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Two Sides of the City: Dog-keeping Practices in Russian Urban Areas

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ABSTRACT This article examines dog-owner relations and dog ownership in Omsk, Russia. We describe typical dog-keeping practices and reveal how diverse urban environments can influence these practices. A two-stage survey was conducted in 2014 to determine the numbers and management of dogs owned. In total, some 1,583 households at the first stage of the research and 323 households at the second stage were interviewed face-to-face. About 23% of all households in Omsk owned dogs, but this proportion varied markedly for different parts of the city. In the city's single-story area, 71.5% of households had dogs, while in the multi-story area this was only 10.8%. Dog-keeping practices were different in these areas. Significant differences in these practices were shown for almost all aspects: the selection criteria, dog feeding, veterinary treatment, dog walking, the roles of dogs, and owners' attitudes toward them. Owners living in the single-story area demonstrated a utilitarian or functional approach to their dogs—influencing the sex, size, and the breed of the animal. Dogs often lived outside the house; they were vaccinated and taken to the veterinarian less often than dogs from the multi-story area. The owners in the multi-story area described more affectionate feelings toward their dogs. This is reflected in both the choice and treatment of the animals. We observed a larger proportion of pedigree dogs, a larger proportion of female animals, more vaccinations, and the owners making a variety of purchases for their dogs.

Keywords: dogs, dog owners, human–animal interaction, urban area



Most studies devoted to human–animal relationships investigate primarily pets, but this research is founded in our interest in the problems of stray dogs. In our previous paper, we studied the relation between domestic and stray dogs (Makenov & Bekova, 2016). There was an exchange between these two populations: some pet dogs were either lost or had run away, while some abandoned dogs were adopted. We found that the number of dogs that moved from the domestic to the stray population was significant and made an important

contribution to the population of urban stray dogs (Makenov & Bekova, 2016). The control of the stray dog population is closely related to the culture of pet-keeping. Therefore, to manage the stray dog population, we also need to learn more about dog owners. There is a lack of research on this topic in Russia, with a few exceptions (Levada Center, 2014a; Shmerlina, 2008).

In other countries, different aspects of pet-keeping practices have been studied, including the problems and risks of pet-human interaction (Ascione & Shapiro, 2009; Blouin, 2012). Human-animal studies have developed in different directions. Researchers have studied changes in the purchasing practices of pet owners (Nast, 2006) and pet-owner relationships as a substitute for human relationships (Franklin, 1999; Greenebaum, 2004). Other studies concern interaction with an animal as a significant other (Irvine, 2004) and the perception of pets by specific groups of owners, including children and homeless people (Lem, Coe, Haley, & Stone, 2013; Westgarth et al., 2013). Researchers have stressed the social basis of pet-owner relations that are not purely utilitarian and that should be studied sociologically (Charles, 2014).

The current study fills the gap in information about dog ownership and dog-owner relations in Russia. We sought to describe typical dog-keeping practices, to study how diverse urban environments can define these practices, the attitudes people have toward dogs, the functions of dogs in the family, and to understand if dog-keeping practices can affect whether domestic dogs become strays.

Methods

Study Area

Omsk (54°58' N, 73°23' E), is a large Russian city in Western Siberia with a population of 1,173,000 people. The residential area of Omsk, like most other major cities of Russia, has a distinct division into two areas: single-story and multi-story. The multi-story area includes households located in apartment buildings without a backyard. The single-story area covers households residing in detached, low-story houses with fenced yards.

The household density in the multi-story area is approximately 9,500 households per sq.km¹; in the single-story area it is 726 households per sq.km. The proportion of single-story buildings in the city is less than 6% (Makenov & Bekova, 2015). However, the single-story area occupies about half of the city's total living space and makes a significant contribution to the overall city image. Taking into account this and our assumption that the conditions of keeping dogs in multi-story and single-story areas can differ radically, we built subsamples for each area.

Sampling and Questionnaire

Within each area, we distinguished three zones that differ in terms of infrastructure, property value, and the income of the population:

- 1) *Central zone*: the central part of the city has the most expensive houses, the highest concentration of offices, commercial, social, and political buildings, and the highest traffic levels. Expensive detached houses represent the single-story buildings of this area.
- 2) *Transitional zone*: this is the zone between the central part of the city and the periphery, characterized by multi-story buildings, fewer public buildings, reduced density and traffic.
- 3) *Peripheral zone*: a residential area with low-cost single-story detached housing adjacent to the countryside and parkland that surround the city.

This division allowed us to construct stratified samples separately for the multi-story and single-story areas. The minimum sample size required was determined for the multi-story area with a confidence level of 95% and a confidence interval of 5%; for the single-story area, the confidence level was 97%, with a confidence interval of 3%.

We used a two-stage sample to determine the number of households needed. Within the first phase, the sample unit was an urban household. Households were defined as communities of persons living in the same residence. The first phase was comprised of a short questionnaire; sample consisted of 1,260 households in the multi-story area and 323 in the single-story area. The primary goal of the first phase was to determine the number of dog-owning households and the total number of dogs owned.

The second phase sample covered only households with dogs. The sample size for both areas was 321 households. The main goal of this step was to examine dog-keeping practices. Using an extensive questionnaire, this phase of the research included a survey of dog owners, with questions about: the dog's age, sex, and breed; dog-keeping practices; the experience of owning a dog; the relationship with the dog; the characteristics of the household. Detailed information about the sampling has been published previously (Makenov & Bekova, 2015; Makenov & Bekova, 2016).

This cross-sectional research was conducted using face-to-face interviews. Sixteen interviewers took part in the data collection; the average length of an interview was 3 minutes for the first phase of the research and 15 minutes for the second.

Data Analysis

The data were analyzed using the SPSS (Armonk, NY, USA) and R packages for statistical analysis. To describe basic dog-keeping practices, we used descriptive statistics and contingency tables (where we interpreted adjusted standardized Z statistics with values > 1.6). To check the homogeneity of groups of owners from the zones described above, we used cluster analysis.

Variables

The function of the dog was measured by the variable "the main role of the dog." Initially, it contained five values plus "other" as answer options, but two of them received less than 1% of the answers and so in the analysis we used three labels: Guard; Family member; Friend, companion. This question allowed multiple answers and 18% of respondents chose more than one answer. The most frequent combinations were: 1) family member + friend, companion: 8.4%; 2) family member + guard: 8.1%.

The questionnaire included a question about the reasons for getting a dog, which can also reflect the owner's attitude. Descriptive statistics showed that:

- 1) These responses were related to each other. According to the contingency tables, owners who had dogs mainly for friendship or because they loved dogs considered them as a friend or family member ($\chi^2 = 94.99$, $p < 0.001$, $Z = 5.3$). To a large extent, owners who used their dogs as guards regarded them mostly in a functional way ($Z = 9.3$).
- 2) 11% of respondents kept their dog as a guard dog but currently treated her as a friend or family member.
- 3) The number of respondents that had more than one motive to get a dog was low (3.4% of respondents cited two reasons: to get a friend and to get a guard).

Table 1. The percentage of households with dogs in different areas (% from all households in the area).

Type of Residential Area	Zones			Total in the Area
	Central Zone	Transitional Zone	Peripheral Zone	
Multi-story Building Area	16.0	10.1	11.0	10.8
Single-story Building Area	62.1	61.2	79.8	71.5

Ethical Statement

Ethical approval for the study was obtained from the Institutional Review Board of Higher School of Economics. Participants were informed about the study; participation in the survey was voluntary and all responses were kept confidential.

Results

Dog Ownership Patterns

We found significant differences between the ownership practices in multi-story buildings and single-story buildings. About 71.5% of households in the single-story area had dogs (Table 1), while for multi-story households it was 10.8% ($\chi^2 = 534.66$; $df = 1$, $p < 0.001$). There were also significant differences between single- and multi-story buildings in terms of the sex of the dog, breed preferences, the role of the dog in the family, and other characteristics (Table 2).

Dog Characteristics

Most dog owners in Omsk had one dog (80.9%), and residents of single-story buildings were more likely to have more than one dog (26.0% vs. 7.4% in the multi-story area). The sex of the dog tended to differ between areas: single-story area residents tended to have male dogs (65%, $Z = 2.6$), while for inhabitants of the multi-story area, there was no significant preference as to gender.

The large majority of dog-owning multi-story building residents (82%) had pedigree dogs, with 41% having certified pedigrees. In the single-story area, this figure was 15%. The most popular breeds in the multi-story area were (according to the classification of the World Canine Organization [FCI]): Russian Toy, Dachshund, Medium and Miniature Poodles, and Labrador retriever. These are all (with the exception of Labrador retriever) small breeds (from 4 to 10 kg).

Slightly over half the dog-owning inhabitants of the single-story area had a mixed breed dog (51%), most often medium-sized (from 11 to 25 kg). The owners in this area who chose a breed preferred German Shepherd, Central Asian Shepherd Dog, Caucasian Shepherd Dog, and Dachshund.

No statistical connection was found between the area and the age of the dog.

Care and Maintenance

Residents of the multi-story area kept their dogs in the home; in such cases, the dogs did not have a particular place and the owners did not limit their movement in the apartment (82%). Most owners in the multi-story area (95%) walked their dog twice a day or more (52% used a leash, 5% used a muzzle). The most popular dog-walking places are shown in Figure 1. There were no specially assigned places for dog walking, so people were forced to use the surrounding area.

Only 17% of residents in the single-story area kept their dogs inside. Most often, the dogs lived in the yard (50% on a chain and 22% without). About 10% of owners used a doghouse.²

Table 2. Differences in dog-keeping practices between owners from different areas.

Dog Owners' Practices	Multi-story Area	Single-story Area
<i>Dog Ownership</i>	10.8%	71.5%
One dog	92.6%	74.0%
Two or more dogs	7.4%	26.0%
<i>Dogs' Characteristics</i>		
Sex (male)	51.0%	62.5%
Pedigree animal	82%	49%
With a breeding record	42%	15%
Size (mode)	4–10 kg	11–25 kg
<i>Care Practices</i>		
Keep the dog in the house	—	17%
Keep the dog outside (in the yard)		
- on a chain	—	50%
- without a collar	—	22%
- in a doghouse	—	10%
Veterinary care (the share of owners that)		
- vaccinate	88%	59%
- go to the veterinarian ^a	76%	26%
- read special books/websites	79%	44%
- train their pets ^b	51%	29%
Nutrition		
- buy dry dog food	51%	17%
- cook food for the dog	48%	71%
- give leftovers	33%	52%
- buy canned dog food	14%	3%
Buy		
- toys	78%	30%
- treats	70%	18%
- grooming products	63%	18%
- daily care products (collar, leash)	61%	47%
- dog clothes	40%	5%
<i>Experience</i>		
Have had a dog before	58%	79%
Time gap of less than 1 year ^c	39%	57%
<i>Attitude to the Dog</i>		
The main role of the dog:		
- a guard	2%	47%
- family member	85%	11%
- friend, companion	11%	41%
Feelings:		
- I love my dog very much	91%	53%
- good attitude to the dog ("I somewhat like my dog")	9%	42%
- indifferent ("I'm indifferent toward my dog")	—	4%
- I do not like my dog	—	1%
Displays of affection to the dog:		
- hugs	71%	25%
- kisses	58%	7%
- talking	63%	49%
- have a photo of the dog	92%	55%

^aPlan visits to a vet or in the case of illness.^bTrain their dogs by themselves or with specialist help.^cTime gap between the loss of a previous dog and getting a new one.

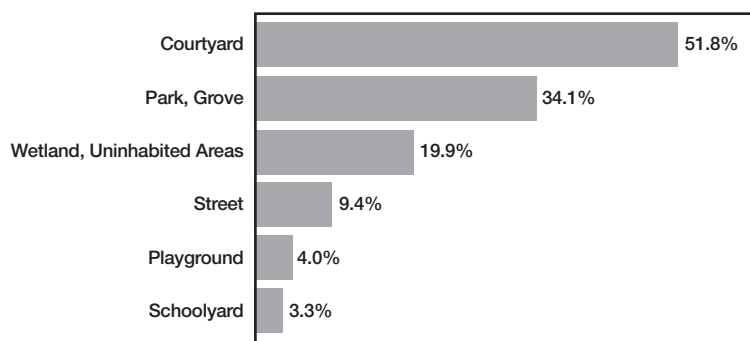


Figure 1. The most popular places for dog walking; percentage of those who answered ($n = 277$).

The owners in the multi-story area vaccinated their dogs more often (88% vs. 59% in the single-story area); visited a veterinarian for follow-up examinations and treatment in case of illness (75.7% vs. 25.8%); studied dog-keeping literature and read websites about dogs (78.7% vs. 43.7%); and trained their dogs by themselves and with specialist help (51.2% vs. 28.6%).

There was also a difference in nutrition. The residents of the multi-story area preferred to give dry dog food and also purchased canned food more often than the owners in the single-story area. The latter cooked their dogs' food themselves. They were also more likely to feed their dogs with leftovers than residents in the multistory apartments. The differences in the other purchases for dogs were also very marked (see Table 2).

Owner Experience

Most dog owners from the single-story area had previously owned another dog (79%, compared with 50% in the multi-story areas). Based on the data concerning the previous dog and age of the current dog, we determined the time lag between the loss of a dog and obtaining a new one. There were three possibilities: i) the current dog appeared when the previous dog was still alive; ii) the time lag was up to 1 year; iii) the dog appeared a year or more after the last dog was no longer present.

For 57% of owners who previously had a dog in the single-story area, the time lag was within a year. The time lag before getting a new pet was, however, longer for owners in the multi-story area; about half of the owners (49%) who previously had a dog got a new one a year or more after the last dog's death.

Attitudes to Dogs

Dog-keeping practices were connected not only with the living conditions but also with the functions of the dog. The dog in a single-story area was, above all, a guard (47%), while in the multi-story buildings, the main role of the dog was that of a family member (84.5%), a friend, or a companion (11%).

Most residents in the multi-story area (90%) stated that they were very fond of their dogs ("I love my dog very much"), while the corresponding proportion of owners in single-story buildings was 53% (another 42% liked or somewhat liked their dogs). Owners express their feelings by hugs (71% in the multi-story buildings vs. 25% in single-story areas), kisses (58% vs. 7%), and talking to the dog (63% vs. 49%). Nearly 92% of residents of the multi-story area had a dog photo on their cellphone or computer (in the single-story area this figure was 55%).

Table 3. The results of the classification of dog owners.

Cluster	Type of Settlement	Role of Dog	Number of Households*
1	Multi-story	Friend/Family member	218
2	Single-story	Guard	59
3	Single-story	Friend/Family member	53

*From a total of 334 households, four observations were missing.

In summary, the study showed that we can distinguish two different groups of dog owners in the city: owners in multi-story areas and those in single-story areas. Many dog-keeping practices differ significantly between these areas (Table 2). A further stage of the study was to check the homogeneity of the owner groups and to build a typology of dog owners. We assumed that the function and role of the dog in the family, along with the style of housing (multi-story or single-story), were the most important characteristics for owner typology.

Types of Dog Owners

To check if practices in the ‘two cities’ (multi-story or single-story areas) were similar or different, we conducted a cluster analysis on two variables. The first was building type and the second was the role of the dog in the household. Both variables were binomial. We recoded the variable “dog’s function” as a variable with two labels: 1) Functional: This label suggests that the dog serves the role of a guard; 2) Emotional: This indicates that the dog is a friend, a family member, or a companion.

We conducted a k-means cluster analysis several times to determine the optimal number of clusters, resulting in a model with three clusters (Table 3). We found that the multi-story area was quite homogeneous while the single-story area was divided into almost equal clusters that differed by the role the dog played in the household. The owners in the second and third clusters differed significantly.

In particular, the biggest difference was in the characteristics of the dog. The owners from the second cluster (who perceive their dogs primarily as a guard) had certain preferences regarding the relevant sex and size of the dog. Owners from this cluster more often possessed a medium-sized, male dog. For owners of the third cluster, the dog was primarily a friend or companion, and the dog’s sex was not as important to them. These owners tended to prefer larger dogs (over 26 kg). This shows that the owners from the third cluster are an intermediate group. They are similar to owners from the multi-story area because they consider their dogs as friends or family members. Also, one third of the owners from the third cluster kept their dogs inside the home, which is rare for the single-story area (only 17% of all owners in the single-story area kept their dogs indoors).

Discussion

The study showed that 71.5% of single-story households own dogs (vs. 10.8% of multi-story households). These results correspond with the data of the nationwide survey conducted by the Public Opinion Foundation in 2006 in Russia. According to this survey, 11% of residents in million-plus cities have dogs; 31% in other cities and 44% in small towns, while 70% of rural households have dogs (Shmerlina, 2008, p. 40). Similar figures are observed in Chile (Acosta-Jamett, Cleaveland, Cunningham, & Bronsvort, 2010), Zambia (De Balogh, Wandeler, & Meslin, 1993), and Mexico (Ortega-Pacheco et al., 2007).

In this study, we found that dog-owner practices in a large Russian city differ significantly between single-story and multi-story areas. Most cities in Russia grew out of small villages, where the residential part consisted entirely of single-story houses. Omsk in particular was a small town and developed after the evacuation of industrial enterprises from the European part of the country during the Second World War; the single-story residential area of the city represents an earlier design. From this perspective, such residential areas can be considered as “urban villages.” Redfield calls this sector “folk society” (Redfield, 1947). This part of the urban space differs significantly in objective standards of living and in dog-keeping practices from multi-story buildings. It can be assumed that dog-keeping practices in the single-story area in cities have their roots in rural practices and these practices are changing in accordance with a constantly evolving urban area. This process reflects the co-evolution of the city and human–animal interaction.

Residents of the single-story area starting to own dogs usually have to equip the space in the yard for the animal (kennel, chain), as well as feed it every day, clean up the space, and visit the veterinarian if necessary. In return, the owner receives a guard for the courtyard and the property. Some authors have highlighted the utilitarian function of dogs in rural areas (McCrindle, Gallant, Cornelius, & Schoeman, 1999; Sepúlveda, Singer, Silva-Rodríguez, Stowhas, & Pelican, 2014). The decision to get a dog in the multi-story area involves more radical changes in everyday life (Yau & Chiu, 2015). Apart from the minimum range of responsibilities (to arrange a place for the dog in the apartment, to feed it, and clean up after eating), the owner needs to walk and train the dog (the dog must be quiet and non-aggressive). All these changes to one’s daily life are perceived as limitations. At the same time, the benefits of dog-keeping relevant for the single-story area do not play an important role here.

The utilitarian component of pet-keeping (as a guard dog) is decreasing, and dogs more often play a different role (family member or friend); also, the owners’ dog-keeping practices are changing (Charles, 2014; Franklin, 2007; Sanders, 1990; Tipper, 2011). The results of the Levada Center survey in Russia showed that Russians say that they love animals (89% of the general population) and the vast majority of dog owners (87%) consider their pet a family member (Levada Center, 2014b). In the US, the results of a Harris Poll, for instance, indicates that 91% of dog owners consider their pets as members of their family (Corso, 2011).

Some authors have considered different parameters that might define ownership practices: gender (Ramirez, 2006), race and social class (Anderson, 1990), and characteristics of family (Turner, 2005). In our research, we tested the hypotheses about the connection between dog-keeping practices and the type of residence the family live in. Data analysis shows that the owners in the multi-story area are a homogeneous group that sees the dog as a family member, a friend, or a companion. Based on this attitude, they implement the appropriate practices. A large proportion of these owners regularly vaccinate their dogs, seek medical advice, and make various purchases for it.

The owners in the single-story area were divided into two groups. The first group has a dog mostly to perform certain functions (as a guard), while individuals from the second group are more involved emotionally in the dog-keeping process and perceive their pet as a family member. This research does not include longitudinal data and so we cannot test this relationship in our data, but the difference between the urban and “rural” areas in the city, and the intermediate group between them, suggests this tendency to be true. With the rapid growth of Russian cities, dog-keeping practices have also moved to the multi-story areas. However, in these changed environments, utilitarian motives have ceased to play

an important role and a new practice of exclusively emotional reasons has gained significance. Each country has its own developments in human–animal interaction, but the common tendency is that urbanization leads to changes in the roles that a dog plays in the household (McCrindle et al., 1999).

This study found that the vast majority of dog owners in Omsk treat their pets like a friend or even a member of the family. Therefore, the loss of a pet is an extremely unpleasant and undesirable experience. This result supports the conclusions of our previous work where we showed that the loss of a pet is a relatively rare and accidental event (less than 1%) (Makenov & Bekova, 2016). Based on these findings about dogs ownership, we suggest that capturing lost dogs and their subsequent maintenance in a shelter could be an effective way to increase the return of lost dogs to their owners and reduce the replenishment of the stray dog population. There is only one animal shelter in Omsk, with a limited number of spaces for dogs, and therefore has low efficiency. In general, in Russian cities, such practices as shelters are not widespread and for a long time thousands of dogs on the streets were caught and disposed of.

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Conflict of Interest

The authors state there are no conflicts of interest.

Notes

1. According to the data gathered in the current research.
2. In Russia, a doghouse is usually a small shed intended for a dog. There a dog can rest, sleep, or take cover from sun/cold/rain.

References

- Acosta-Jamett, G., Cleaveland, S., Cunningham, A. A., & Bronsvoort, B. M. de C. (2010). Demography of domestic dogs in rural and urban areas of the Coquimbo region of Chile and implications for disease transmission. *Preventive Veterinary Medicine*, 94, 272–281. doi: 10.1016/j.prevetmed.2010.01.002.
- Anderson, E. (1990). *Streetwise: Race, class, and change in an urban community*. Chicago, IL: The University of Chicago Press.
- Ascione, F. R., & Shapiro, K. (2009). People and animals, kindness and cruelty: Research directions and policy implications. *Journal of Social Issues*, 65, 569–587. doi: 10.1111/j.1540-4560.2009.01614.x.
- Blouin, D. D. (2012). Understanding relations between people and their pets: Pet ownership in American society. *Sociology Compass*, 6, 856–869. doi: 10.1111/j.1751-9020.2012.00494.x.
- Charles, N. (2014). “Animals just love you as you are”: Experiencing kinship across the species barrier. *Sociology*, 48, 715–730. doi: <https://doi.org/10.1177/0038038513515353>.
- Corso R (2011). Pets really are members of the family. The Harris Poll, #70, June 10, 2011. Retrieved from http://www.theharrispoll.com/health-and-life/Pets_Really_Are_Members_of_the_Family.html.
- De Balogh, K., Wandeler, A. I., & Meslin, F.-X. (1993). A dog ecology study in an urban and a semi-rural area of Zambia. *Onderstepoort Journal of Veterinary Research*, 60, 437–443. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/7777333>.
- Franklin, A. (1999). *Animals and modern cultures: A sociology of human–animal relations in modernity*. London: Sage.
- Franklin, A. (2007). Human–nonhuman animal relationships in Australia: An overview of results from the First National Survey and follow-up case studies 2000–2004. *Society & Animals*, 15, 7–27. doi: 10.1163/156853007X169315.

- Greenebaum, J. (2004). It's a dog's life: Elevating status from pet to "fur baby" at yappy hour. *Society & Animals*, 12, 117–135. doi: 10.1163/1568530041446544.
- Irvine, L. (2004). A model of animal selfhood: Expanding interactionist possibilities. *Symbolic Interaction*, 27, 3–21. doi: 10.1525/si.2004.27.1.3.
- Lem, M., Coe, J. B., Haley, D. B., & Stone, E. (2013). Effects of companion animal ownership among Canadian street-involved youth: A qualitative analysis. *The Journal of Sociology & Social Welfare*, 40, 285–304. Retrieved from <http://scholarworks.wmich.edu/cgi/viewcontent.cgi?article=3771&context=jssw>.
- Levada Center. (2014a). Pets. Press-release. Retrieved from <http://www.levada.ru/2014/04/04/domashnie-zhivotnye>. (in Russian)
- Levada Center. (2014b). Russians' attitudes toward animals and dog-baiting. Press-release. Retrieved from <http://www.levada.ru/2014/11/28/otnoshenie-rossiyan-k-zhivotnym-i-pritravkam/>.
- Makenov, M. T., & Bekova, S. K. (2015). Stratified sampling for the survey of urban dog owners. *The Veterinarny Vrach Journal*, 4, 56–61. (in Russian, abstract in English)
- Makenov, M. T., & Bekova, S. K. (2016). Demography of domestic dog population and its implications for stray dog abundance: A case study of Omsk, Russia. *Urban Ecosystems*, 19, 1405–1418. doi: 10.1007/s11252-016-0566-9.
- McCrindle, C. M. E., Gallant, J., Cornelius, S. T., & Schoeman, H. S. (1999). Changing roles of dogs in urban African society: A South African perspective. *Anthrozoös*, 12, 157–161. doi: 10.2752/089279399787000228.
- Nast, H. J. (2006). Loving ... whatever: Alienation, neoliberalism and pet-love in the twenty-first century. *ACME: An International E-Journal for Critical Geographies*, 5, 300–327. doi: 10.1.1.459.9360.
- Ortega-Pacheco, A., Rodriguez-Buenfil, J. C., Bolio-Gonzalez, M. E., Sauri-Arceo, C. H., Jiménez-Coello, M., & Forsberg, C. L. (2007). A survey of dog populations in urban and rural areas of Yucatan, Mexico. *Anthrozoös*, 20, 261–274. doi: 10.2752/089279307X224809.
- Ramirez, M. (2006). "My dog's just like me": Dog ownership as a gender display. *Symbolic Interaction*, 29, 373–391. doi: 10.1525/si.2006.29.3.373.
- Redfield, R. (1947). The folk society. *American Journal of Sociology*, 52, 293–308. Retrieved from <http://www.jstor.org/stable/2771457>.
- Sanders, C. R. (1990). The animal "other": Self-definition, social identity and companion animals. *Advances in Consumer Research*, 17, 662–668. Retrieved from <http://acrwebsite.org/volumes/7082/volumes/v17/NA-17>.
- Sepúlveda, M. A., Singer, R. S., Silva-Rodríguez, E., Stowhas, P., & Pelican, K. (2014). Domestic dogs in rural communities around protected areas: Conservation problem or conflict solution? *PLoS ONE*, 9, e86152. Retrieved from <http://doi.org/10.1371/journal.pone.0086152>.
- Shmerlina I. (2008). About the love of dogs and not only... *Social Reality*, 1, 40–48. Retrieved from <http://corp.fom.ru/uploads/socreal/post-314.pdf>. (in Russian)
- Tipper, B. (2011). Pets and personal life. In V. May (Ed.), *Sociology of personal life* (pp. 85–97). Basingstoke: Palgrave Macmillan.
- Turner, W. G. (2005). The role of companion animals throughout the family life cycle. *Journal of Family Social Work*, 9, 11–21. doi: 10.1300/J039v09n04_02.
- Westgarth, C., Boddy, L. M., Stratton, G., German, A. J., Gaskell, R. M., Coyne, K. P., & Dawson, S. (2013). Pet ownership, dog types and attachment to pets in 9–10 year old children in Liverpool, UK. *BMC Veterinary Research*, 9, 102. doi: 10.1186/1746-6148-9-102.
- Yau, Y., & Chiu, S.M. (2015). The economics of the right to keep a dog. *Society & Animals*, 23, 343–362. doi: 10.1163/15685306-12341288.