ownership, and the advantages

and disadvantages related to possessing pets. According to their survey, more than half of these families had a child who was the sole pet owner. Pet ownership correlates with parental employment, residential location, and the number of offspring (Sarah J. Fifield & Darryl K. Forsyth, 2015).

Gates et al. (2019) delineated the demographics of pet ownership, indicating that it is more prevalent in rural regions, among those with elevated incomes, and within households with female children (MC Gates et al., 2019).

The research conducted by Matthew et al. (2017) revealed that girls exhibit greater friendship with their pets than boys, and that dog owners reported elevated levels of camaraderie and pet satisfaction compared to owners of other animals.

Adolescents experience more happiness with their pets compared to adults (Matthew T et al, 2017).

#### 4. RESULT AND DISSECTION

**Table 2: ANOVA Test Pet Owner and Family Number.**

Sum of Squares		df	Mean square	F	Sig.
Between Groups	1.006	2	.503	2.104	1.24
Within Groups	71.004	297	.239		
Total	72.010	299			

The ANOVA test results regarding participial responses related to this variable are shown in Table 2, which clearly indicates that there are no statistically significant differences among pet owners based on family size, as the p-value (0.124) surpasses the required level of statistical significance (0.05).

**Table 3: ANOVA Test Pet Owner and Living.**

Sum of Squares		df	Mean square	F	Sig.
Between Groups	1.034	3	345	1.437	232
Within Groups	70.976	296	240		
Total	72.010	299			

As shown in Table3, the finding shown that there are no statistically significant differences in living in relation to pet ownership. However, P (0.232) was above the required level of statistical significance (0.05).

This indicates that participants' attitudes towards pet ownership go beyond living in large spaces, which means that there is a desire among all participants to own a pet without regard to living. Despite the above results, we would like to clarify that the participants' responses indicate that most

pet owners of cats and dogs live in large areas, as shown in table 1.

**Table 4: One-way ANOVA Test Pet Owner and Monthly Family Income.**

Sum of Squares		df	Mean square	F	Sig.
Between Groups	2.438	3	813	3.457	017
Within Groups	69.572	296	235		
Total	72.010	299			

**Table 5: Scheffe Test Pet Owner and Monthly Family Income.**

Family monthly income (I)	Family monthly income (J)	Mean Difference (I-J)	Std. Error	Sig	95% Confidence Interval	
					Upper bound	Lower bound
5.00-15.000	16.000-26.000	-.13704	.07525	.347	-.3486	.0745
	27.000-37.000	-.08154	.07755	.776	-.2996	.1365
	≤38.000	-.24359*	.07755	.021	-.4616	.0255
16.000-26.000	5.00-15.000	.13704	.07525	.347	-.0745	.3486
	27.000-37.000	.05550	.08295	.930	-.1777	.2887
	≤38.000	-.10655	.08295	.648	-.3398	.1267
27.000-37.000	5.00-15.000	.08154	.07755	.776	-.1365	.2996
	16.000-26.000	-.05550	.08295	.930	-.2887	.1777
	≤38.000	-.16205	.08504	.306	-.4012	.0771
≤38.000	5.00-15.000	.24359*	.07755	.021	.0255	.4616
	16.000-26.000	.10655	.08295	.648	-.1267	.3398
	27.000-37.000	.16205	.08504	.306	-.0771	.4012

\*. The mean difference was significant at the level of 0.05.

Table 4 presents the findings of the one-way ANOVA performed on participants according to their monthly household income. Table 3 illustrates that there are no statistically significant differences among pet owners regarding monthly family income, as the p-value of (.017) above the requisite significance threshold of (0.05). Thus, the Scheffe test was utilised for the subsequent comparisons to ascertain the source of the inconsistencies (see to table 5). The data in Table 5 indicate statistically significant variations in family monthly income concerning pet ownership, favouring families with a monthly income of < 38,000.

**Table 6: Pet Owner and Type of Pet.**

Levine's Test for Equality of Variances		t-test for Equality of Means		
F	Sig	t	df	
Equal variances assumed	.437	.509	.487	298
Equal variances not assumed			.488	295.484

Based on the pet owner and type of pet depicted in Table 6, the results indicate that the observed p-value (0.487) exceeds 0.05. Consequently, the test at the 0.05 significance level indicates that the amount of pet ownership does not substantially vary according to the type of pet variable.

It is essential to note that the data reveals a larger percentage of dog ownership compared to cat

ownership, as illustrated in Table 1. It is also essential to note that the participants owned a small, fuzzy dog.

**Table 7: Pet Owner and Gender (Males and Females).**

Levine's Test for Equality of Variances		t-test for Equality of Means		
F	Sig	t	df	
Equal variances assumed	1.984	.160	2.415	298
Equal variances not assumed			2.419	297.975

According to pet owner and gender, as shown in table 7, regarding pet owners and their gender, the results indicate that the observed p-value (0.160) exceeds 0.05. Therefore, the analysis at the 0.05 significance level suggests that there is no notable difference in the pet ownership levels when considering the gender variable (males and females).

**Table 8: One-way ANOVA Test Pet Owner and Social Status Member of Family.**

	Sum of Squares	df	Means of square	F	Sig
Between Groups	2.600	3	.867	3.696	.012
Within Groups	69.410	296	.234		
Total	72.010	299			

**Table 9: Scheffe Test Pet Owner and Social Status Member of Family.**

Owner of the pet (I)	Owner of the pet (J)	Means Difference (I-J)	Std. Error	Sig	95% Confidence Interval	
					Upper Bound	Lower Bound
Father	Mother	-.27845*	.08373	.012	-.5139	-.0430
	Son	-.12816	.07505	.406	-.3392	.0829
	Daughter	-.12694	.07807	.451	-.3464	.0926
Mother	Father	.27845*	.08373	.012	.0430	.5139
	Son	.15029	.08190	.340	-.0800	.3806
	Daughter	.15151	.08467	.363	-.0866	.3896
Son	Father	.12816	.07505	.406	-.0829	.3392
	Mother	-.15029	.08190	.340	-.3806	.0800
	Daughter	.00122	.07610	1.000	-.2127	.2152
Daughter	Father	.12694	.07807	.451	-.0926	.3464
	Mother	-.15151	.08467	.363	-.3896	.0866
	Son	-.00122	.07610	1.000	-.2152	.2127

\*The mean difference was significant at the level of 0.05.

The outcomes of the one-way ANOVA test performed on participants according to the social status of family members, as illustrated in Table 8, demonstrate that no statistically significant differences exist among pet owners regarding the variable of social status of family members, since p is (0.012), which surpasses the requisite statistical significance threshold of (0.05).

Consequently, the Scheffe test was employed to identify the origin of the inconsistencies (see to table 9). Table 9 shows statistically significant differences in family members' social standing for the pet ownership variable that favor the mother.

**Table 10: ANOVA Test Pet Owner and Age**

Sum of Squares		df	Means of square	F	Sig
Between Groups	1.548	3	.516	2.168	.092
Within Groups	70.462	296	.238		
Total	72.010	299			

According to pet owner and gender shown in table 10, the results indicate that the observed p-value (0.092) exceeds 0.05. Therefore, the test at the 0.05 significance level suggests that there is no substantial difference in the level of pet ownership based on the age variable.

**Table 11: ANOVA Test Pet Owner and Number of Years Pet Ownership.**

Sum of Squares		df	Means of square	F	Sig
Between Groups	1.836	3	.612	2.581	.054
Within Groups	70.174	296	.237		
Total	72.010	299			

The ANOVA test results regarding participial responses for this variable are shown in Table 11, which clearly indicates no statistically significant differences among pet owners based on the duration of pet ownership, as the p-value (0.054) surpasses the required level of statistical significance (0.05).

**6. CONCLUSION**

This study offers a comprehensive analysis of pet ownership trends among urban families in the UAE, specifically focussing on demographic parameters such family size, housing type, income, social status, and gender. The results indicate that pet ownership is broadly embraced among diverse family sizes and housing arrangements, contesting the conventional notion that larger families or more expansive residences are better suited for pet keeping. This transition corresponds with recent studies showing that urban families increasingly perceive pets as essential components of their households, irrespective of their living situations. Income proved to be a crucial determinant, suggesting that financial resources influence the decision to acquire pets, presumably due to the continuous expenses related to pet maintenance. The inclination towards smaller canine breeds among affluent families indicates an adjustment to urban settings, where these breeds may be more easily accommodated. Moreover, pronounced sex-based preferences were noted, with female participants exhibiting a preference for cats and male participants demonstrating a preference for dogs. These trends may indicate the fundamental social or cultural influences driving pet preferences, necessitating additional examination. This research highlights the involvement of family

members in pet ownership, indicating that mothers predominantly assume pet care responsibilities, hence extending their conventional caregiving obligations. This discovery elucidates the changing family dynamics in metropolitan settings, where caring responsibilities are increasingly encompassing pets, indicative of a contemporary perspective on family life.

The absence of notable disparities in pet ownership among age groups signifies a normalization of pet ownership across demographics, highlighting the role of pets as sources of emotional and psychological support. This study enhances the current body of literature on pet ownership, emphasizing the need for additional research into the social and cultural determinants influencing pet ownership in non-Western settings, particularly as urbanization and globalization transform traditional family dynamics in the UAE.

### 6.1. Limitations

In assessing the outcomes, it is crucial to acknowledge the several limitations of this study. Future research should examine the influence of economic variables and social welfare on pet ownership, while also investigating specific categories of pet ownership, such as those of cats or dogs, and their interaction with children in the household. Furthermore, research investigating the role of pets as family members should emphasize varied participant selection to enhance the generalizability of their results.

This study offers a thorough examination of pet ownership patterns among urban families in the UAE, specifically analysing demographic characteristics such family size, housing type, income, social status, and gender. The data indicate that pet ownership is broadly embraced across

diverse family sizes and housing arrangements, contesting the conventional notion that larger families or more expansive homes are better suited for pet keeping. This transition corresponds with previous studies demonstrating that urban families increasingly perceive dogs as essential components of their households, irrespective of their living conditions.

Income proved to be a crucial determinant, suggesting that financial resources influence the decision to possess pets, presumably due to the continuous expenses related to pet care. The inclination for smaller furred dogs among affluent families indicates an adjustment to urban settings, where these breeds are more manageable. Moreover, pronounced sex-based preferences were noted, with female participants exhibiting a preference for cats and male participants demonstrating a preference for dogs. These tendencies may indicate the fundamental social or cultural causes influencing pet preferences, necessitating additional examination.

This study emphasises the involvement of family members in pet ownership, indicating that mothers predominantly assume pet care responsibilities, hence extending their conventional caregiving obligations. This discovery elucidates the changing family dynamics in metropolitan settings, where caring responsibilities are increasingly encompassing pets, indicative of a contemporary perspective on family life.

This research enhances the current literature on pet ownership, emphasizing the need for further investigations into the social and cultural factors influencing pet ownership in non-Western contexts, especially as urbanization and globalization continue to reshape traditional family structures in the United Arab Emirates.

**Acknowledgments:** This paper has been supported by the Deanship of Research and Graduate Studies, Ajman University, Ajman, UAE.

**Author Contributions:** Conceptualization, O.S.A.; methodology, O.S.A. and M.E.E.; software, M.E.E.; validation, S.N. and A.Z.A., formal analysis, M.E.E.; investigation, S.N.; data curation, O.S.A. and S.N.; writing original draft preparation, O.S.A. and M.E.E.; writing review and editing, O.S.A.; visualization, A.Z.A. and S.N.; supervision, O.S.A.; project administration, O.S.A. and M.E.E.; funding acquisition, A.Z.A. and S.N. All authors have reviewed and consented to the final version of the manuscript.



## REFERENCE

- Ahmed, O.S, Eltahir, M.E, (2023), The Impact of COVID-19 on Family Values and Relations: A Case Study of Ajman Emirate Family, *Przestrzen Społeczna*, 23(1), 500 – 534.
- Allen R. McConnell, E. Paige Lloyd & Brandon T. Humphrey, (2019) We Are Family: Viewing Pets as Family Members Improves Wellbeing, *Anthrozoös*, 32:4, 459-470, DOI: 10.1080/08927936.2019.1621516
- Anna Maria C. Behler, Jeffrey D. Green, Jennifer Joy-Gaba, (2020), “We Lost a Member of the Family”: Predictors of the Grief Experience Surrounding the Loss of a Pet, *Human-Animal Interaction Bulletin*, 8(3), 52-70. <https://doi.org/10.1079/hai.2020.0017>
- Cain, Ann Ottney, (1991), pets and the family, *Holistic Nursing Practice* 5(2), 58-63.
- David D. Blouin (2013) Are Dogs Children, Companions, or Just Animals? Understanding Variations in People's Orientations toward Animals, *Anthrozoös*, 26:2, 279 -294. DOI: 10.2752/175303713X13636846944402
- Elsayed Abdelrahman, Osman S. Ahmed, Alaa Z. Al-Rawashdeh, Zeit M. Neural, (2023), The Impact of Family Upbringing Methods on the Formation of Children's Health Awareness, *Journal of Human, Earth, anFuture*, 4(2), 197-206, <http://dx.doi.org/10.28991/HEF-2023-04-02-05>
- Esther M. C. Bouma ,Marsha L. Reijgwart ,Arie Dijkstra,(2022), Family Member, Best Friend, Child or ‘Just’ a Pet, Owners’ Relationship Perceptions and Consequences for Their Cats, *Int. J. Environ. Res. Public Health*, 19(1), 193. <https://doi.org/10.3390/ijerph19010193>
- Finka, L.R.; Ward, J.; Farnworth, M.J.; Milss, D.S, (2019), Owner personality and the wellbeing of their cats share parallels with the parent-child relationship. *PLoS ONE*, 14, e0211862.
- Foreman-Worsley, R.; Finka, L.R.; Ward, S.J.; Farnworth, M.J. (2021), Indoors or Outdoors? An International Exploration of Owner Demographics and Decision Making Associated with Lifestyle of Pet Cats, *Animals*, 11(2), 253. <https://doi.org/10.3390/ani11020253>.
- Ingrid H. Tague, (2021) Pets and the eighteenth-century British family, *The History of the Family*, 26:2, 186-213. DOI: 10.1080/1081602X.2021.1946834
- Johnson, E.; Volsche, S, (2021), COVID-19: Companion Animals Help People Cope during Government-Imposed Social Isolation. *Soc. Anim*, 29, 1-18
- Johnson, E.A.; Portillo, A.J.; Bennett, N.E.; Gray, P.B, (2021), Exploring women’s oxytocin responses to interactions with their pet cats. *PeerJ*, 9, e12393.
- Judee E. Onyskiw, (2007), The Link Between Family Violence and Cruelty to Family Pets, *Journal of Emotional Abuse*, 7:3, 7-30. DOI: 10.1080/10926798.2007.10766830
- Kristel J. Scoresby, Elizabeth B. Strand, Zenithson Ng, Kathleen C. Brown, Charles Robert Stilz, Kristen Strobel, Cristina S. Barroso, Marcy Souza, (2021), Pet Ownership and Quality of Life: A Systematic Review of the Literature, *Veterinary Sciences*,8,332.1-23. <https://doi.org/10.3390/vetsci8120332>
- Matthew T Cassels, Naomi White, Nancy Gee, Claire Hughes, (2017), One of the family? Measuring young adolescents' relationships with pets and siblings, *Journal of Applied Developmental Psychology*, 49, 12-20. <https://doi.org/10.1016/j.appdev.2017.01.003>
- MC Gates, J Walker, S Zito & A Dale (2019), Cross-sectional survey of pet ownership, veterinary service utilisation, and pet-related expenditures in New Zealand, *New Zealand Veterinary Journal*, 67:6, 306-314, DOI: 10.1080/00480169.2019.1645626
- Osman. S. Ahmed, Elsayed Abdelrahman, (2022), The Relationship between Social Variables Related to Parents and the Academic Achievement of their Children during Corona Virus: A Case Study. *Information Sciences Letters.*, 11(3),739-744. <doi.org/10.18576/isl/110306>
- Osman. S. Ahmed, Alaa Z. ALRawashda, Asma R. Al Arab, Asma S. Ahmed, (2025), Statistical Analysis of Pet Ownership and Care Expenses in Urban Families of Ajman, UAE, *Journal of Statistics Applications & Probability*,14(3), 461-468. <http://dx.doi.org/10.18576/jsap/140309>
- Pamela Carlisle-Frank, Joshua M. Frank & Lindsey Nielsen, (2004) Selective battering of the family pet, *Anthrozoös*, 17:1, 26-42. DOI: 10.2752/089279304786991864
- Paul L. Schvaneveldt Ph.D., Margaret H. Young, Jay D. Schvaneveldt & Vira R. Kivett, (2001) Interaction of People and Pets in the Family Setting, *Journal of Teaching in Marriage & Family*, 1:2, 34-51. DOI: 10.1300/J226v01n02\_03
- Pavol Prokop & Sue Dale Tunnicliffe, (2010) Effects of Having Pets at Home on Children's Attitudes toward Popular and Unpopular Animals, *Anthrozoös*, 23:1, 21- 35, DOI: 10.2752/175303710X12627079939107
- Peter B. Gray, Shelly L. Volsche, Justin R. Garcia & Helen E. Fisher, (2015) The Roles of Pet Dogs and Cats in

- Human Courtship and dating, *Anthrozoös*, 28:4,673-683. DOI: 10.1080/08927936.2015.1064216
- Sarah J. Fifield & Darryl K. Forsyth, (2015), A Pet for the Children: Factors Related to Family Pet Ownership, *Anthrozoös*, 12:1, 24-32, DOI: 10.2752/089279399787000426
- Soorae, A. Al Hemeri, A. Al Shamsi, K. Al Suwaidiin, (2008), Survey of the Trade in Wildlife as Pets in the United Arab Emirates, *TRAFFIC Bulletin*. 22 (1), 41-46.
- Sueur, C.; Forin-Wiart, M.; Pelé, M. (2020), Do They Really Try to Save Their Buddy? Anthropomorphism about Animal Epimeletic Behaviours. *Animals*, 10, 2323
- Susan Phillips Cohen, (2002), Can Pets Function as Family Members? *Western Journal of Nursing Research*, 24, 6, 621-638. <https://doi.org/10.1177/019394502320555386>
- Vlasta Vizek Vidović, Vesna Vlahović Štetić & Denis Bratko, (2015), Pet Ownership, Type of Pet
- Vidović, V. V., Štetić, V. V., & Bratko, D. (1999). Pet ownership, type of pet and socio-emotional development of school children. *Anthrozoös*, 12(4), 211-217.