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The Unquantifiable Costs and Benefits of Keeping Dogs in Poland

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ABSTRACT

The aim of the study was to determine whether dog keeping affected the physical and mental condition of dog owners in Poland. Data from 715 surveys were analysed. The questionnaire contained questions on the different aspects of dog ownership and certain characteristics of the respondents (such as sex, residence and age). The distribution of answers to each question was given on a scale of one to five. The survey showed that the owners gained certain benefits (mainly emotional ones) and experienced some losses (usually associated with the animal's passing) stemming from dog ownership. Knowledge of these types of costs and benefits can improve future owners' awareness and help to prevent homelessness in dogs.

Key words: Benefits, Dog, Intangible costs, Maintenance.

Every year more and more people are interested in having dogs (Hadge *et al.,* 2009; Hedge *et al.,* 2009; Strychalski and Gugołek 2010). However, it seems that future owners focus on the positive aspects of caring for pets, being unaware of the actual expenses (Wirth and Rein, 2008). Numerous intangible benefits and costs of dog keeping affect different areas of human life such as emotions, feelings, attitude and skill development (Mills and Yeager, 2012). Emotional advantages include alleviation of loneliness, a greater sense of security, a higher level of happiness, increased sociability and reduced stress (McConnell *et al.,* 2011; Peng *et al.,* 2018). Many dog owners believe that their dog has made their lives fuller and brought them joy and serenity, which may previously have been lacking (Bao and Schreer 2016; McConnell *et al.,* 2011). People who grow up surrounded by pets are more empathetic as adults (Daly and Morton, 2009). Attachment is at least partially responsible for the bond between human and dog (Nagasawa *et al.,* 2009), which is of great adaptive importance and a source of comfort and safety for both sides (McConnell *et al.,* 2011). This mutual benefit was one of the foundations of dog domestication (Raja *et al.,* 2018).

Currently, there are about six and a half million dogs and four million cats in Poland (Dwużnik-Szarek *et al.,* 2023). About 37% of households have at least one dog and 23% of them own at least one cat (Mars Poland, 2024). The total number of dogs registered in the Polish Kennel Club in 2023 was 101,269, including 49,334 purebred animals (Polish Kennel Club, 2024). For many people, the benefits of owning dogs outweigh the costs and inconveniences of keeping them (Saulicz *et al.,* 2015). Their analysis is especially important for increased awareness among future pet owners and dog homelessness prevention (Bednarczyk-Szurmak *et al.,* 2015).

So far, many studies on the effects of dog keeping on the different aspects of physical and psychological well-being in people of various age groups have been carried out (Kubinyi, 2023). However, the current work is one of the first attempts to comprehensively analyse nonfinancial factors, especially under polish conditions. Given the above, the main purpose of the present study was to determine whether dog keeping affected the physical and mental condition of dog owners in Poland.

The research was carried out at the West Pomeranian University of Technology, Szczecin, Poland in 2022. The results of an electronic survey conducted among 715 dog owners were analysed. The survey was designed in a way that ensured reliable collection of information about non-measurable benefits (social, emotional, health, related to personal development and self-esteem) and costs of owning dogs (Wirth and Rein, 2008). The total number of closed questions was 30. The survey was distributed electronically *via* a social networking website in a group of dog owners and supporters of the Polish Kennel Club. The website was available for all dog owners in Poland. Respondents were anonymous and their answers were given on a scale from one (strongly disagree) to five (strongly agree). Unfortunately, the questionnaire was not

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pre-tested. The terms 'dog owners' and 'dog ownership' are used in the paper because they are commonplace expressions and are not intended to objectify animals.

The sample size for the present study (n = 715) was based on the phi measure of effect size for the chi-square goodness-of-fit test, which was used for verifying the significance of differences in the distribution of answers at a significance level of P<0.05 (Kim, 2017). The results were analysed using Microsoft Office Excel 2020 (Microsoft Inc., Redmont, WA, USA) and Statistica (v. 13.3, Tibco Software Inc., Palo Alto, CA, USA).

Demographic structure of respondents

The vast majority of respondents (90.2%) were women. Men accounted for 7.8% and 2.0% chose not to give their sex. The age distribution was as follows:

- 53.3% over 35
- 22.5% from 27 to 35
- 22.2% from 18 to 26
- 2.0% under 18

The largest group of respondents (36.3%) comprised people living in rural areas. The distribution of those living in cities was as follows:

- 22.3% from cities with a population of more than 500,000.
- 13.4% from cities with a population from 150,000 to 500,000.
- 13.5% from cities with a population from 50,000 to 150,000.
- 14.4% from cities with a population up to 50,000.

Among all respondents, 62.9% stated that they lived in a house with a garden, while 37.1% lived in a flat.

Unquantifiable benefits of dog ownership

It should be emphasised that the status of free-living dogs is absent in Poland. Consequently, such animals were not included in the present study, in which dog ownership significantly contributed to the owners' tendencies to visit new places (P<0.05), meet new people (P<0.05) and undertake additional activities (P<0.05) (Table 1). These results may be explained by the dog's need to be walked, which forces their owners to leave the house and cover a certain distance (Power, 2013). Some always take the same routes, but others decide to explore new areas. Walks

Table 1: Number of responses to the survey questions.

	Question	1	2	3	4	5	
1	Dog ownership helps in discovering new places	22	37	104	219	332	*
2	Dog ownership helps in meeting new people	14	38	66	162	436	*
3	Dog ownership motivates to take on additional activities	21	40	96	212	347	*
4	A dog owner needs to devote a great deal of time to working on their dogs' behaviour and skills	8	34	107	267	299	*
5	Dog's presence eliminates feelings of loneliness	8	18	33	92	565	*
6	Emotional bond with the dog is important to a dog's owner	2	4	5	49	655	*
7	A dog owner perceives their dog as a friend	6	3	8	42	656	*
8	A physical contact with a dog increases a joy feeling	4	6	15	63	627	*
9	Dog's presence increases feelings of security	8	29	85	108	485	*
10	A dog owner perceives their dog as a member of the family	4	5	8	35	663	*
11	Meeting the dog's needs is an enjoyable activity	2	4	23	113	571	*
12	A dog owner expresses higher self-esteem	64	68	205	152	227	*
13	A dog owner previously dreamed of having their own pet	17	7	33	61	596	*
14	A dog owner can count on support from other dog owners	28	56	154	217	261	*
15	A dog owner expresses greater sense of responsibility	0	31	90	254	340	*
16	A dog owner expresses a higher level of empathy	7	15	77	179	438	*
17	A dog owner has a more positive attitude	13	32	132	235	301	*
18	Dog ownership stimulates to expand knowledge of cynology	16	27	67	163	443	*
19	Concern about the cost of treatment if the dog becomes ill	147	108	146	155	160	*
20	Feeding is a significant burden on the household budget	151	222	177	123	42	*
21	Dog owners express fear of their dog's death	15	24	47	89	539	*
22	Dog's hair is a problem	354	185	105	41	30	*
23	The need to tidy up after the dog is a major problem	322	206	121	46	21	*
24	Barking of other people's dogs is a problem	131	157	192	124	111	*
25	Barking of the owners' own dogs is a problem	173	149	182	130	81	*
26	Dog owners subordinate their own life style to the animal's needs	30	60	129	198	298	*
27	Dog is a problem when the owners go on holiday	302	145	126	85	57	*
28	Dog ownership limits the owner's social and cultural life	388	187	73	44	21	*

1 - Strongly disagree, 2 - Disagree, 3 - No opinion, 4 - Agree, 5 - Strongly agree; *Significant at P<0.05.

with dogs are therefore a popular way to spend free time (Westgarth *et al.,* 2014). The dog also interacts socially with other dogs during walks, which prompts conversation. In addition, visits to pet stores and veterinary clinics promote meeting new people (McConnell *et al.,* 2011; Wood *et al.,* 2015).

In the present study, dog owners expressed the need to devote a great deal of time to working on their animals' behaviour and skills (P<0.05) and to learn more about the principles of caring for and raising a dog (P<0.05) (Table 1). A substantial percentage of respondents had also previously dreamed of having their own pet (P<0.05). In general, having a dog creates many paths for personal development, which are increasingly available and popular with dog owners (Bennett *et al.,* 2007). While shaping an animal's behaviour is often time-consuming, it usually achieves the intended effect and makes life with the dog easier (Fugazza and Miklósi, 2015). Activities associated with developing the pet's skills and influencing its behaviour directly affect a person's character, perception of the world and life choices (Stevens *et al.,* 2021). The attempt to communicate with a being with a different communication system leads to a better understanding of the world. The opportunity to observe the animal's progress during training, its growing strength and engagement provides enormous satisfaction (Bennett *et al.,* 2007).

In the present study, dog ownership significantly reduced loneliness (P<0.05), increased security (P<0.05), created an emotional bond with the dog (P<0.05) and brought joy from physical contact with the animal (P<0.05). Moreover, many respondents perceived their dog as a friend (P<0.05) and a member of the family (P<0.05). Even caring for the animal's everyday needs was not a problem (P<0.05). Dog owners could also count on support from other dog owners (P<0.05), expressed higher self-esteem (P<0.05), had a greater sense of responsibility (P<0.05), a higher level of empathy (P<0.05) and a more positive attitude (P<0.05) (Table 1). According to McConnell *et al.* (2011), the companionship of a dog generally increases feelings of security and comfort and alleviates loneliness, whereas Bao and Schreer (2016) showed a positive relationship between the presence of a dog and life satisfaction. Dog keeping also reduces stress in humans and motivates them to increased physical activity (Peng *et al.,* 2018). Finally, pet owners have better self-perception and higher self-esteem, which are positively correlated with life satisfaction (Diener and Diener, 1995; McConnell *et al.,* 2011).

It could be assumed that the survey respondents would treat the daily necessity of meeting the dog's needs as a burden (Hsu *et al.,* 2003). However, this did not negatively affect the human-animal relationship. They also regarded the dog as a member of their family, which provides a topic of conversation when one is lacking (Dotson *et al.,* 2010). Being an involuntary object of the expression of one's own feelings, dog has a positive impact on people who find it difficult to express their emotions (McConnell *et al.,* 2011). Children in particular derive benefits from growing up in a family of which a dog is an integral part. They learn responsibility, the ability to express their own feelings and greater empathy in adult life (Christian *et al.,* 2018; Daly and Morton, 2009).

Unquantifiable costs incurred by dog owners

Dog ownership generated general concern about the cost of animal treatment (P<0.05), whereas feeding was not a significant burden on the household budget (P<0.05) (Table 1). This may indicate that dog owners were well-prepared to care for a dog, or that they purchased cheaper dog food. On the other hand, worries about access to veterinary care may result from a lack of sufficient funds in the case of sudden need, which leads many pet owners to borrow money or organize collections (Bir *et al.,* 2020; Freiwald *et al.,* 2014).

Cleaning up after the dog and barking were not a major problem in the present study (P<0.05) (Table 1), which is in contrary to some previous studies (Jégh-Czinege *et al.,* 2020; Mateo *et al.,* 2013; Vijayakumar *et al.,* 2006). On the other hand, most dog owners in our study had to subordinate their own life style to the animal's needs (P<0.05), although this was not a problem when they went on holiday (P<0.05) or took part in social and cultural life (P<0.05). According to Christian *et al.* (2018), having a dog affects the organization of time and the problem arises when the owners go away for a long time (Flannigan and Dodman, 2001). However, the increase in the number of dog-friendly holiday resorts and pet hotels or a tendency to go away on holiday less often may partially alleviate these problems (Lee and Lai, 2021). Dog owners can also choose social and cultural events at which dogs are allowed, or they may not have a problem with leaving the dog at home (Norling and Keeling, 2010). Finally, it is worth noting that most dog owners in the present study expressed fear of their animal's death (P<0.05), which is usually associated with a great sense of loss, especially in children (Crawford *et al.,* 2021).

CONCLUSION

The presence of a dog in the home significantly influenced their owners' physical and (mainly) mental condition. The most important benefits were emotional. Taking care of a dog was perceived in most cases as a pleasure. However, the greatest nonfinancial cost was the loss caused by the animal's passing.

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Disclaimers

The views and conclusions expressed in this article are solely those of the authors and do not necessarily represent the views of their affiliated institutions. The authors are responsible for the accuracy and completeness of the

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Informed consent

All animal procedures for experiments were approved by the Committee of Experimental Animal Care and Handling Techniques were approved by the University of Animal Care Committee.

Conflict of interest

The authors declare that there are no conflicts of interest regarding the publication of this article. No funding or sponsorship influenced the design of the study, data collection, analysis, decision to publish, or preparation of the manuscript.

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