

# THE ROLE OF DOGS IN INCREASING PHYSICAL ACTIVITY AND IMPROVING THE HEALTH OF DOGOWNERS

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#### **Abstract**

Nowadays pets, especially dogs, are very popular. One of the most common ways of describing dogs is "members of the family". It can be said that nowadays dogs have become an integral part of the household, becoming an important part of one's family and social circle. Not only children want a little friend, but adults also need the company of a pet. Nowadays, the recreational (leisure) purpose of keeping dogs is also increasingly being observed and is becoming more and more visible, as leisure time spent with a dog contributes to improving one's health and working ability. Walking can be one of the most important leisure activities with a dog and can help to provide the daily activity needs. A number of studies have focused on the positive effects of dog walking for physical activity. Research focuses on the positive effects of dog ownership on increasing an individual's physical activity. Active encouragement of dog walking can increase physical activity levels, thus contributing to improving people's health and quality of life [14, 15, 45, 59]. Studies suggest that dog ownership has a positive impact on physical activity [62, 63, 64]. More and more dog owners are now taking their dogs with them on both their travels and holidays. Physical activity, which includes exercise, is inversely related to mortality but also to reducing obesity rates, and thus has an important role in preventing disease, improving quality of life [18] and reducing healthcare expenditure. The aim of my research is to investigate the dog-human relationship and the role and importance of the recreational activity system in this context in society. A further aim of my research was to investigate the role and impact of dogs on dog owners' physical activity, dog interaction and mental health. To achieve my goal, I created an online questionnaire. In my research, I sought to answer questions about how dog owners develop a relationship with their companion animal, the role of the dog in their active leisure time and the impact of the dog on the owner's mental health.

# 1 Introduction

Nowadays, with the rise of health-conscious behaviour, many people are engaging in various health-promoting preventive leisure activities. Several researches show that in addition to the

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entertainment function in the choice of leisure activity, the motivation to participate in sport is also an important aspect to maintain health, improve fitness and quality of life [2, 16, 24, 28, 29, 32, 54]. Many national and international studies report on health tourism spa and wellness services that, in addition to recreation and experience, serve to maintain and preserve health [8, 26, 31, 37, 38, 40, 42, 43]. One of the dominant areas of leisure research is the evidence of the positive effects of various stress relief methods on mental health [17, 41, 53].

The determinant of health behaviour is an individual's body culture, which refers to the behaviours, habits, skills, knowledge, values and attitudes that ensure the maintenance of health and are a preventive step in the prevention of disease.

Physical activity, which includes exercise, is inversely related to mortality, but it also plays an important role in reducing obesity rates. By increasing physical activity, including sport, we can contribute to preventing disease and improving quality of life [18, 55] and reducing health expenditure [39, 53].

The recreational (leisure) purpose of dog ownership is also becoming increasingly dominant, with leisure time spent with dogs contributing to improving human health and working ability [14, 15, 45], or the therapeutic purpose, which is also dominated by health promotion [37].

#### 2 Literature review

Higher levels of physical activity among dog owners were found by Cutt et al. (2008) who surveyed 1813 adult dog owners, found that 23% of dog owners walked their dog more than 5 or more times per week, with physical activity and walking with a dog 57-77% higher among dog owners than non-dog owners (P<0.05). However, other studies have reported that 40-80% of dog owners walk their dogs [6, 23, 51, 58, 59] which showed significant variation within total physical activity [9, 57, 58]. Dog ownership was thus intrinsically linked to physical activity and walking. Active encouragement of dog walking can increase physical activity levels and thus contribute to improving people's health and quality of life. The health benefits for both the owner and the dog need further investigation. In addition, a better understanding of the factors associated with physical activity and dog ownership would help inform future interventions. One of the undoubted health benefits of dog ownership is that it increases the physical activity of the dog owner, but other health benefits have also been reported in research, the results of which are summarised in Table 1.

Table 1. Research supporting the health benefits of dog ownership. Source: own source

Health benefit	Health benefit, impact	Reasons for health benefit	Literature
1. Physical Activity	increasing physical activity	Regular walks, games and runs with your dog can help maintain a healthy weight, improve cardiovascular health and improve overall fitness.	[10], [35], [50], [51], [52], [63], [64]
2. Stress Reduction	reduce stress and anxiety	Stroking the dog, playing with the dog, interacting with the dog, playing with the dog. These activities can trigger the release of oxytocin and reduce the production of cortisol, the stress hormone.	[7], [13], [27], [62]
3. Mental Health	company, friend, family member	Dogs can provide companionship and alleviate feelings of loneliness and depression. Their presence can improve mood and provide emotional support for those who live alone.	[3], [13], [33], [44]

4. Social Interaction	more open, friendlier, overcoming fear	Dog owners often meet other dog owners, either at the dog park or while walking. This can lead to increased social interaction and a sense of community.	[5], [35], [60], [64]
5. Routine and Structure	establishing a daily routine	Dogs need a consistent routine of feeding and exercise. This can help dog owners to structure their lives, which can be particularly beneficial for individuals with mental health problems.	[12]
6. Sense of Purpose	increase sense of responsibility and purpose	Caring for a dog gives people a sense of purpose and responsibility. This can be particularly important for older individuals or those facing major life changes.	[25], [63]
7. Allergen Resistance	reduce the risk of allergies and asthma	Interaction with dogs.	[23], [47], [56]
8. Security and Safety	reduce feelings of vulnerability and fear	Larger dog breeds can give their owners a sense of security. Knowing that a loyal and protective dog is nearby can reduce feelings of vulnerability.	[11]
9. Happiness and Joy	increase happiness levels, better mood, happiness	The company of a dog can bring much joy and happiness into your life. Their playful and affectionate nature can lift your spirits and give you a sense of fulfilment.	[35], [48]
10. Improved Cardiovascular Health	lower blood pressure, lower risk of heart disease	Petting the dog can trigger a relaxation response and reduce the heart rate.	[30], [46], [52]
11. Enhanced Immune System	strengthen the immune system, better resistance to disease	Contact with the dog's microbiome can boost the human immune system. Less time can be spent fighting illnesses and visiting the doctor.	[4]

#### 3 Material and method

In spring 2022, I conducted a questionnaire survey among dog owners. The questionnaire was prepared online and distributed to the dog community and dog groups via the internet. Both closed and open questions were used in the questionnaire. I used response categories in the questionnaire to help the respondents. In addition to sociodemographic data, the questionnaire asked about dog owners' leisure time, leisure habits, leisure time spent with dogs and typical leisure activities with dogs. What role do dogs play in the health and well-being of their owners?

I also asked respondents about their involvement in tourism. I used Spss software to process the data and calculate basic statistics (mean, standard deviation, median, modus).

Presentation of the sample

In my questionnaire survey, I present the results of 448 people who keep dogs as a hobby animal, a pet, who were 35.24 years old on average.

The distribution of the sample is shown in Table 2.

Table 2. Sociodemographic data of the sample. Source: own source

		Men (N=127)		Women (N=321)		Total (N=448)	
		Yes	Percentage	Yes	Percentage	Frequency	Percentage
Habitation	Village	10	8%	25	8%	35	8%
	City	37	29%	136	42%	173	39%
	Town	22	17%	47	15%	69	15%
	Capital city	58	45%	113	35%	171	38%

Number of dogs	1	96	77%	181	56%	277	62%
	2	21	16,5%	117	36%	138	31%
	3	5	4%	14	4%	19	4%
	4	2	1,5%	6	2%	8	2%
	5	0	0%	3	1%	3	1%
	more than 6	0	0%	0	0%	0	0%
Total		127	100%	321	100%	448	100%

## 4 Results

25.4% of the respondents (114) had a mixed breed dog, the rest of the respondents had a purebred dog. Of the purebred dogs, the majority of respondents had a border collie, 11.6% (52 respondents), followed by golden retriever 8,7% (39 respondents) and Hungarian pointer 5,1% (23 respondents) as the most popular breeds. The border collie was the dog breed that, due to its intelligence, generally gets on well with its breed mates and, with appropriate socialisation, with cats and other pets [65]. It is a people-loving dog and has no problems with children. His remarkable intelligence has earned him the title of the smartest dog in the world. Although overall very independent, he cooperates readily with his owner. The Border Collie is bred to work, so he can excel in any sport [66]. It was observed that the medium bodied, well-trained, active, sporty, family and child-friendly breeds were the most popular with respondents.

Table 3. Dog owners' views on the health benefits of dog ownership and its impact on the owner. Source: own source

Statement	Average (mean)	Standard deviation
I feel more active	4,099	1,1575
I feel better	4,396	0,9250
I am happier	4,528	0,8553
Helps me to think more positively	4,289	1,0441
Reduced stress/tension	4,186	1,0833
Helps to make friends	3,213	1,3559
I am more open to new things, new people	3,224	1,3474
I spend my free time usefully	4,074	1,0984
Great sense of responsibility	4,179	1,1319
Stronger immune system	3,541	1,3522
I feel safer with a dog	3,353	1,4067
No particular positive effects	1,295	0,8394

Dog owners commented on the positive effects of dog ownership on their own health and wellbeing, and were asked to rate the statements on a scale of 1 to 5 (1= strongly disagree and 5= strongly agree). The highest mean score was given to the response I feel happier (mean= 4.528, sd= 0.853), followed by I feel better (mean=4.39, sd=0.925), I think more positively (mean=4.28, sd=1.044), I reduce stress (mean=3.186, sd=1.083). Even the I feel more active core scored a mean response of 4 (mean=4.099, sd=1.157). The high activity level is also confirmed by the fact that their favourite leisure activity is to play with their dogs. Based on the responses of the dog owners, the results show that 6.5% of the respondents spend 1 hour a day, 30.2% 1-2 hours a day, 19.2% 2-3 hours a day, 8.7% 3-4 hours a day and 4.2% 4-5 hours a day, 24.1% spend all the time with their dog and only 0.1% said that they do not spend time with their dog. 55.6% of dog owners regularly do physical activity with their dog. Dogs motivate their owners to reduce sedentary behaviour and increase physical activity. This finding is important because nowadays a lot of research reports on the spread of sedentary lifestyles, increasing sedentary time, which is a health risk for obesity and cardiovascular diseases [1, 19, 20].

## 5 Conclusion

As with previous studies, my own findings demonstrate the important role dogs play in the lives of their owners and, in turn, their impact on our physical and mental health. My research has also shown that dogs play an important role in maintaining health and quality of life. Every dog owner has experienced how much more colourful and happy life is with a dog. Dogs comfort us in the sad times of our lives and share our joys [68, 69]. One of the best benefits of owning a dog is that it is almost impossible to feel lonely when your dog is with you, always there for you, a companion, a friend [67]. Dogs recognise our moods and always know how to treat us and what to do. They always try to make us happier, cheer us up and make our lives better [70, 71]. We receive unconditional love and acceptance from dogs, as well as a lifelong friendship [69, 72 73, 74]. The results show that exercise and physical activity with dogs have a positive effect on people. And walking with a dog also helps the owner to exercise, move and spend time outdoors in the fresh air. About 55.6% of respondents regularly do some kind of physical activity with their dog. These surveys are important because they can help to develop strategies to encourage physical activity.

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