

Sanja Stanić, PhD, Full Professor
University of Split
Faculty of Humanities and Social Sciences
sstanic@ffst.hr
<https://orcid.org/0000-0003-0569-4841>

Stanka Vukasović-Lončar, univ. bacc. soc.
University of Split
Faculty of Humanities and Social Sciences
svukasovicloncar@ffst.hr

THE ROLE OF PETS IN STUDENTS' LIVES

Abstract: *The human-animal relationship is ambivalent in modern society. The boundary between humans and animals is not clear or has been removed in regard to pets. The increase in the number of pets in households defines the 21st century as the century of pets. Pets have different functions in the life of a modern human. This paper presents the results of research on the role of pets in the lives of students as a social group with a specific social status and lifestyle. The objectives were to examine how many students own pets, how they perceive pets, and what meaning they attach to pets. The research was conducted using a survey method among students at the University of Split (N = 200) in 2023. Research findings have shown that half of students own pets, mostly dogs and cats. Possession and perception of pets define students as a pet-friendly population. They recognize the benefits arising from the owner's relationship with the animal and the social meanings of pets as social support and social lubricant. The conclusion summarizes the obtained results and indicates the limitations of this research as well as motives for future research.*

Keywords: *social interactions, research, human-animal relationship, health*

INTRODUCTION

Humans and animals have a long common history. Humans have used animals in many different ways, which mostly fall into four categories: using animals for food and clothing, for research and education, as a companion, and for recreation (Plous, 1993, p. 3).

The perceptions of animals and attitudes toward them have changed in line with social development and social changes. Anthropocentrism, i.e., the view that humans are superior, the foundation and center of everything, has long marked Western culture, including scientific thought. Such an attitude has shaped human perception of animals as useful and functional, as objects, and therefore unworthy of scientific study.

The 1970s saw a wider social trend of establishing a close relationship with animals and being aware of them, while at the same time, social sciences showed an increasing interest in studying animals. Since that time, there have been many discussions about "the social roles and meaning of pets as well as the emotional benefits resulting from relationships with pets" (Veevers, 1985, p. 11). Moreover, scientific papers have been written on animal awareness and human-animal relationships (Franklin, 1999, p. 46). Currently, there is rich scientific knowledge about both human-animal relationships and the roles of animals in our lives.

As Franklin (1999, pp. 1-2) claims, modern people think about animals and use and treat them in different ways than before, for example, at the beginning of the 20th century. According to Franklin, modernization processes have influenced a wide range of industrial, ethical, conceptual, and emotional changes in our attitude toward animals; people in modern cultures establish an emotional bond toward an increasing number of animals; the boundary between humans and animals has been seriously questioned in the postmodern age and has even sometimes been removed; and the social cause of these changes can be located in at least three processes that frame the postmodern state: misanthropy, risk, and ontological insecurity.

Modern society creates controversial and conflicting relationships between humans and animals in different ways, while the bonds between humans and animals are special and ambivalent. As Bauman (1993) explains, ambivalence is the “substance of modern life” (1993, p. 12); it marks postmodern society, and people need to learn how to live in an ambiguous world. Animal-related ambivalence manifests as the development of sensitivity and, at the same time, the growth of insensitivity to them. For example, sensitivity is confirmed by celebrating the National Love Your Pet Day on February 20, as well as by introducing the legal protection of animals. European Union legislation advocates animal welfare. Article 13 of Title II of the Treaty on the Functioning of the European Union states that “The Union and the Member States shall, as animals are sentient beings, pay full regard to welfare requirements of animals” (European Parliament, 2022). Many Member States have improved their legislation under the influence of EU rules. In addition to protecting wild and farmed animals, in 2008, the European Parliament introduced a ban on trade in cat and dog fur and products containing such fur. Pets have received EU passports that allow them to move outside the EU borders. We are witnessing the development of a system of care, shelter, and adoption of abandoned animals. In 2017, the Croatian Parliament adopted the Animal Protection Act, which is based on the legal actions of the European Union and ensures the protection of the life, health, and welfare of animals. Furthermore, some of our cities have adopted the practice of banning New Year’s Eve fireworks due to the harmful effects on animals.

On the other hand, insensitivity to animals is increasing, as is inhumane breeding and unethical treatment in the food, cosmetics, and pharmaceutical industries. We witness many cases of violence, abuse, exploitation, and neglect of animals. Abandoning pets, leaving dogs and cats on the street when going on vacation, is also a good example of irresponsible behavior toward animals.¹

In regard to pets (within a wider framework of animals), whether they are dogs, cats, hamsters, birds, or any other animal, the 21st century seems to be the century of pets. According to the *American Pet Products Association National Pet Owners Survey* conducted in 2021-2022, 70% of American households owned a pet—up to 3% from the previous 2019-2020 survey. During the COVID-19 pandemic, 14% of participants got a pet. Most pet owners are Millennials (32%), followed by Boomers (27%) and Generation X (24%) (APPA, 2022). The number of pet owners in Europe is also on the rise, from 70 million in 2010 to 91 million, or 46% of households, in 2022 (Shahbandeh, 2024). In Croatia, too, there is an increase in households that own a pet. According to the GFK survey, in 2016, 61% of households in Croatia owned a pet, 41% of which owned a dog and 29% of which owned a cat (Večernji list, 2016). The latest estimates indicate that in 2022, there were 787 500 pets in Croatia, of which 350 000 were dogs and 437 500 were cats (Cooper Pet Care, 2022).

The reason for the continuous increase in pet ownership can be found in the functions pets have in our lives, which are becoming increasingly significant. Recent decades have been marked by strong technological development and a fast-paced life, leading to weak social interactions. In such circumstances, interaction with a pet can substitute for human interaction and social relationships (Van Houte and Jarvis, 1995; Baker et al., 2020). Veevers (2008) distinguishes three pet functions. The projective function includes the extent to which pets can serve as a symbolic extension of the self. The sociability function includes the role of pets in facilitating human interaction. The surrogate function involves the extent to which interaction with pets substitutes for and supplements human-human interaction. According to Veevers, pets facilitate interactions between people by serving as social

¹ France is first place in Europe for pet abandonment. It is estimated that in 2023, 12 000 pets were abandoned during vacations (Loh, 2023).

lubricants.² They are a neutral object of conversation and perform a variety of functions as social catalysts (2008, p. 15-16).

Pets played an important role during the COVID-19 pandemic. A large number of people have adopted pets to alleviate isolation from their loved ones and friends. Pets relieved their owners' loneliness, provided them with good conditions, and gave them a sense of purpose. They helped the owners think less about the dangers of the pandemic. Walking with dogs enables better mental health but also contact with other people (World Economic Forum, 2021).

Research has confirmed that pet companionship has a beneficial effect on all age groups. Pets can provide social support, often to lonely and elderly people (McNicholas, 2014), and have a beneficial effect on children in various ways (Blue, 1986; Purewal et al., 2017). There are increasing discussions about allowing animals in the workplace, as they have a beneficial effect on employees and help them achieve a productive work environment (Beheshti, 2019). Recognizing their positive impacts, increasingly more areas of modern society are "opening up" to pets. Among the already famous pet-friendly hotels, restaurants, workplaces, and offices, there are numerous universities that allow students to socialize with their pets. Having a pet while studying contributes to emotional stability, reduces tension and stress, and increases physical activity and social interactions, such as making new acquaintances and friendships (Beach, 2019).³

In this paper, we present the results of research on the role of pets in students' lives. Our goal was to explore how many students own pets, how they perceive pets, and what meaning they attach to pets. We find the opinions and attitudes of each social group interesting for sociological study. The selection of students as research participants was guided by the status of the population, which consisted of young people in the process of education, who were often separated from their homes and loved ones and who made daily encounters of various efforts and pressures typical of student life. Consequently, it was to be expected that the student period and lifestyle would not be appropriate for adopting and caring for the animal. However, the results showed a significant representation and role of pets in the lives of students.

METHODOLOGY

Pets are becoming increasingly common members of our households. In modern society, they fulfill different roles: functional, emotional, social, etc. They can substitute for social interactions and other people and improve one's health and welfare. The perception and meaning of pets differ depending on one's period of life and lifestyle. Hence, there is interest in researching this issue in the student population as a specific social group, both in terms of lifestyle and socioeconomic status, rights, and obligations.

There are multiple questions that we want to answer with this research. First, we wondered how many students own pets and whether this is linked to their socioeconomic status. Furthermore, we wanted to determine which animals students preferred as pets. We are also interested in how students perceive pets, what meaning they attach to pets, and whether they recognize pets' role in establishing social interactions. In response to the research questions, the questionnaire included items related to participants' socioeconomic status, possession and perception of pets, and meaning and function in social interactions.

The research was conducted among 200 students at the University of Split in May and June 2023.

An online survey was chosen as a suitable method. We opted for an online method of data collection, taking into account its advantages and disadvantages (Evans and Mathur, 2018), estimating that the choice of such a tool is appropriate for the research, the studied population, and the research methodology (Nayak and Narayan, 2019, p. 36). Namely, the instrument needed to be aimed at the

² In foreign literature, this role of pets is referred to as *social lubricants*. Considering the meaning of the word *lubricant* in the Croatian language as a grease or a means for improving slipperiness (Struna), we considered it more appropriate to use the term *pospješivač* in the Croatian version of the paper.

³ There is only one pet-friendly faculty in Croatia. In 2017, the Faculty of Humanities and Social Sciences in Osijek allowed students to bring their pets into certain areas of the Faculty (Korljan, 2020).

population that would be easily accessible online and that had access to the technology and knowledge of how to use it, and the selected method needed to be the most practical for the target population.

The questionnaire was created in *Google Forms*. Invitations were forwarded to students via social networks (*Facebook*, *Instagram*, *WhatsApp*) and via email. *A priori*, it was decided to stop the research when a sample of 200 participants was reached. A nonprobability, convenience method of sampling was applied.

Methods of descriptive statistics were used in the statistical analysis. If needed for a certain research question, the probability of correlation between variables was checked by the chi-square test.

RESULTS AND DISCUSSION

Participants' profile

The study involved significantly more female students (80%) than male students (20%). The participants mostly came from urban areas, with 49.5% permanently residing in a larger city and 26.5% residing in a smaller city. However, the share of participants living in rural areas was not negligible (24%). The majority of participants were undergraduate students (81%), majoring in social sciences (38.5%), medicine (28.5%), humanities (17.5%), and technical sciences (11.5%). The participants were mostly successful students. In the previous academic year, 16.5% of them achieved excellent success, 54% achieved very good success, and 26% achieved good success. The educational status of the participants' parents was favorable. According to the data, most parents had secondary education (62% of fathers and 59% of mothers) or higher education (16% of fathers and 19.5% of mothers). Three-quarters of participants estimated their standard of living to be average (75%), while approximately one-fifth (19.5%) considered it to be high or very high. Accordingly, their consumer opportunities are as follows: 59% of students assess them as average, while 35% consider them good or very good. The increasing trend of working while studying was confirmed by this research. Even two-thirds of participants work while studying, including 50.5% of those who work part-time and 13% who work full-time. A total of 63% of participants declared themselves religious, while in terms of political orientation, the majority were right-wing (59%).

Pet ownership and preferences

Students' answers to the question of whether they own a pet are approximate to the percentage of Croatian households with pets. Half of the participants, more precisely 51%, own a pet, while estimates for Croatia confirm that 60% of households own pets.

The students' preference for pets was also confirmed by data on former and planned ownership. A total of 12% of them stated that they used to have a pet but currently do not have it, while as many as 24.5% stated that they do not have a pet but would like to have it in the future.

If the previous data on the current, former, or planned ownership of pets are considered as a whole, it can be concluded that a total of 87.5% of students had, have, or would like to have a pet, which defines our sample as a pet-friendly population.

To answer the research question on the impact of socioeconomic characteristics on pet ownership, a statistical verification of variables was performed using the χ^2 test. The results of the χ^2 test showed that the examined participants' socioeconomic characteristics (gender, place of residence, area of study, and standard of living) did not affect their possession of pets. The data obtained by the previous analysis confirm that the student population is homogeneous in terms of pet ownership, i.e., pet ownership is widespread in a sample of students regardless of the socioeconomic characteristics of the participants.

Although students are mostly prone to pets, not all types of animals are equally desirable. When asked which animals they prefer as pets, measured from 1 – most undesirable to 5 – most desirable, most participants answered that they are more prone to dogs, cats, and fish (Table 1). Data on preferred pets are expected because numerous studies have shown a prevalent phenomenon of preferring dogs and cats over other animals. For example, among Croatian households that own pets, 50.77% have a dog, while 34% have cats. On the other hand, birds (8.96%) and fish are less represented (5.46%) (InStore, 2018). The results of our research coincide with the data obtained by a study conducted in

America, which also showed that dogs (65.1%) and cats (46.5%) are the most popular pets, followed by fish (11.1%) and rabbits (6.7%), while reptiles and mini pigs are among the least popular pets (Leeson, 2024).

Table 1

Most popular pets

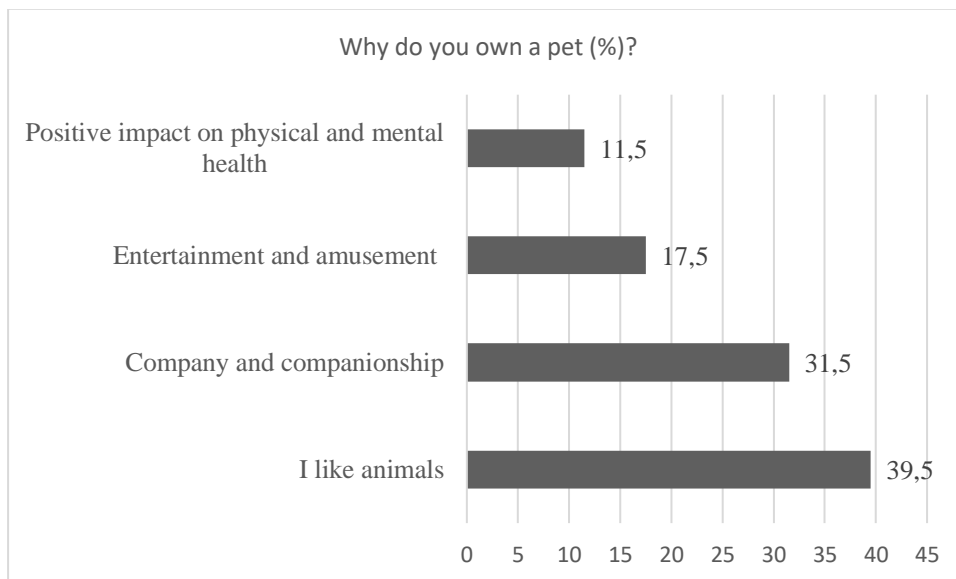
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>total</i>	
	%	%	%	%	%	%
dogs	1.5	2.0	8.5	18.5	69.5	100.0
cats	9.5	6.5	11.5	23.5	49.0	100.0
fish	7.5	18.5	25.5	26.0	23.5	100.0
birds	20.0	24.5	27.5	18.5	9.5	100.0
rodents	29.0	22.0	28.5	14.0	6.5	100.0
rabbits	19.5	21.5	31.5	19.5	8.0	100.0
reptiles	47.5	25.0	17.5	6.0	4.0	100.0

Considering the results of our study and other research mentioned here, it can be said that there is a universal view of most popular pets. To clarify people's preferences for dogs and cats as pets, a survey was conducted involving owners in Denmark, Austria, and the UK showing that dogs are the most preferred pets. The owners explained that the reason was the emotional and social support that the dogs offered. The results showed a strong attachment to dogs because 45% of dog owners would be willing to pay high bills for the treatment of their pet, while 23% of cat owners would do so (Sandøe, 2021).

The following question in our research related to the reasons for owning a pet. This question was answered only by pet owners. Overall, the data confirm that students perceive the benefits of having an animal. As shown in Graph 1, more than one-third of the students reported owning a pet in love for animals (39.5%), followed by the company or companionship that a pet offers them (31.5%). However, the share of students who expect entertainment from pets (17.5%) and their positive impact on health (11.5%) are not negligible.

Graph 1

Reasons for owning a pet

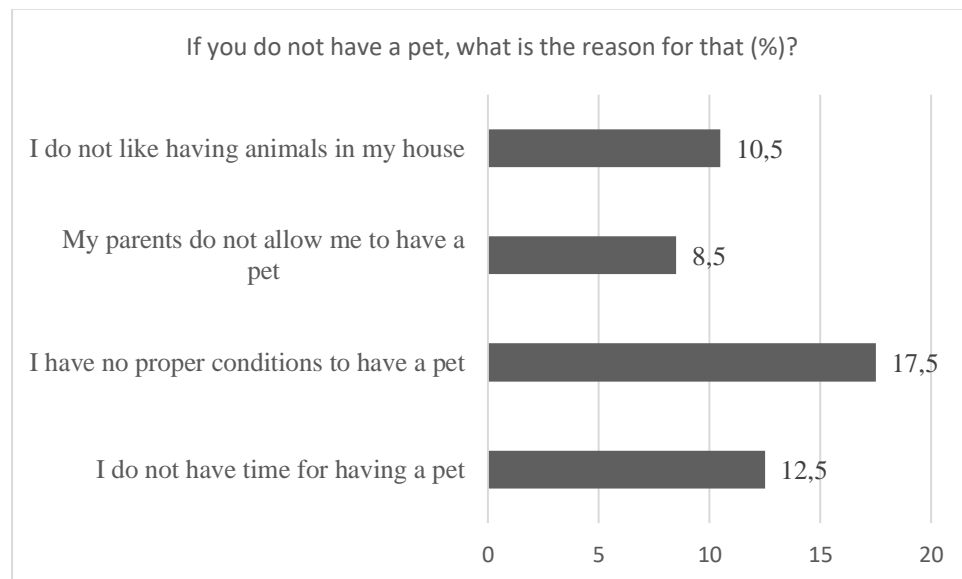


The following question was posed to participants who were not pet owners (49%), as we were interested in why they did not currently own a pet. From the response distribution shown in Graph 2, it is evident that the most common reason is the lack of conditions required for having and taking care of a pet (17.5%). Students' responses are expected and understandable given that a pet requires its own place or space, while students rarely have their own living space. The second most common reason is the lack of time that should be devoted to the animal (12.5%). Pets are often demanding in terms of time; they need to be fed, require hygienic practices (both for the animal and the space), need physical activity, entertainment, attention, and love. Maintaining an animal, especially a dog, requires spending time with them every day, which sometimes poses a problem depending on the owner's obligations or lifestyle. Therefore, the lack of time can be explained by student status, which implies many study obligations.

Considering the above reasons, it can be concluded that students are responsible for adopting animals since, despite the possible desire to own a pet, they still estimate that they would not be able to pay proper care and attention to the pet. Certainly, some students might want to have a pet, but since they live with their parents, this is currently not possible (8.5%). It should also be noted that only 10.5% of the students stated that they do not like having animals in their living space, which confirms our sample once again as mostly pet friendly.

Graph 2

Reasons for not owning a pet



Perception and meaning of pets

The relationship between humans and animals is complex. Often, animals are thought of as “others” and are thus perceived as inferior. Speciesism, as the discrimination or exploitation of animal species, is rooted in society and is based on beliefs of human superiority (Irvine, 2008, p. 1959). People can treat animals in a negative way, such as in cases of animal violence, abuse, or neglect. On the other hand, animals can be treated with empathy and affection, and they can even be anthropomorphized. These psychological mechanisms are considered positive and healthy attitudes toward animals (Prato-Previde et al., 2022). Research has shown that animal ownership is a variable that affects care and aspiration for animal welfare. People who had a pet during childhood show significantly greater empathy for animals than those who did not have a pet as children (Paul, 2000).

To answer the research question related to the perception of pets, the participants were offered items that checked their sensitivity to pets, the impact of pets on health, and seeing pets as the owner’s work and financial obligations (Table 2). Participants expressed their level of agreement with the items using a scale from 1 (minimum) to 5 (maximum).

Table 2

Perception of pets

<i>Item</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>AS</i>
	%	%	%	%	%	
Pets are owners’ best friends.	5.5	6.0	18.0	28.0	42.5	3.94
A pet is like a family member.	4.0	6.0	13.5	27.0	49.5	4.12
If I had the opportunity, I would adopt a dog from a shelter.	9.0	13.5	18.0	22.0	37.5	3.65
I mind when people are aggressive toward pets.	0.0	0.0	6.0	9.0	85.0	4.79
Pets are an emotional support for owners.	1.5	2.5	13.5	25.0	57.5	4.34

A pet contributes to the psychological well-being of the owner.	0.0	1.5	12.0	19.5	67.0	4.52
Pets have a positive effect on the physical health of the owner.	0.0	5.5	17.0	26.5	51.0	4.23
People who have pets are happier.	4.0	12.0	28.0	24.5	31.5	3.67
Pets can pass dangerous diseases.	9.5	27.0	38.0	14.5	11.0	2.90
Therapy dogs can help children heal.	0.5	1.5	11.5	15.0	71.5	4.55
Having a pet requires having a lot of money.	0.5	9.0	33.5	34.5	22.5	3.69
A pet is too much of a chore.	7.5	17.5	40.5	23.5	11.0	3.13
A pet requires a lot of work.	0.5	4.5	16.5	28.0	50.5	4.24

Sensitivity to pets was checked by using the following items: *If I had the opportunity, I would adopt a dog from a shelter.* ; *I mind when people are aggressive toward pets.* *Pets are owners' best friends.* and *A pet is like a family member.* According to the data in Table 2, the items related to sensibility toward pets were well accepted by the students. For example, 59% of the students were willing to adopt a dog from a shelter, 70% of them believed that pets were the owners' best friends, and as many as 96% of the students reported experiencing mental aggression toward pets. It is necessary to emphasize the high acceptance of the item *A pet as a family member*, with which 77% of the students agreed to a greater or lesser extent. Despite their different opinions and attitudes, research shows that both owners and nonowners believe that pets can be perceived as family members. For example, a survey conducted in the US showed that 97% of pet owners consider their pet family members to be family members (Brown, 2003). Additionally, it was confirmed that pets have a beneficial effect on family interactions. Even 70% of pet owners reported an increase in happiness and entertainment in the family after the arrival of the pet, while 52% confirmed that the family spends more time together because of the pet (Cain, 1985).

Students showed a high level of agreement with items that checked students' attitudes about the function of pets as beneficial for emotional state and mental and physical health. The data confirm that participants believe that pets are emotional support for owners (82%), that they have a beneficial effect on owners' psychological (86.5%) and physical (77.5%) health, and that they believe in their therapeutic functions (86.5%). Emotional support as well as beneficial effects on owners' health have been confirmed by previous studies (Allen, 2003, Brooks et al., 2018, Hussein et al., 2021), while a recent meta-analysis, Martins et al., 2023, based on 49 selected studies, confirmed that dogs have a positive impact on owners' physical activity, which people who do not have dogs do not experience.

Pets represent a part of their owners' life, with whom they have intense emotional and social interactions, affecting owners' welfare by "providing improvements to the human-animal biopsychosocial system" (Aragunde-Kohl et al., 2020, p. 2136).

Possession and interaction with a pet carry certain health risks; therefore, as an aspect of pet perception, health concerns have also been explored. Dogs and cats, as the most common pets, are carriers of microorganisms, viruses, bacteria, fungi, and parasites that can be transmitted to humans. Zoonotic infections are transmitted by animal secretions, i.e., by close interaction with the animal (Ghasemzadeh and Namazi, 2015, Garoma and Diba, 2023).⁴ According to our results, 24.5% of participants agreed to a greater or lesser extent that the item "*Pets can pass dangerous diseases to humans*". The lower acceptance of this item suggests that a greater proportion of students are not

⁴ Diseases that animals pass to humans are curable, however, they can have more serious consequences in a more sensitive population, especially children, pregnant women, and elderly individuals, as well as those with weakened immune systems. To reduce the possibility of transferring microorganisms to humans, it is recommended to maintain pet hygiene, vaccinate pets regularly, and wash hands after contact with the pet or cleaning its place.

informed about the health risk that can arise from close contact with an animal and that a smaller proportion are aware of the dangers that close contact with an animal can have on their health.

Sometimes, buying or adopting a pet is an impulsive decision. However, in addition to the benefits that pets bring with them, they imply a responsibility and obligation that lasts for the animal's lifetime. Part of this responsibility applies to pet-related expenses. The costs of maintaining pet, food, equipment, hygiene, and veterinary care are constantly increasing, and they can significantly burden the budget of the owner.⁵ A survey of dog owners in the US revealed that 91% of them had financial difficulties due to pet expenses, 66% had to reduce certain personal expenses due to having a dog, and 65% were forced to borrow money from friends or relatives to cover pet-related expenses (Gollub and Lobb, 2023). Just over half of our research participants (57%) agreed to a greater or lesser extent that keeping a pet requires a large amount of money. However, more than a financial commitment, they recognize a work obligation around the pet. A total of 78.5% of the participants agreed that there was a lot of work around the pet. It can be assumed that differences in agreement regarding the pet as a financial and work obligation result from the fact that both often depend on the type of pet, so the bird, fish or guinea pig are less demanding than, for example, the dog.

Furthermore, the meaning of pets was explored, i.e., what participants think about pets' role in modern society. In connection with this, there is an increasing number of households with pets. The increase in pet ownership can be explained by the weakening of supportive social structures. In an analysis of the increase in pet ownership after World War II in the United States, Serpell explains that pet ownership during this period was the result of postwar prosperity and changes in housing, especially the acquisition of home ownership. Over the following approximately 40 years, social networks have fragmented; the number of people living alone and the number of divorces and families without children are on the rise, fewer people live close to their families, and there are weaker ties with the community. Due to the loss of social support and fragmentation of social interactions, the resulting gap is filled by pets (Serpell, as ctd. in Schaffer 2009, p. 33). As a result, feelings of loneliness, social exclusion, and abandonment are increasingly common in modern society. An increasing number of people diminish or prevent this feeling by adopting a pet (Hussein et al., 2021).

Considering the increasingly intense trends of weakened social networks and reduced social interactions, which are compensated for by the purchase or adoption of pets, we asked the participants whether they noticed an increase in the number of pets in their area. A total of 46.5% of the students answered this question affirmatively. The following survey question was used: *Why do you think more and more people have pets?*

As shown in Table 3, the most common opinion is that there is an increase in loneliness, as reported by almost one-third of participants (32.2%). These findings coincide with earlier research that identified loneliness as a problem of modern society, with some authors even talking about an epidemic of loneliness (Killen, 1998, Franklin, and Taner, 2021). In this context, participants' opinions that the reasons for the increasing number of pets are instability and changes in society (9%) as well as a lack of understanding from other people (7%) are important. The inability to adapt to social changes and the weakening of social support are also reasons for breaking the ties of the individual and the social environment. In this case, by summing the responses of the participants, we can conclude that 48% of them perceive a change in sociability that people replace with animal ownership. Pets can take on the roles of others or be a substitute for others, friends, partners, children, or parents. This is confirmed by attaching human attributes to them, for example, by giving them human names, talking to them, organizing events typical of people such as birthday parties, giving gifts for holidays, or organizing funerals. One study confirmed that 77% of owners believe that pets understand them when they speak to them, 73% believe that they reciprocate, and 59% believe that pets understand them and are even sensitive to their moods (Cain, 1985). According to Veevers, to some extent, almost all relationships with pets involve a certain level of anthropomorphism and can be interpreted as surrogates for human

⁵ Initial costs for buying a dog in the US ranged from \$ 1135 to \$ 5155 in 2023. Annual costs for essentials, from dog food and toys to flea medication, range from \$ 610 to \$ 3555. If special accessories are afforded, the dog can cost between \$ 1390 and \$ 4095 per year. The 2017 survey on the basic characteristics of consumption within the household showed that Croatian citizens annually spend around six billion kuna on food, equipment, and veterinary care for pets, with an annual growth of consumption of five to six percent (Laslavić, 2019).

relationships. The differences are only in the degree to which animals are treated as humans or used to replace humans (1985, p. 19-24).

Table 3

Reasons for buying or adopting pets

<i>Why do more and more people have pets?</i>	<i>F</i>	<i>%</i>
increased loneliness of people	147	32.2
lack of understanding from other people	32	7.0
instability and changes in society	41	9.0
love for animals	89	19.5
mental and physical well-being	111	24.3
total	457	100.0

Pets as social interaction lubricants

The professional literature recognizes the function of pets as social lubricants or catalysts of social interactions. This function refers to pets' role in influencing, enhancing, or changing human interactions. In other words, pets are often used to establish social contacts and interactions, such as starting a conversation with an acquaintance or stranger. They also serve to make us kinder, more approachable, and friendly to other people. For example, a study by Wood et al. (1915) confirmed that companion animals can be catalysts in several dimensions of social interactions, from accidental interactions and meeting people to forming new friendships. In some cases, pets encouraged relationships from which owners could subsequently obtain practical or emotional social support.

The effect of pets as a social lubricant is most often related to and studied in dogs, which is quite understandable due to their interactivity and taking them outside several times a day. Dogs contribute to intense social interactions in a number of ways. First, being with a dog contributes to social visibility. A person who walks a dog is more noticeable than other passers-by or walkers, most often thanks to the pet. Dogs can attract attention to their appearance or play and can be the reason for the owner's initial contact and casual conversation with another person. Research has confirmed that the presence of a dog increases a person's social accessibility. If a person is accompanied by a dog, people will be more tolerant, willing to listen for a long time, and nicer than toward a person who does not have a dog (Lawson, 2001).

In an experimental study, Guéguen and Ciccotti (2008) studied the role of the dog in the creation of a sense of belonging and the realization of social interaction. The results showed that an unknown person will prefer to help and fulfill the requests of a person with a dog. A study by Colarelli et al. (2017) showed that the presence of a dog in a work group has positive effects and improves the behavior of team members, making them more cooperative, active, friendly, enthusiastic, and attentive toward others, compared to members of a work group in which a dog was not included.

People who have a dog are usually perceived as "good" or "pleasant" as opposed to those who do not like animals. Moreover, pet owners become members of various groups, associations or clubs, which can serve as a source of social contacts and expand social networks.

Although dogs tend to improve interactions, in certain situations, they can make them difficult or confrontational, for example, when the owner does not follow the rules about where the dog is allowed to be and where it is not or when they cannot control their pet. Pets can limit owners' relationships with close people and friends because some people are not animal lovers, while some owners even consciously choose certain types of dogs because they are effective at repelling other people (Veevers, 1986, p. 16-19). The effect of the dog as a catalyst in human interactions is a powerful phenomenon that can be generalized beyond common walking areas such as parks and is independent of the appearance of the dog or the owner (McNicholas and Collis, 2000, p. 69).

Given the importance and prevalence of the role of pets as catalysts of social interactions, all participants were asked the following question: *Do you think that owners who walk their dogs find it*

easier to communicate with other people? Student responses confirmed the function of dogs as social lubricants. A total of 74.5% of the participants answered that they believe the dog improves the social interactions of the owner, 22% are undecided, and 3.5% think that dogs do not have that function.

However, participants did not consider other types of pets to function as social lubricants to the same extent as dogs. When asked whether pets, regardless of their species, “help” in making acquaintances and friendships, somewhat different results were achieved, which showed that 37.5% of the students attributed this function to pets in general.

The final question was exclusively for pet owners: *Have you made new acquaintances or friendships thanks to your pet?* The distribution of responses (Table 4) showed that 28% of the participants made new social contacts through their pet, while 25.5% of them had no such experience. The obtained data confirm the thesis that pets act as social lubricants for some of the students, and it can be assumed that the reason for this is the type of pet.

Table 4

Social visibility of pets

Have you made new acquaintances thanks to your pet?	<i>f</i>	%
no	51	25.5
yes	56	28.0
no answer	93	46.5
total	200	100.0

CONCLUSION

Animals are a part of people’s daily lives. Historically, animals have played an important role in the development of society. From the earliest days of human communities, they have made progress toward a better quality of life in various ways (Hodges, 1999). However, their study in sociology is relatively recent. Only since the 1960s has sociology made important progress in understanding how the human world relates to the nonhuman world. Today’s research on animal and human-animal relationships “has become an area of increasing interest for sociologists, which results in new, interesting knowledge and discoveries” (Koop-Monteiro, 2023, p. 1158). Studies on “zoological connection” enable academic sociology to open up to the realization that we live in “mixed species societies” in which human-animal relationships play an important role (Sanders, 2006, p. 7).

One of the contributions of sociological research on the relationship between society and animals is that cultural constructions determine the life and destinies of animals. The relationships and attitudes of people toward animals, including pets, are socially constructed, institutionalized, and culturally passed through generations. Whether we treat animals as food, helpers or pets, our relationship determines their lives (Atwood, 1994, p. 184).

There are several reasons for researching human-animal relationships. Pets are increasingly present in our households, fulfill our lives, and have different functions. On a social level, increasing sensitivity is shown toward all animals, and this sensitivity is particularly noticeable in regard to pets. Their owners try to ensure their comfort, safety, and health. They buy food supplements, clothes, toys, and sweets for their pets, mark important events in their lives, and provide them with their own places or beds in their apartments. There are numerous groups and associations in society that take care of abandoned pets. After all, pets are welcomed in an increasing number of spaces that were once reserved exclusively for people. The emotional evaluation and sentimentalization of animals and their perceptions of social support are increasingly common in modern relationships with pets. This all speaks about the importance of pets in our lives, which is an essential motive for their study. In regard to the sociological approach, the focus is on the relationship between people and pets, as well as the meanings and roles of pets in human lives. These were also the objectives of this research, which was conducted

among the student population. In this final section, we will briefly review some of the achieved results and answer the research questions.

With regard to the research questions related to pet ownership and the influence of certain socioeconomic characteristics on pet ownership, the results showed that pets are quite present in the lives of students in the sample and that students' socioeconomic characteristics do not determine pet ownership. Considering the status of the students and their lifestyle, it was not expected that half of them would own a pet or that pet ownership would have no connection with the independent variables.

The results on students' preferred types of pets confirmed the existing data on dogs and cats as the most common pets. The universal acceptance of dogs and cats as pets, although more demanding than other species, can be explained by the personalities of these animals, which return friendship, attention, and love to their owners more directly than other pets, such as fish, birds, or rodents.

An examination of the perception of pets showed that the majority of the student population in the sample is empathetic toward pets, which is expressed through the willingness to adopt pets, perceiving pets as friends and family members, and showing significant sensitivity to aggression toward animals. Considering the frequency of ownership as well as the expressed sensibility toward pets, we can define the student population in the sample as pet friendly.

In their answers, the students confirmed that they recognize the benefits that pets have for their owners, primarily the positive effect on their mental and physical health. Considering the expressed sensitivity of students toward pets, on the one hand, and pets' beneficial effect on owner's health, on the other hand, it can be concluded that the human-pets relationship is useful for both of them. At the same time, animals need people who give them care, safety, and love, while interacting with animals has a beneficial effect on people's mental and physical health.

People are social beings; however, today, they are increasingly distancing themselves from others. The loss of social ties leaves a void that is increasingly being filled by pets. Students perceived this role of pets by recognizing the increase in their number in their surroundings, as well as social changes and the reasons for adopting pets. In addition to the role of pets as social support, students also recognized their role in another type of sociability, which refers to the establishment or improvement of interactions and social ties among individuals.

In this paper, we focused on the attitudes of students, as a specific social group, toward pets. We researched their opinions and attitudes regarding certain aspects related to pets and came to certain conclusions. Considering the sample and the method of sampling, we cannot generalize our findings, as they are illustrative of the studied population only. Therefore, the limitations of this research include checking the achieved results on a representative sample of the student population, as well as comparing them by examining other social groups.

In addition to these limitations, our findings point to the need for future research. Namely, during the data processing and analysis, new topics and questions appeared, deepening the research issues. For example, what do participants think about why dogs and cats are the most preferred pets? Are there other fears and risks from pets? Are there negative experiences with pets? What if the owner cannot take care of their pet? What if the animal is sick or dies? Some of the mentioned topics are certainly suitable for research using quantitative methods, while the use of a qualitative, in-depth approach could reveal the less obvious and less expected meanings of pets.

REFERENCES

- Allen, K. (2003). Are Pets a Healthy Pleasure? The Influence of Pets on Blood Pressure. *Current Directions in Psychological Science*, 12(6), 236–239. <https://doi.org/10.1046/j.0963-7214.2003.01269.x>
- Aragunde-Kohl, U., Gómez-Galán, J., Lázaro-Pérez, C., & Martínez-López, J. Á. (2020). Interaction and Emotional Connection with Pets: A Descriptive Analysis from Puerto Rico. *Animals*, 10(11), 1–15. [doi:10.3390/ani10112136](https://doi.org/10.3390/ani10112136)
- APPA (2022). *APPA National Pet Owners Survey 2021-2022*. <https://www.americanpetproducts.org/docs/default-source/uploadedfiles/npos/21-22-businessandfinance>
- Atwood, L. E. (1994). Conflicting Ideologies: Views of Animal Rights Advocates and Their Opponents. *Society & Animals*, 2(2), 175–190. [doi:10.1163/156853094x00199](https://doi.org/10.1163/156853094x00199)
- Barker, S. B., Schubert, C. M., Barker, R. T., Kuo, S. I., Kendler, K. S., & Dick, D. M. (2020). The Relationship between Pet Ownership, Social Support, and Internalizing Symptoms in Students from the First to Fourth Year of College. *Applied Developmental Science*, 24(3), 279–293. [doi:10.1080/10888691.2018.1476148](https://doi.org/10.1080/10888691.2018.1476148). Epub 2018 Jul 24
- Bauman, Z. (1993). *Postmodern Ethics*. Oxford: Blackwell.
- Beach, L. A. (2019). *More colleges are adopting pet-friendly policies*. USA Today. <https://www.usatoday.com/story/life/2019/05/19/animal-house/3705183002/>
- Beheshti, N. (2019). *Pet-Friendly Workplaces Are a Win-Win for Employee Wellbeing and for Business*. Forbes. <https://www.forbes.com/sites/nazbeheshti/2019/05/22/pet-friendly-workplaces-are-a-win-win-for-employee-wellbeing-and-for-business/>
- Blue, G. F. (1986). The value of pets in children's lives, *Childhood Education*, 63(2), 84–90. <https://doi.org/10.1080/00094056.1986.10521747>
- Brown, A. (2023). *About half of U.S. pet owners say their pets are as much a part of their family as a human member*. Pew Research Center. <https://www.pewresearch.org/short-reads/2023/07/07/about-half-us-of-pet-owners-say-their-pets-are-as-much-a-part-of-their-family-as-a-human-member/>
- Brooks, H. L., Rushton, K., Lovell, K., Bee, P., Walker, L., Grant, L., & Rogers, A. (2018). The power of support from companion animals for people living with mental health problems: a systematic review and narrative synthesis of the evidence. *BMC Psychiatry* 18(1), 1–12. <https://doi.org/10.1186/s12888-018-1613-2>
- Cain, A. O. (1985). Pets as family members. In M. B. Sussman (ed.), *Pets and the family* (str. 5–10). New York; Haworth Press.
- Colarelli, S. M., McDonald, A. M., Christensen, M. S., & Honts, C. (2017). A Companion Dog Increases Prosocial Behavior in Work Groups, *Anthrozoös*, 30(1), 77–89. [doi:10.1080/08927936.2017.1270595](https://doi.org/10.1080/08927936.2017.1270595)
- Cooper Pet Care (2022). *Pet Statistics. Cat and Dog Population in Europe*. <https://cooperpetcare.com/pet-statistics/>
- Lawson, D. J. (2001). The correlation of social approachability, social interaction, and tolerance levels depending on the presence of a dog. *Modern Psychological Studies*, 8(1), 26–31. <https://scholar.utc.edu/mps/vol8/iss1/7>
- Evans, J. R. and Mathur, A. (2018). The value of online surveys: a look back and a look ahead. *Internet Research*, 28(4), 854–887. [doi:10.1108/intr-03-2018-0089](https://doi.org/10.1108/intr-03-2018-0089)
- Europski parlament (2022). Članak. *Dobrobit i zaštita životinja: Zakonodavstvo EU-a*. https://www.europarl.europa.eu/pdfs/news/expert/2020/8/story/20200624STO81911/20200624STO81911_hr.pdf
- Franklin, A. (1999). *Animals and Modern Cultures: A Sociology of Human–Animal Relations in Modernity*. SAGE Publications Ltd. <https://doi.org/10.4135/9781446217764>
- Franklin, A. and Tranter, B. (2021). Loneliness and the cultural, spatial, temporal and generational bases of belonging. *Australian Journal of Psychology*, 73(1), 57–69. <https://doi.org/10.1080/00049530.2020.1837007>

- Garoma, A. and Diba, S. (2022) Role of pet animals (dogs, cats) for emerging and re-emerging zoonoses disease: *Review. Int J Vet Sci Res*, 8(2), 071–073. DOI: 10.17352/ijvsr.000116
- Ghasemzadeh, I. and Namazi, S. H. (2015). Review of bacterial and viral zoonotic infections transmitted by dogs. *J Med Life*, 8(4), 1–5. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5319273/>
- Gollub, H. and Lobb, J. (2023). *Survey: 91% of dog owners have experienced financial stress over the cost of pet ownership.* USA Today. <https://www.usatoday.com/money/blueprint/pet-insurance/cost-of-pet-ownership/>
- Guéguen, N. and Ciccotti, S. (2008). Domestic Dogs as Facilitators in Social Interaction: An Evaluation of Helping and Courtship Behaviors, *Anthrozoös*, 21(4), 339–349, DOI: 10.2752/175303708X371564
- Hodges, J. (1999). Animals and values in society. *Livestock Research for Rural Development* 11(3). <https://www.lrrd.org/lrrd11/3/hod113.htm>
- Hussein, S. M., Soliman, W. S., & Khalifa, A. A. (2021). Benefits of pets' ownership, a review based on health perspectives, *Journal of Internal Medicine and Emergency Research*, 2(1), 1–9. [https://doi.org/10.37191/Mapsci-2582-7367-2\(1\)-020](https://doi.org/10.37191/Mapsci-2582-7367-2(1)-020)
- InStore, (2018). *Psi – najpopularniji kućni ljubimci među Hrvatima.* <https://instore.hr/hr/article/43853/psi-najpopularniji-kucni-ljubimci-medu-hrvatima>
- Irvine, L. (2008). Animals and Sociology. *Sociology Compass*, 2(6), 1954–1971. <https://doi.org/10.1111/j.1751-9020.2008.00163.x>
- Killeen, C. (1998). Loneliness: an epidemic in modern society. *J Adv Nurs*, 28(4), 762–770. doi: 10.1046/j.1365-2648.1998.00703.x
- Koop-Monteiro, Y. (2023). Including animals in sociology. *Current Sociology*, 71(6), 1141–1158. <https://doi.org/10.1177/00113921211065492>
- Korljan, Z. (2020). *Jedini fakultet u zemlji na kojeg sa sobom smijete povesti psa i nitko vas neće krivo pogledati.* <https://www.jutarnji.hr/vaumijau/aktualno/jedini-fakultet-u-zemlji-na-kojeg-sa-sobom-smijete-povesti-psa-i-nitko-vas-neze-krivo-pogledati-15033585>
- Laslavić, Ž. (2019). *Kućni ljubimci – Milijarde se vrte da bi psi i mačke bili siti, zdravi i zadovoljni.* Lider. <https://lidermedia.hr/poslovna-scena/hrvatska/kucni-ljubimci-milijarde-se-vrte-da-bi-psi-i-macke-bili-siti-zdravi-izadovoljni-129486>
- Leeson, J. (2024). *The 8 Most Popular Pets in 2023.* PetMD. <https://www.petmd.com/general-health/most-popular-pets>
- Loh, M. (2023). *Thousands of holidaygoers in France are abandoning their pets on the way to the coast or countryside, local shelters say, with one organization already taking in 12,000 animals this summer.* Business Insider. <https://www.businessinsider.com/vacation-france-abandon-pet-summer-holiday-beach-countryside-2023-8>
- Martins, C. F., Soares, J. P., Cortinhas, A., Silva, L., Cardoso, L., Pires, M. A., & Mota, M. P. (2023). Pet's influence on humans' daily physical activity and mental health: a meta-analysis. *Front Public Health*, 30(11), 1196–1199. doi: 10.3389/fpubh.2023.1196199.
- Nayak, S. D. P., & Narayan, K. A. (2019). Strengths and Weaknesses of Online Surveys. *IOSR Journal of Humanities and Social Sciences (IOSR-JHSS)*, 24, 31–38. DOI: 10.9790/0837-2405053138
- McNicholas, J., & Collis, G. M. (2000). Dogs as catalysts for social interactions: Robustness of the effect. *British Journal of Psychology*, 91(1), 61–70. doi:10.1348/00071260016167
- McNicholas, J. (2014). The role of pets in the lives of older people: a review. *Working with Older People*, 18(3), 128–133. doi:10.1108/wwop-06-2014-0014
- Paul, E. S. (2000). Empathy with animals and with humans: Are they linked? *Anthrozoös*, 13(4), 194–202. <https://doi.org/10.2752/089279300786999699>
- Plous, S. (1993). The Role of Animals in Human Society. *Journal of Social Issues*, 49(1), 1–9. doi:10.1111/j.1540-4560.1993.tb00906.x
- Prato-Previde, E., Basso Ricci E., & Colombo, E. S. (2022). The Complexity of the Human–Animal Bond: Empathy, Attachment and Anthropomorphism in Human–Animal Relationships and Animal Hoarding. *Animals*, 12(20), 1–30. <https://doi.org/10.3390/ani12202835>
- Purewal, R., Christley, R., Kordas, K., Joinson, C., Meints K., Gee, N., & Westgarth C. (2017). Companion Animals and Child/Adolescent Development: A Systematic Review of the Evidence. *Int J Environ Res Public Health*, 14(3), 1–25. doi: 10.3390/ijerph14030234

- Sanders, C. R. (2007). The Sociology of Nonhuman Animals and Society. In C. D. Bryant and D. L. Peck (ur.), *21st Century Sociology: A Reference Handbook*. Vol. 2 Thousand Oaks: SAGE Publications, Inc.
- Sandøe, P. (2021). *Danes favor canines over felines*. University of Copenhagen. https://news.ku.dk/all_news/2021/08/danes-favor-canines-over-felines/
- Schaffer, M. (2009). *One Nation Under Dog: America's Love Affair with Our Dogs*. St. Martin's Publishing Group.
- Shahbandeh, M. (2024). *Number of pet owning households in Europe 2010-2022*. Statista. <https://www.statista.com/statistics/515192/households-owning-a-pet-europe/>
- Večernji list (2016). Istraživanje. *Hrvatska među vodećima u svijetu po broju vlasnika kućnih ljubimaca*. <https://www.vecernji.hr/vijesti/hrvatska-medu-vodecima-u-svijetu-po-broju-vlasnika-kucnih-ljubimaca-1110152>
- Van Houte, B. A. and Jarvis, P. A. (1995). The role of pets in preadolescent psychosocial development. *Journal of Applied Developmental Psychology*, 16(3), 463–479. doi: 10.1016/0193-3973(95)90030-6
- Veevers, J. E. (1985). The Social Meaning of Pets. *Marriage & Family Review*, 8(3-4), 11–30. doi:10.1300/j002v08n03_03
- Wood, L., Martin, K., Christian, H., Nathan, A., Lauritsen, C., Houghton, S., Kawachi, I., & McCune, S. (2015). The pet factor-companion animals as a conduit for getting to know people, friendship formation and social support. *PLoS One*, 10(4), 1–17. doi: 10.1371/journal.pone.0122085
- World Economic Forum (2021). *This is how pets helped our mental health during lockdown*. <https://www.weforum.org/agenda/2021/10/pet-dog-cat-mental-health-lockdown/>