

HEALTHY LIVING TOGETHER

The Human-Animal Bond

The shared health benefits and existing barriers



Executive Summary

This paper investigates the human-animal bond as it results from the relationship established between pets and companion animals (terms that will herein be used interchangeably) and their owners.

It aims to demonstrate that both the owners and their pets may harness important physical and mental health benefits through their reciprocal companionship. The analysis builds on a thorough literature review which uncovered scientific evidence of a mutually reinforcing interaction between pets and their owners, promoting good health and well-being in both.

Data show that pet ownership – and the relationship behind it – is a reality for a large section of the European population, which spans diverse generations and societal groups, including nationality and socioeconomic status.¹ This document highlights that the human-animal bond has a fundamental function in EU society today. This bond has a proven contribution to fostering the healthy living and ageing of EU citizens and the provision of better care and welfare for their animals.

Against the backdrop of this research, the authors identified existing barriers that currently hinder the creation, management or continuation of such a bond throughout peoples' lifetimes. These barriers prevent many people and pets from fully experiencing the associated positive health and welfare impacts. By providing an overview of relevant EU and international,

political and legislative initiatives, the paper aims to highlight priority areas of action for the promotion of the human-animal bond and its continued benefits to society.

The document provides an introduction, followed by further detail that is structured into four sections. The first section deals with the human-animal bond through the investigation of academic studies on the impact on human health (1.1), with a specific focus on scientific findings pointing to the benefits for both healthy ageing (1.1.1) and mental health (1.1.2). The animal health and welfare impact (1.2) is addressed with an analysis of veterinary considerations and emerging animal welfare indicators. The second section addresses the barriers to harnessing the bond by spelling out challenges in acquisition (2.1), housing and public spaces & travel restrictions (2.2 and 2.3), issues affecting the veterinary care (2.4), the academic curricula of veterinarians (2.5), the implication linked to understanding pet ownership and care responsibilities (2.6), the economic importance of companion animals (2.7) and the overall need for more systemic support. Section three outlines the EU context and the guiding principles for future legislation and initiatives. Additional documents provide some more immediate policy and education recommendations that can be implemented at the EU, national and local levels.

Disclaimer: This document is intended as a high-level draft paper on the human-companion animal bond. It is the result of the joint work of Zoetis, the Federation of European Companion Animal Veterinary Associations (FECAVA) and the Human Animal Bond Research Institute (HABRI), based on their knowledge and expertise. It is not meant to give an exhaustive description of all issues at stake, but to describe those that were selected as priorities, based on the current political and policy environment. The document is not intended in any way to be construed as legal or medical advice. Copyright vests with Zoetis, FECAVA and HABRI, the authors of this document.

Introduction

The human-animal bond has a fundamental impact on many people's everyday lives, across the EU as well as globally, making it important to investigate and assess its nature in order to fully understand today's society. In this context the human-animal bond created through pet ownership is a focal point of attention because it interests a large section of population and diverse generational groups.

Demographic changes, rising income levels and the COVID-19 pandemic drove more people to acquire pets. As a result, pet ownership is rising globally, particularly in millennial households. It is estimated that there are about 127 million cats and 104 million dogs living in the EU, with 46% of households in the EU owning a pet.² As of 2022, an estimated 91 million European households owned at least one pet. During the last decade, the number of pet-owning households has increased by approximately 20 million.³ Recent statistics also show that Gen Z represent a growing segment of pet owners.

Companion animals accompany their owners throughout the different stages of their life and the positive impact of the human-animal bond manifests itself across demographics – from children getting exercise, to families finding comfort in their pet's presence during the social isolation brought about by the pandemic, to animals supporting senior people.

Studies also show that these benefits remain, even when adjusted for demographic, socioeconomic status, education, medication use, and others, demonstrating a strong causal link between pet ownership and human health.

Although, pets have been demonstrated to bring sustained mental and physical health benefits to humans⁴, this relationship should not be seen as merely supporting human health gains. Pets and their owners support each other in a mutually reinforcing interaction that promotes good health and well-being in both. Responsibly owned pets are provided with comfortable homes, good nutrition, and veterinary care, as well as affection and play. Receiving the appropriate care and attention increases their health and longevity, resulting in an overall welfare improvement. However, it is important to point out, that the escalating cost of living is making it harder for many pet owners to take care of their companion animals, especially if ill or ageing.

 **46%**
of households in the
EU own a pet



1. Human-Animal Bond

The academic study of the human-animal bond has increased over several years, both in the EU and beyond. Growing awareness of the close links between human health and animal health was crystallised in the promotion of the One Health approach in the early 2000s. Emphasising the dynamic interdependence between and among humans, animals and ecosystems, this greater attention given to the human-animal bond⁵ kick-started an increasing body of literature on its impact on mental and physical well-being. With mounting evidence that animals play an important role in many different aspects of human health – whether it be for exercise, education, or mental health – over the last few years we have also seen a rise in the explorations of the reciprocal relationship, with a focus on the impact of owners and companion animals being healthy together.



The increase in companion animal acquisition at the start of the COVID-19 pandemic⁶ and the particular circumstances that this produced drew attention to the growing body of academic research into the positive connection between humans and companion animals. There is now a myriad of research looking into the effects of the human-companion animal bond throughout the human and animal lifecycles. While research into animal welfare and criteria to assess it scientifically has increased dramatically during the last decade, research

that investigates the individual experience of the pet and the impact the human-animal bond has on its wellbeing, could benefit from more extensive analysis. This would be beneficial especially with a view to foster education of pet owners, not only on their responsibilities to provide for basic needs, but also on how to ensure the highest possible level of pet care and welfare. As the recognition of the animal sentience grows in today's society, our responsibility to tend to pets' emotional state and true well-being becomes increasingly important.

1.1 Impact on Human Health

The human-animal bond is intergenerational as companion animals accompany their owners during the different stages of their life. We now have convincing evidence that companion animals boost emotional and physical health in young and ageing populations, for example by bringing benefits during childhood development⁷ or in ageing populations.⁸



1.1.1 Healthy Living and Ageing

Pet companionship has a direct positive link with the healthy ageing of people.⁹ Several studies highlight how having a pet increases people's physical activity rate (e.g., dog walking), lessens anxiety, stress and also pain, as well as providing an overall sense of purpose that boosts life satisfaction. Pets also provide opportunities for social engagement,¹⁰ which is one of the most powerful predictors of pet adoption and maintenance of behavioural change, increasing the chances of achieving recommended exercise goals through more frequent and longer activity sessions. By helping people to be physically active, pets therefore have a direct positive

influence on tackling the loss of cognitive function and Non-Communicable Diseases, in particular obesity¹¹ and cardiovascular issues.¹² This goes beyond ownership in a domestic context and also applies to the hospital setting. Animal-assisted therapy (AAT) and other forms of animal-assisted interventions (AAI), when integrated as part of the wider healthcare support, have demonstrated to have positive effects on patients of all ages.¹³ The effect AAT may have on the animals, will be explored later in this paper. Explorations of the potential of cats and dogs to identify disease in humans are also being explored.¹⁴



Several studies highlight how having a pet increases people's physical activity rate (e.g., dog walking), lessens anxiety, stress and also pain, as well as providing an overall sense of purpose that boosts life satisfaction.



1.1.2 Mental Health

There is a large body of evidence on the link between pet companionship and an increase in mental wellbeing and with improved outcomes also being shown for specific mental health disorders, and mental health symptoms of other diseases such as AIDS.¹⁵ Several studies looking into the social benefits suggests that the human-animal bond is linked with an increased perceived social support¹⁶ and can increase human-to-human socialisation. Pet ownership and AAI have demonstrated to alleviate loneliness, depression symptoms, as well as support the processing of a traumatic event,¹⁷ particularly for those

affected by PTSD.¹⁸ Preliminary evidence also shows that animal-assisted social skills trainings might increase the effectiveness of therapies for children with autism spectrum disorders.¹⁹ Hence, research suggests that AAI offers an untapped potential to increase the efficacy of mental health programmes targeting children and young people, older people – particularly residents of long-term care facilities²⁰ – and war veterans. The majority of these studies are based on patient-reported outcomes and consider pet companionship as important in the self-management of specific mental health disorders.²¹

Impact on Animal Health & Welfare

The human-animal bond is not beneficial for humans only. Responsibly owned pets are provided with food or shelter and are less likely to get into fights or get injured. It should also be considered that pet neutering can lead to a diminished risk of cancer and other diseases affecting pets' reproductive organs – good thought should be given though on whether this intervention is right for the individual animal or not. As the frequency of pregnancy in female animals decreases – either through neutering or responsible breeding –, other related negative impacts are reduced. As a result, owned and appropriately handled pets generally live longer lives and, as they age, they can count on their responsible owner for care.

Like in humans, assessing pets' quality of life is a complex task as this can be influenced by a multitude of factors, such as their physical and psychological health, the environment, owner behaviour and the strength of the human-animal bond. For example, the interaction with humans has been shown to have a positive effect

on companion animals' welfare by reducing their cortisol response, hence their stress levels, in an adverse environment (i.e., shelters).²² Additional research assessing cortisol levels in therapy dogs suggests that these animals do not experience undue stress in a therapy settings.²³ However, it should be noted that these findings cannot be automatically transferred to other animals also used in therapy.²⁴

In general though, the strength of the human-animal bond has been shown to positively correlate with increased care given to the animal's health, exemplified by the increased use of preventive medicine, such as vaccines and regular veterinary visits.²⁵

Hence, evaluating companion animal welfare resulting from the human-animal bond may be done using behavioural, physiological and health status indicators. Measures include abnormal behaviours, physiology, immune system function and injury level.

Specifically, reduced welfare may be indicated by the onset of behavioural problems related both to the genetic individual basis and environmental factors. Physiological variables which may be analysed in order to evaluate pet welfare include hormone levels, mainly related to the HPA (hypothalamus-pituitary-adrenal-axis), and to the immune system's activations.

For example, stress responses in animals should be considered as an adaptive mechanism to an event that changes their quality of life. When owners are unable to recognise and effectively manage and resolve the situation, the stress response becomes chronic causing a deterioration in the quality of the human-animal bond.

One of the most important behavioural manifestations of a negative emotional state in both cats and dogs is aggression. Other frequently displayed behavioural problems are anxiety-related disorders, such as generalised anxiety, separation related problems, fears and phobias, stereotypies/compulsive behaviours. Body

language and facial expression can be an indicator for some of the issues in dogs (e.g. pain), while others may be harder to detect.

Recently, the symbiotic link between the health of owners and the health of companion animals has been studied with the novel Milan Pet Quality of Life instrument (MPQL) finding that pets' psychological state is impacted by owners' demographics, personality and mental health.²⁶

It has to be pointed out that the effect that pet ownership produces on pets has not been investigated as much as it has been on humans. As the science on animal welfare indicators advances, this remains a field of study where additional research could be beneficial, especially to inform pet owners' behaviour change and ensure greater animal health and welfare.



The strength of the human–animal bond has been shown to positively correlate with increased care given to the animal's health, exemplified by the increased use of preventive medicine, such as vaccines and regular veterinary visits.

2. Barriers to Harnessing the Bond

While literature on the human-animal bond is on the rise, our academic understanding of the front-line barriers to how humans and companion animals can better benefit from the bond is comparatively understudied. There are a broad range of legal, social and logistical obstacles, often specific to each country and type of companion animal which have made the hurdles difficult to study. While some literature explores hurdles for acquisition and lifestyle, especially when they are shared across geographical issues, such as rental housing restrictions, travel restrictions, access to public spaces, much of the research into non-health barriers to ownership merit further study.



2.1 Challenges to Pet Acquisition

Benefiting from a long-term human-animal bond is complicated by initial challenges to pet acquisition. Given the scientific evidence on the benefits of pets to mental, physical and social health, it may be time to revisit restrictions on pet ownership. This topic comes with a certain conflict of interest, as while it is desirable to make it easier to acquire pets, minimum ownership requirements should be in place, so that the potential pet owner chooses the appropriate pet species which fits circumstances, lifestyle and capability to care for the pet in a way that ensures the animal's welfare.

Ideally, people planning to acquire an animal, should also be able to trust that this comes from a reliable source. Especially during the COVID-lockdown some European countries saw imports of young puppies which came from so called 'breeding mills', with a clear breach of legal and best practice requirements. EU and national authorities should put in place surveillance according to legislation and actual enforcement.

As an additional point regarding exotic pets, there is evidence that the introduction of 'positive lists',²⁷ where only exotic pets from the list can be legally kept,²⁸ can have a positive impact, ensuring appropriate husbandry and reducing illegal animal trading. Reducing barriers to pet acquisition must come with education and support for potential pet owners to ensure that the animals receive the best care possible.



72%
of rental housing
residents report that
pet-friendly housing
is hard to find.

2.2 Housing Restrictions

There is also significant literature looking at housing restrictions for companion animals and the restriction of the rental market for pet owners. This is beginning to translate into analysis of socio-economic status and the poverty cycle.²⁹ Studies suggest that rental restrictions cause owners to compromise on the quality or location of their house in order to continue to benefit from the pet companionship,³⁰ with overall detrimental impacts on their, and their pets', health and welfare. Rental housing restrictions are common in the United States as well, where a recent survey found that seventy-two percent of rental housing residents report that pet-friendly housing is hard to find.³¹ Moreover, companion animals are often not allowed in shared housing such as nursing homes,³² where the benefits arising from the human-animal bond may be the greatest.

2.3 Public Spaces and Travel

Restrictions on travel and work can also pose a problem for owners. Whereas most workplaces do not permit companion animals, during the COVID-19 pandemic we saw increased literature on the positive role that teleworking has on mental health, due to – among other things – the increased time spent with companion animals.³³ One study showed that this had a positive impact on job performance.³⁴ Moreover, a large survey found that pet-friendly workplaces improved employee recruitment, retention, engagement and presenteeism.³⁵ There are findings showing that well-behaved dogs visiting public spaces promote a higher quality of human-animal interactions.³⁶

With regards to travel, there are significant barriers within and between EU countries, with requirements and restrictions for companion animals being set at a national or even regional level. Companion animals are often not welcome or face additional restrictions on public transport, e.g. trains³⁷, with breed-specific laws posing additional barriers to some owners. Particularly in the case of air travel, costs and limited availability of appropriate spaces are relevant issues. A notable example of the importance of pets was the lifting of cross-border requirements for pet health certificates (Regulation EU No. 576/2013)³⁸ for the pets of Ukrainian war refugees.³⁹

This highlights the need for such cross-border protocols to be formalised, keeping pets and people together in case of human-caused or natural disasters.

2.4 Veterinary Care

A growing pet population increases the need for access to veterinary care. A recent 91-country survey found that almost half of all clinics reported an increase in their caseloads,⁴⁰ putting veterinarians and their practices under increased pressure and taking a significant toll on veterinary mental health. Alarming recent data show that an increasing number of vets are suffering from burn-out. This is partially due to veterinary workforce challenges that exist in nearly all EU countries. In numerous countries, governments have reacted to this challenge by setting incentives and increasing vet fees to make the income and the profession more attractive.

The affordability of and access to veterinary care has become an issue for some pet owners. For those pet owners struggling to cover bills for their or their family's basic needs, a vet visit can be an economic challenge.⁴¹

In this context it is worth considering that prices for veterinary medicinal products (VMPs) have increased over time – partially due to the fact that R&D efforts as well as compulsory regulatory requirements are comparable to human medicines. Research has shown that VMPs are usually less expensive than comparable human products with the same active pharmaceutical ingredient.⁴² While this may be the case regarding wholesale or prices for clinics, medication costs can also put a higher burden on pet owners, as they often pay the full price in contrast to human medicines, most of which are partially or fully covered by medical insurance. This is also coupled with the fact that some veterinary medicines were in shortage globally due to increased demand and disrupted supply chains – a situation that is gradually easing.

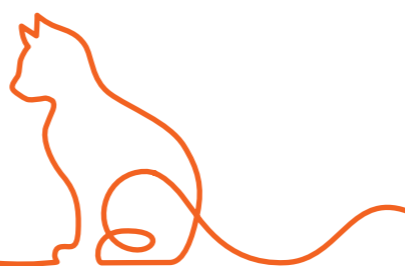
Financial challenges could in part be alleviated through pet health insurance.⁴³ However, currently pet insurance is not available in all EU member countries and having a pet-insurance is far from being the norm and in many cases, pet insurance itself represents a substantial economic commitment from owners. It is thus worth considering how it can be expanded to help improve access to veterinary care.

While owning a companion animal may present significant costs which will be a barrier for many potential owners, research strongly suggests that pet owners around the world are highly committed to maintaining their human-animal bond with their



A recent 91-country survey found that almost half of all clinics reported an increase in their caseloads.

pets. The human-animal bond is universally valued and recognized among pet owners, who report a close relationship with their pet and that they would pay whatever it takes if their pet needed extensive veterinary care.⁴⁴ Particularly when pet owners are knowledgeable of the benefits of the human-animal bond to their health and wellness, pet owners are more likely to invest in caring for their pet. This awareness may even boost pet ownership.⁴⁵



2.5 Academic Curricula

Mirroring medical education in human medicine, veterinary medicine's focus lies on preventing disease and resolving physical ailments. On top of this, most veterinarians have a good understanding about animal behaviour and welfare and are able to draw conclusions from an animal's behaviour better than many other people. This might be due to training on the subject during their education, daily handling of animals or simply having a natural talent of understanding an animal's behaviour and wellness state – which might have contributed to choosing a career-path involving animals in the first place.

Traditional processes in vet practices and clinics can however pose obstacles to fully harnessing the potential of the human-animal bond for joint health. Usually pet-owners come to a vet with a clear objective, for example vaccinating an animal or asking for a diagnosis and treatment of a disease or injury. While a short

examination and discussion of the anamnesis are usually standard-procedure, more in-depth discussions about husbandry, welfare and hidden signs of wellbeing are often not discussed. This could again be rooted in 'classical' expectations of owners and 'routine' processes in practices.

As a consequence, many vets cannot make use of their existing knowledge on welfare issues or expand it. For instance, the veterinary professionals' knowledge about a cat's behavioural needs is, in certain areas (namely stress releasers and human stimulation), similar to the caregivers' level of knowledge.⁴⁶ As veterinarians and vet nurses/technicians have a special place to educate caregivers, leading to preventing behavioural problems and increasing quality of life, steps should be taken so that they can utilise this potential. This could include further advancements to the veterinary curriculum:

- Veterinarians around the world stand to benefit from discussing the human-animal bond with pet owners, and a **majority believe that this topic is valuable to their practice**. Pet owners rely on veterinarians for information about the human-animal bond and view them as trusted resources on the subject.⁴⁷ Hence, the concept of the human-animal bond and the resulting benefits for human health and wellbeing should be introduced to veterinarians who have not been exposed to it, so that they have additional information to share in expanded discussions with pet-owners.
- Additional training on economics and running vet practices and clinics in an economically viable and efficient way under changing circumstances. This would allow veterinarians to **spend more time with animals and owners on additional topics like welfare**. Ultimately additional time spent with patients must pay off for veterinary staff and not result in an increased burden.
- So called soft-skills like improved communication, emotional control, vet-patient-relationship should be given more room in the vet curriculum to support

the above-mentioned points and in response to new workforce demands.⁴⁸

- Education about animal behaviour and welfare should be expanded, so that veterinary professionals have an even greater knowledge on the topic. This would allow them to **bring forward relevant evidence-based knowledge** on the topic for the benefit of expanded care.
- If expanding on the curriculum is unfeasible for some universities, the use of existing alternatives could provide a viable alternative. For example, the Human Animal Bond Research Institute (HABRI) and the North American Veterinary Community (NAVC), have relaunched Human Animal Bond Certified. This is a certification course for practicing veterinarians, veterinary nurses, and veterinary practice managers that has become a possible certification for animal health professionals looking to engage with their clients through the communication and the science of the human-animal bond.⁴⁹

Offering certification or credit points for veterinary students and the practicing vet-force for the above-mentioned trainings, could help veterinarians more effectively utilise their understanding and communicate on these topics, leading to improved customer interactions, compliance and relationships.

2.6

Meeting the Health and Welfare Needs of Pets

While for humans living well and ageing healthily means going through life in a good physical and mental state, a similar experience for pets depends to a great extent on pet owners' commitment to ensure the best possible level of care and welfare for them. There is extensive literature investigating what key elements should be used to define animal welfare standards, with research increasingly taking into account species-specific considerations. Adequate welfare levels for pets entail, among other things, for them to be free to express their normal behaviour in an appropriate surrounding environment, to live free from pain and distress, as well as to be fed with a suitable diet. In order to ensure their pet's health, pet owners need to have a solid knowledge and understanding of companion animals' needs and how to respond to these.

However, education on companion animal welfare, pet acquisition and ownership require constant attention and improvement so that pet owners and their pets can

fully enjoy the reciprocal benefits of the human-animal bond. With a significant number of stray animals and pet relinquishments each year, more education is clearly needed. Professionals employed in the veterinary field could play a key role in this respect to advise prospective pet owners prior to the adoption or acquisition, specifically by guiding them in assessing whether or what pets are suitable for them, taking into consideration the animal's health and welfare needs (exercise, enrichment), associated costs, lifestyle and other relevant factors. Moreover, attitudes towards pet ownership are part of a persons' cultural background and differ greatly among individuals, as well as across EU countries.⁵⁰ While recent findings indicate the universality of the human-animal bond across countries and cultures, more research and action are needed on how to foster pet owners' education and translate this into positive actions to ensure for pets the highest level of care.

2.5

Lack of systems-level support

As it was experienced during the pandemic, the risk of loneliness, lack of interaction and prolonged isolation continue to be relevant issues even in today's hyper-connected society. These are especially affecting certain cohorts of the population; those more exposed to social exclusion for reasons linked to their socio-economic status, age or health conditions. While different forms of institutional support exist to provide health care and social assistance to people living in difficult conditions or experiencing a temporary but challenging moment, generally these services do not extend to assisting with pet ownership. For example, access to pet-friendly domestic violence shelters and emergency or temporary housing remains a significant barrier for domestic violence survivors and the unhoused with pets. Considering the importance that the human-animal bond has on both owners' and pets' well-being, addressing this gap is of the utmost importance. While social and health services are generally part of unified systems that are, or

should be well interconnected, based on reciprocal communication and cooperation, veterinary medicine is currently not included in the equation – an aspect that somehow breaks the continuity of that approach enshrined in the One Health concept.⁵¹

The mutually beneficial human-animal bond would therefore be better guaranteed through a holistic approach to care, in particular for those people and companion animals that are more vulnerable and are subjected to greater health risks.

In this respect cross-sectoral partnerships linking veterinary professionals, animal shelters and the pet industry with public health and social agencies could help leverage the prospective benefits of animal companionship on disadvantaged individuals, families and communities.⁵²



Lack of acknowledgement of economic importance of companion animals

The benefits that companion animals can have on their owners' health have been explored to some detail in this report. It also is apparent that the economic value of this to society is not acknowledged to the degree that it should be. Numerous industries based on companion animals generate a large number of jobs, economic growth and tax-revenues.

- A recent report by the Human Animal Bond Research Institute (HABRI) evaluated savings in the human health sector in the United States through pet ownership. **According to the economic impact report pet ownership saves the U.S. health care system \$22.7 billion every year.** The report not only reflects better overall health for pet owners in the form of fewer doctor visits per year, but also tracks specific savings for reduced obesity, reduced infections, and better mental health for children, seniors, and other groups.⁵³ Even though figures do not exist for the EU, it seems fair to take the assumption that savings of several billion Euros are generated in the European human health systems as well.
- The pet food market mirrors the increased care of pets, providing more specialised products to cater for the needs of companion animals in every stage of their lives. It has **grown 5.1% in 2022** in value terms and is now worth 29.1 billion EUR, with additional spendings on home-made pet food.⁵⁴
- Other expenditures for pet-related products and services like toys, baskets, leashes and other equipment has reached a similar size and grown to 24,5 billion EUR.
- Next to providing products which help predict, prevent and treat diseases in animals – and through reducing the risk of zoonosis also in humans –, the animal health industry contributes to animal health and wellbeing to a great extent. Furthermore, through modern R&D- and production-facilities all over Europe, it ensures the availability of medicines and vaccines as well as generating revenue and taxes. Around 52.000 professionals are employed directly in the sector, and **the value grew to 3,7 billion EUR in 2022.**⁵⁵
- Over 300.000 veterinarians take care of animals in Europe, employing many more staff like vet nurses or technicians. Although no detailed figures exist, again billions of Euros for vet services and sale of products are generated each year.⁵⁶
- Finally, certain services performed by working dogs shall be mentioned which are of priceless value to society. While herd-dogs and shepherds play a marginal role for the livestock-sector nowadays, herd-protection dogs have become important again as they are essential for extensive husbandry in those areas where wolves have made a comeback in Europe. Hunting dogs are called out in their thousands each day in Europe to search for wild animals injured in traffic, or more recently to search for wild boar carcasses in areas affected by African Swine Fever, and guard dogs protect property for many households. Dogs are also used at borders to search for illegal drugs, weapons, money or even micro-chips. Rescue dogs are irreplaceable when searching for lost persons or after natural disasters like earthquakes. On an individual level, guide-dogs enable blind or disabled people to more fully participate in societal activities, just as therapy-dogs can play an important role for relieving stress or improving mental health.

While the inherent benefits of pet-ownership should be reason enough for politics to put a stronger focus on companion-animal related issues, the economic and societal importance may serve as further impetus to make companion animals centre of political initiatives which contribute to their and their owners' wellbeing.



The EU Context: Lack of Legislation and Initiatives on the Human Animal Bond

The COVID-19 pandemic has exacerbated existing mental health problems in people of all ages – including children and adolescents – owing to the unique combination of the health crisis, social isolation and economic recession. Despite a number of health initiatives aimed to improve mental health, further action at the EU level should be envisaged, specifically targeting young people or children. Healthy ageing policies are also in the purview of EU and its institutions, particularly in light of the UN Decade of Healthy Ageing, which offers an important opportunity to develop new and innovative approaches in this field.⁵⁷



In parallel to this, livestock animal welfare issues have gained a prominent stage in EU level debates and legislation, with animal health and well-being considerations increasingly integrated across diverse policies. Significantly, the EU has become vocal on the importance of the One Health concept, embracing this as a holistic and systematic approach that is fundamental to address today's human-, animal- and environmental health challenges. Against this background, while the welfare of food-producing animals is the object of a revision of existing EU legislations, so far companion animals have not received as much attention as livestock. Companion animals' well-being has not been addressed by any EU initiatives,⁵⁸ in spite of the mounting scientific evidence indicating the important contribution of the human-animal bond to improving human health.

Very practical initiatives could be taken on EU and Member State-level, to reduce the cost-burden and ensure a vital veterinary health-sector, accessible to all pet-owners in the EU.

Policymakers are not the only stakeholders who could play a more important role in reforming the companion animal environment in Europe. A wide range of other players – from the hospitality and transport industry to education institutions and nursing homes – also have a role in shaping the current environment.

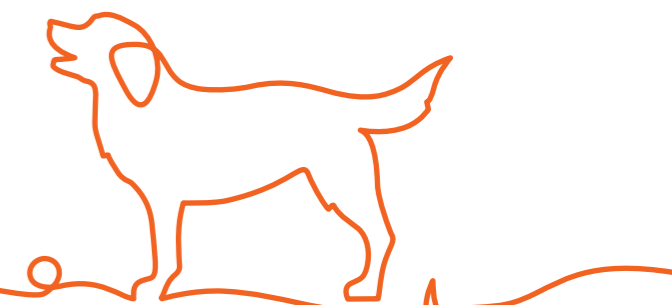
Working together, these stakeholders can have a direct impact on enabling pet ownership and making pet care more accessible – and therefore harnessing the mutually beneficial relationship between companion animals and humans.

Considering the potential for the human-animal bond to contribute significantly to general wellbeing, mental health and healthy ageing of EU citizens, raising awareness and supporting the human-animal bond should become a more prominent goal for EU policymakers and institutions. This is all the more important in light of their ability to influence or call for a change in Member States' rules and private stakeholders' pet-relevant policies. As the health of pets is a pre-condition for them to support pet owners' mental health and healthy living, policies should foster and facilitate the development of healthy human-animal bonds across different contexts.

In further documents broad principles that should guide such policies as well as detailed policy-asks will be presented for further discussions.

References

1. Zoetis-HABRI. (2022). International Human-Animal Bond Survey. <https://habri.org/international-hab-survey/>.
2. Europeanpetfood.org. FEDIAF EuropeanPetFood releases its annual Facts&Figures confirming 340 million pets in Europe. [online] Available at: https://europeanpetfood.org/_/news/fediaf-europeanpetfood-releases-its-annual-factsfigures-confirming-340-million-pets-in-europe/
3. Statista. European households owning a pet 2010-2020. [online] Available at: <https://www.statista.com/statistics/515192/households-owning-a-pet-europe/>.
4. Martins, C. et al. (2023). Pet's influence on humans' daily physical activity and mental health: A meta-analysis. *Frontiers in Public Health*, 11.
5. McCune, S. and Promislow, D. (2021). Healthy, Active Aging for People and Dogs. *Frontiers in Veterinary Science*, 8.
6. Ho, J., Hussain, S. and Sparagano, O. (2021). Did the COVID-19 Pandemic Spark a Public Interest in Pet Adoption? *Frontiers in Veterinary Science*, [online] 8(647308).
7. Hawkins, R. and Williams, J. (2017). Childhood Attachment to Pets: Associations between Pet Attachment, Attitudes to Animals, Compassion, and Humane Behaviour. *International Journal of Environmental Research and Public Health*, 14(5), p.490.
8. Janevic, Mary, et al. National Poll on Healthy Aging: How pets contribute to healthy aging. (2019).
9. National Poll on Healthy Aging. How Pets Contribute to Healthy Aging. [online] Available at: <https://www.healthypoll.org/reports-more/report/how-pets-contribute-healthy-aging>
10. Wood, Lisa, et al. (2015). The pet factor-companion animals as a conduit for getting to know people, friendship formation and social support. *PLoS one* 10.4 : e0122085.
11. Kushner, R. F., et al. (2006). The PPET study: people and pets exercising together. *Obesity Research* 14(10): 1762-1770.
12. Kazi, D.S. Who Is Rescuing Whom? (2019). *Circulation: Cardiovascular Quality and Outcomes*, 12(10).
13. Barchas, D. et al. (2020). The Best Medicine: Personal Pets and Therapy Animals in the Hospital Setting. *Critical Care Nursing Clinics of North America*, 32(2), pp.167-190.
14. Kure, S. et al. (2021) Breast Cancer Detection from a Urine Sample by Dog Sniffing: A Preliminary Study for the Development of a New Screening Device, and a Literature Review. *Biology*, 10(6), p.517.
15. Hart, L.A., et al. (2022). Companion Animals' Roles for AIDS Survivors, Mostly Aging Males, during HIV/AIDS and COVID-19 Pandemics. *Animals*, 12(11), p.1449.
16. Muraco, A. et al. (2018). Lifesaving in Every Way: The Role of Companion Animals in the Lives of Older Lesbian, Gay, Bisexual, and Transgender Adults Age 50 and Over. *Research on Aging*, 40(9), pp.859-882.
17. O'Haire, M. E., Guérin, N. A., & Kirkham, A. C. (2015). Animal-Assisted Intervention for trauma: a systematic literature review. *Frontiers in psychology*, 6, 1121.
18. O'Haire, M.E. and Rodriguez, K.E. (2018). Preliminary efficacy of service dogs as a complementary treatment for posttraumatic stress disorder in military members and veterans. *Journal of Consulting and Clinical Psychology*, 86(2), pp.179-188.
19. Becker, J. L., Rogers, E. C., & Burrows, B. (2017). Animal-assisted social skills training for children with autism spectrum disorders. *anthrozoös*, 30(2), 307-326
20. Banks, M. R., & Banks, W. A. (2002). The effects of animal-assisted therapy on loneliness in an elderly population in long-term care facilities. *The journals of gerontology series A: biological sciences and medical sciences*, 57(7), M428-M432.
21. Brooks, H., Rushton, K., Walker, S., Lovell, K. and Rogers, A. (2016). Ontological security and connectivity provided by pets: a study in the self-management of the everyday lives of people diagnosed with a long-term mental health condition. *BMC Psychiatry*, 16(1).
22. Coppola, C.L., Grandin, T. and Enns, R.M. (2006). Human interaction and cortisol: Can human contact reduce stress for shelter dogs? *Physiology & Behavior*, 87(3), pp.537-541.
23. McCullough, A., et al. (2018). Physiological and behavioral effects of animal-assisted interventions on therapy dogs in pediatric oncology settings. *Applied Animal Behaviour Science*, [online] 200, pp.86-95.
24. Cats or rabbits can be territorial or frightened in therapy settings, as they are prey-species. Further welfare issues may arise regarding animals that are 'used' in education. While mice or guineapigs kept by primary classes may teach children responsible behaviour, special care needs to be taken to meet their demands. King, L.A. (2004). Ethics and welfare of animals used in education: an overview. *Animal Welfare*, [online] 13(S1), pp.S221-S227.
25. HABRI. (n.d.). International Survey of Pet Owners & Veterinarians. [online] Available at: <https://habri.org/international-hab-survey/>.
26. Piotti, P., et al. (2021). Use of the Milan Pet Quality of Life Instrument (MPQL) to Measure Pets' Quality of Life during COVID-19. *Animals: an open access journal from MDPI*, [online] 11(5), p.1336.
27. Toland, E., et al. (2020). Turning Negatives into Positives for Pet Trading and Keeping: A Review of Positive Lists. *Animals*, 10(12), p.2371.
28. Such as is the case with the recently introduced pet permits in Wallonia (Belgium).
29. Applebaum, J.W., et al. (2021). Pet-Friendly for Whom? An Analysis of Pet Fees in Texas Rental Housing. *Frontiers in Veterinary Science*, 8.
30. Graham, T., et al. (2018). 'Pets Negotiable': How Do the Perspectives of Landlords and Property Managers Compare with Those of Younger Tenants with Dogs?. *Animals*, 8(3), p.32.
31. Pet-Inclusive Housing Initiative. (n.d.). 2021 Pet-Inclusive Housing Report. [online] Available at: <https://www.petsandhousing.org/2021-pet-inclusive-housing-report/>
32. Fox, M. and Ray, M. (2019). No pets allowed? Companion animals, older people and residential care. *Medical Humanities*, 45(2), pp.211-222.
33. Kogan, L.R., Currin-McCulloch, J., Bussolari, C., Packman, W. and Erdman, P. (2021). The Psychosocial Influence of Companion Animals on Positive and Negative Affect during the COVID-19 Pandemic. *Animals*, 11(7), p.2084.
34. Junça-Silva, A., Almeida, M. and Gomes, C. (2022). The Role of Dogs in the Relationship between Telework and Performance via Affect: A Moderated Mediation Analysis. *Animals*, 12(13), p.1727.
35. HABRI. Workplace Wellness. [online] Available at: <https://habri.org/research/mental-health/workplace-wellness/>
36. Marnoto, V., et al. (2022). Effects of dogs' visits to a public exhibition. *Pet Behaviour Science*, (12), pp.11-30.
37. Euronews. (2022). Italy has made it a whole lot easier to travel with your dog on public transport. [online] Available at: <https://www.euronews.com/travel/2022/06/24/italy-has-made-it-a-whole-lot-easier-to-travel-with-your-dog-on-public-transport>
38. EurLex. (2022). Regulation (EU) No 576/2013 of the European parliament and of the council of 12 June 2013 on the non-commercial movement of pet animals and repealing regulation (EC) No 998/2003 Text with EEA relevance. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1646137451619&uri=CELEX:32013R0576>
39. The Economist. (n.d.). Europe is bending immigration rules for pets from Ukraine. [online] Available at: <https://www.economist.com/europe/2022/03/19/europe-is-bending-immigration-rules-for-pets-from-ukraine>
40. WSAVA Academy. (n.d.). Global impact of COVID19: the veterinarians perspective. [online] Available at: <https://academy-wsava.thinkific.com/courses/wsavaseminar-global-impact-of-covid19>.
41. The Guardian. (2022). 'I've lost my best mate': the owners forced to give up their pets in the cost of living crisis. [online] Available at: <https://www.theguardian.com/lifeandstyle/2022/oct/19/ive-lost-my-best-mate-the-owners-forced-to-give-up-their-pets-in-the-cost-of-living-crisis>
42. Haque, W., et al. (2022). Price Comparison of Human and Veterinary Formulations of Common Medications. *JAMA Internal Medicine*, [online] 182(11), p.1216.
43. Barrons. (2023). A Drug for Itchy Dogs Costs \$1,200. Why Is the Human Equivalent \$43,000? [online]. Available at: <https://www.barrons.com/articles/drug-costs-pricing-dogs-humans-1479e10e>
44. Williams, A., Williams, B., Hansen, C.R. and Coble, K.H. (2020). The Impact of Pet Health Insurance on Dog Owners' Spending for Veterinary Services. *Animals*, [online] 10(7), p.1162.
45. Zoetis-HABRI. (2022). International Human-Animal Bond Survey. <https://habri.org/international-hab-survey/>.
46. HABRI. Survey of U.S. Pet Owners. [online] Available at: <https://habri.org/pet-owners-survey/>.
47. Da Graça Pereira, G., et al. (2014). Comparison of interpretation of cat's behavioral needs between veterinarians, veterinary nurses, and cat owners. *Journal of Veterinary Behavior*, [online] 9(6), pp.324-328.
48. HABRI. International Survey of Pet Owners & Veterinarians. [online] Available at: <https://habri.org/international-hab-survey/>.
49. European Association of Establishments for Veterinary Education. (2023). Program points of 2023 congress in Leipzig (Germany).
50. HABRI. HAB Certified. [online] Available at: <https://habri.org/hab-certification>.
51. Selby, L.A., et al. (1979). A survey of attitudes toward responsible pet ownership. *PubMed*, 94(4), pp.380-6.
52. World Health Organization (2017). One Health. [online] www.who.int. Available at: <https://www.who.int/news-room/questions-and-answers/item/one-health>.
53. McLennan, K., Rock, M.J., Mattos, E. and Toohey, A.M. (2022). Leashes, Litterboxes, and Lifelines: Exploring Volunteer-Based Pet Care Assistance Programs for Older Adults. *Frontiers in Psychology*, 13.
54. Clower, T. and Thornton, T. (n.d.). The Health Care Cost Savings Of Pet Ownership. [online] Available at: <https://habri.org/assets/uploads/Health-Care-Cost-Savings-Report.pdf2023>
55. Europeanpetfood.org. FEDIAF EuropeanPetFood releases its annual Facts&Figures confirming 340 million pets in Europe. [online] Available at: https://europeanpetfood.org/_/news/fediaf-europeanpetfood-releases-its-annual-factsfigures-confirming-340-million-pets-in-europe/.
56. Animal Health Europe. (2022). The European animal medicines industry in figures. Available at: https://animalhealthurope.eu/wp-content/uploads/2023/07/FactsandFigures_2022.pdf.
57. Fve.org. (2021). About FVE- Federation of Veterinarians of Europe. [online] Available at: <https://fve.org/about-fve/>
58. World Health Organisation (2020). Healthy ageing and functional ability. [online] World Health Organisation. Available at: <https://www.who.int/news-room/questions-and-answers/item/healthy-ageing-and-functional-ability>.
59. Except for the illegal dog trade that was tackled as part of the Animal Welfare Platform: European Commission. Illegal movement of pets. [online] Available at: https://food.ec.europa.eu/safety/eu-agri-food-fraud-network/eu-coordinated-actions/illegal-movement-pets_en.



zoetis



This report is the result of the joint work of Zoetis, the Federation of European Companion Animal Veterinary Associations (FECAVA) and the Human Animal Bond Research Institute (HABRI), Based on their knowledge and expertise.