



The Impact of Dog Food Brands on the Stability and Sustainability of their Owner's Active Life.

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Dissertation written under the supervision of Professor Pedro Tavares.

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Abstract

In a world where connections are growing stronger every day, one of the most enduring relationships is between humans and dogs. Throughout time, dogs have become increasingly important in our lives, earning the title of "man's best friend" in various contexts. Dogs are widely recognized for being companions, protective guardians and even adept at aiding in the healing process of illnesses. Indeed, dogs profoundly impact the well-being of their owners.

Based on this premise, this research project examines the choices and lifestyle changes that pet owners experience before and after acquiring a dog. Its departures from insights and opinions from experts to gain an understanding about how dog food brands influence owners' active lives, in terms of stability and sustainability.

To collect quantitative and qualitative data for this study, information was gathered from dog owners, breeders, and veterinarians. These views were complemented and enriched with interviews with Nestlé's Vet Channel Advocate and Purina Brand Manager.

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Resumo

Num mundo em que as relações se fortalecem a cada dia que passa, uma das ligações mais antigas e mais fortes é a que existe entre os humanos e os cães. Ao longo do tempo, os cães ganharam um significado crescente nas nossas vidas, tendo ganho o título de "o melhor amigo do homem" em vários contextos. Os cães são conhecidos por serem companheiros dedicados, guardiões obedientes e até poderosos curadores de uma vasta gama de doenças. Para além do seu valor intrínseco como animais de estimação, os cães influenciam significativamente o bem-estar dos seus donos.

Como tal, esta tese investiga as escolhas e o estilo de vida dos donos de animais de estimação antes e depois da posse de um cão, bem como os pontos de vista e opiniões técnicas dos especialistas. O objetivo é proporcionar uma compreensão abrangente do impacto das marcas de ração para cães na estabilidade e sustentabilidade financeira da vida ativa dos seus donos.

Foram recolhidos dados qualitativos através de entrevistas com donos, criadores, veterinários e também com a Vet Channel Advocate da Nestlé e a Brand Manager da Purina. O objetivo foi analisar os principais atributos que os donos valorizam quando selecionam o alimento adequado para os seus cães e explorar a forma como a posse de um cão influenciou as suas vidas.

Título: O Impacto das Marcas de Ração de Cão na Estabilidade e Sustentabilidade Financeira na Vida dos Seus Donos.

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1. Introduction

Humans and dogs share a connection in our interconnected world. Over time, dogs have earned the title of "man's best friend" due to their loyalty, guardianship qualities and even their remarkable ability to provide healing to those facing health challenges. Beyond being cherished companions, dogs have an impact on the well-being of their owners. Owning a dog can bring about transformative and enlightening experiences for both individuals and families. Dogs are not merely house pets. They tend to become members of the family, offering numerous benefits, not only to their owners, but also to their entire household.

Having a dog brings companionship and affection into people's lives. The unwavering dedication and heartfelt devotion displayed by dogs create bonds with family members. They become friends with whom one can celebrate occasions and find comfort during difficult times. Dogs play a role in providing solace, reducing stress, alleviating loneliness, and strengthening family ties. Also, they play a crucial role in the enhancement of mental and emotional well-being.

The responsibility that comes with owning a dog is essential for growth, for young individuals. Activities that are associated with taking care of a pet, such as feeding, walking, and fulfilling other needs instill discipline and responsibility. It also teaches children values such as empathy, compassion, and sustainability, as it teaches to consider the needs of another living beings.

Furthermore, having a dog at home encourages people to engage in activities such as playing and walking. Dogs have a way of inspiring learning and nurturing creativity in children, due to their curious nature. Engaging in activities with dogs can provide stimulation for everyone in the family. By promoting a healthy lifestyle for all family members, owning a dog enhances well-being and overall quality of life.

According to Pordata (2023), the average individual earnings in Portugal vary across sectors. Those working in the electricity, gas and water sector earn an average of 2,965.8 euros per month. The financial and insurance activities sector follows closely, with earnings of 2,374.4 euros per month. Lastly, workers of international organizations and other extraterritorial institutions have an earning of 1,997.5 euros per month. In 2021, the average monthly earnings in Portugal, including all sectors, was 1,294.1 euros.

According to data from 2021, the average family in Portugal spends 29,921.7 euros per year on food, drinks, and tobacco, making it the biggest source of expenses. The second highest source of expenses is housing, including water, electricity, gas, and other fuels, where families spend, on average, 26,897.8 euros per year. Next, we have transportation and communication, with a spending amount of 20,092.6 euros per year. These figures show an increase of 18.5% between 2011 and 2021 (Pordata, 2023).

As reported by Jornal Público (2022), Portugal has more than 3.1 million pets registered in the Sistema de Informação de Animais de Companhia.

Recent studies suggest that the emotional bond and companionship between dog owners and their furry friends can have an impact on health. This connection has implications for psychology and public health. While research on the health benefits of ownership for humans is expanding rapidly, there is still room for investigation into how canine health directly affects the well-being of dog owners.

To gain an understanding of this relationship, and establish a knowledge base about it, this dissertation employs a mixed methods research approach. It aims to provide descriptions by examining studies, publications, and articles, to determine what components should be included in a proper diet, for dogs.

The existing body of literature contains a wealth of knowledge, encompassing concepts and expertise derived from years of research and exploration. It allows us to understand the context, prevailing beliefs and significant findings related to the connection between dog owners' health and the quality of their pet's diet.

Quantitative data was collected through surveys and interviews, as means to gain insights into how dog owners perceive and think about this matter. We conducted interviews with ten dog owners, five breeders and eight veterinarians, to obtain an understanding of the issue at hand. These interviews aimed to explore how breeders and veterinarians influence dog owners in selecting high quality food brands, as well as how these choices impact both the well-being of dogs and the daily lives of their owners. The ten dog owners were specifically asked about their criteria for choosing a brand of dog food, what attributes they considered important and how their choice affected them socially, emotionally, and financially.

To further enhance our understanding of the subject, we reached out to Nestlé for a meeting, where I kindly requested information pertaining to my study – an invitation that was graciously accepted. During my time on Teams, I had the pleasure of meeting Dr. Ana Carolina Bartolomeu, who oversees the Advocacy Vet Channel and the Purina brand at Nestlé.

To gather a range of perspectives, we distributed three different questionnaires, for different agents in dogs' life: Owners, veterinarians, and breeders. We received 218 responses from owners, 30 from vets and 26 from breeders. These questionnaires delved into how owners choose a brand of dog food, including the impact of veterinarians and breeder's advocacy, and on the impact of having a dog in owners' social and financial well-being. From the three questionnaires, we were able to collect useful data that was then analyzed using descriptive statistics and simple correlation metrics. By combining the conclusions from this analysis with insights, it was possible to better understand the correlation between animal health and owner well-being.

From the analysis done, it became clear that three different groups can be categorized according to their approach to dog food choices. One group strictly adheres to veterinarians' dietary recommendations. The second group includes those who base their decisions on information from media sources or influencers (such as friends or other dog owners) Also, there is a third group, composed by those who find a balance between advice and external factors.

Based on interviews, we were able to gather insights on the recommended frequency of visits to the veterinarian for sick dogs, compared to healthy ones. Additionally, we explored the impact of dog health, on the cognitive well-being of their owners. After establishing these connections, we will delve into the aspect, including expenses related to dog food and medical bills. We will also consider the pros and cons that dog ownership brings to the owner's lifestyle.

2. Literature Review

2.1. Brand

A brand, as described by Kotler P. (2000), is the name associated with one or more items in a product line, that helps identify their source and character. On their hand, the American Marketing Association defines a brand as a combination of a name, term, sign, symbol, or design intended to differentiate the goods and services of one seller or group of sellers from those of competitors. According to Keller K.L. (2003), whenever marketers come up with a name, logo, or symbol for a product, they are essentially creating a brand.

Júlio G.R.C.; Pastorelli J.R.A.T. (2022) emphasize that brands are crucial for the success of companies. On that sense, corporate managers are increasingly recognizing the power and impact that brands can have on their businesses' success. Consequently, creating and managing a powerful brand has become a factor that can lead to sustainable competitive advantages and, as a result, business success.

This creation and management of brands is useful called branding. In fact, branding can be defined as a series of activities, performed to optimize how organizations' brands are managed, individually and as a portfolio, with the aim of providing differentiation and adding value to the business, which results in enhanced reputation.

The main objective in branding is to establish a positive reputation for a product or service. Nevertheless, efforts need to be lasting. According to research conducted by Heleno et al. (2022), creating relevance for a brand and establishing connections with audiences is a complex undertaking that yields results in the medium to long term. The goal is to solidify the brands position.

2.2. Dog Food Industry – Purina Nestlé

There are two categories of brands within the dog food industry: Mass market brands and specialist brands. The first encompass brands that do not target any specific type of dog or owner, while the second targets specific customers, through the offer of various levels of premium dog food. All specialty brands, including Purina, aim to target customers who recognize the differences between dog food options and who are willing to pay more for quality. In other words, Pro Plans intended audience consists of individuals who prioritize high quality

dog food over mass produced alternatives. With its reputation for quality and international expertise, Purina One has the potential to revolutionize the dog food market.

Throughout the years, Purina One has dedicated its efforts to expanding its knowledge through research, at their Research Center. They continuously strive to test formulas and products while studying animal behavior and the preferences of owners. Their goal is to be recognized by consumers as a brand that genuinely cares about the well-being and health of pets (Melo S.I.A.S, 2009).

Purina (2023) offers a range of products with varying prices and nutritional quality, ranging from good to exceptional. Their diverse portfolio ensures that millions of lives are positively impacted every day, guaranteeing that all pets have access to a balanced diet. This effort is recognized by guardians who deeply rely on Purina to contribute to a longer and happier life of their pets, enabling them to live happier lives, alongside their loved ones.

2.3. Dog-Human Relationship

According to Prata C.J. (2022), more than half of Portuguese homes are occupied by companion animals, with 1.4 million cats and 2 million dogs. According to a previous Portuguese survey, pet owners' top concerns include nutrition (39.6%), welfare (47.7%), and health evaluation (45.0%).

According to Barroso et al. (2021), it is crucial to understand the link between health and owning a pet, to enhance our understanding of how interactions between humans and animals' impact both parties' well-being. The notion that "pets are beneficial for you" has gained popularity over time, and the negative effects that have been identified typically revolve around diseases, and not around human-animal interactions.

Pet owners shape their emotional and personal identities through their involvement with products associated with pets. It appears that the dynamics of bonding with animals go beyond material possessions. Customers share an understanding that their relationship with one or more animal companions has value, leading them to develop connections like those found in human relationships (Boya et al., 2012).

According to Boya U.O., Hyatt E.M. And Dotson M.J. (2014), understanding our relationships with our pets can provide insight into ourselves as consumers. It is true that each dog owner has a relationship with his dog but, despite existing common elements between relationships, their characteristics and significance vary. It is evident that the bond between dog owners and their pets has evolved over time, becoming more meaningful in people's lives.

2.4. Owner's Characteristics

As expected, the owner plays a role in the relationship. Factors such as life before pet ownership and the desire for companionship impact the well-being of dogs. In terms of marital status, individuals who are single tend to be more attentive to their dog's care. This could be because they have time or because there is less attention divided among multiple relationships. Conversely, when a dog is co-owned or shared with others the level of care tends to decrease. Sharing ownership also weakens the bond between owners and their dogs. In this case, the dog appears to be less confident and not as devoted to its owner, according to Marinelli et al. (2006).

2.5. The Pet Effect

The significance of pets in people's lives, as in mass media, popular culture and marketing communications has been acknowledged by Jia et al. (2022). However, there has been limited research conducted on how pets can influence consumers perceptions, choices, and behaviors. Most existing studies on relationships focus on examining how owning a pet affects the beliefs and actions of the owner.

Smith (2012) explores the effects of companion animals by considering the increased life expectancy and prevalence of diseases among the population. Companion animals offer health related advantages, such as improvements in well-being and overall health. These benefits can be categorized into three areas: health, work, and physical health. Dogs can be especially impactful when they serve as social facilitators or for owners who engage in exercise with their dogs, and social health.

In a study, by Martins C.F., Soares J.P., Cortinhas A, Silva L, Cardoso L, Pires M.A. And Mota M.P. (2023), evidence was found suggesting a connection between increased activity and the bond between pets and their owners. Interestingly, dogs seem to be the animals that often lead

to higher levels of physical activity. This could be due to the support they provide, the motivation they generate for exercise, or even a sense of responsibility towards taking care of them. Accountability is frequently emphasized as a viable tactic to raise physical activity levels in the public and among older adults.

2.6. Pet Food Trends

Moving on to food trends; according to Altitude Marketing (2020) it is common for dog owners to consider their pets as part of their family. As a result, many pet owners opt for quality and nutritious food options for their companions, just like they would choose for themselves. The influence of individual preferences and concerns on food choice is not new, however, these trends are now being reflected in pet food much more quickly than before. This accelerated cycle and the rise of advanced marketing strategies on this core can be attributed both to the easier access clients have to information and to the higher interest and investment that has taken place in the pet food industry.

Sometimes, the pet industry has surpassed the food industry in areas such as digestive health and supplements that promote probiotics and prebiotics. According to Beaton L. (2018), the market for food continues to expand rapidly. However, this growth goes beyond labeling a product as "natural." Pet owners are becoming more discerning when it comes to finding the diet for their animal companions. With the increasing trend of researching and purchasing food online, pet food companies have now an opportunity to directly engage with consumers.

2.7. Dog Expenses

Studies on happiness suggest that people can enhance and maintain their happiness better by making changes in their routines, rather than focusing solely on external factors. In this regard, spending money on pets is the research-backed method that pet owners can adopt to improve their well-being. According to research, giving a gift to a pet may not instantly bring joy to a pet owner, but contributes to higher overall happiness levels among owners. This may be particularly relevant for organizational success and happiness enhancement strategies. Deren J.S., Sim J.J., White M., Khan N., Makja E.A. (2021).

3. Methodology

The main objective of this dissertation is to understand how dog food choices impact dog owners, with a deep dive in aspects such as nutrition, health and even psychology.

The reason behind this research stems not only from a personal admiration for dogs, but also from the previous research and understanding of the impact they have on their owners' lives and, as a result, on society. To comprehensively grasp the connection between maintaining a balance between dogs and their owners mental, physical, and financial well-being, the target audience was segmented and studied.

In a first stage, the objective was to frame the topic, to create a basis and framework for more in-depth research. With that objective in mind, interviews with dog owners, veterinarians, and breeders have been conducted, to gather viewpoints. Complementary, an interview to Dr. Ana Carolina Bartolomeu has been conducted via Teams. Dr. Ana Carolina is Advocacy Vet Channel and Purina Brand Manager at Nestlé. All the interviews have been extremely insightful, and the width and depth of the questions made have given a 360° view on the topic, as most of the stakeholders with a role to play on the dog food market have been interviewed.

After this more qualitative phase, it became relevant to go a step deeper and quantify some of the views, trends and behaviors that shape this market. So, three questionnaires - for dog owners, veterinarians, and breeders were created and distributed, collecting x, y, and z answers, respectively. Given the size of each sample and the addressable target, all the questionnaires have been considered valid and conclusions were drawn.

After having all the relevant data, descriptive statistics and some insightful cross-data analyses were performed to reach the desired conclusions and proof the hypotheses initially created.

3.1. Research Design

To gain a broader and more complete understanding of the topic at hands, I decided to split the research into two phases: the qualitative phase and the quantitative phase. The qualitative phase included the depth interviews with pet food specialists, dog owners, veterinarians and breeders and a deep literature review on the various topics influencing dog food market and dog owners'

lifestyle. The combination of desk research and interviews allowed me to complement previous studies with more practical and updated opinions on dogs and pet food.

After this, a second research phase, more quantitative, has taken place. The three questionnaires delivered have provided data that was analyzed and then used to proof or disproof the hypothesis and ideas generated in the first phase.

3.2. Data Collection

3.2.1. Primary data

For the first phase, interviews with 10 dog owners, 8 veterinarians, and 5 breeders have been conducted. These interviews provided insights into experiences, perceptions and practices related to choosing and/or recommending dog food brands. Also, interviewees have spoken about how dogs impact owners' everyday lives.

In the second phase, three questionnaires were administered to gather a broader range of opinions and insights. Different questionnaires were given to owners, veterinarians, and breeders. The questionnaire targeting dog owners specifically yielded 218 responses. Additionally, the questionnaire for veterinarians resulted in 30 responses and the one for breeders in 26 responses.

3.2.2. Secondary data

To gain perspectives from industry professionals within this field of study, an interview with Dr. Ana Carolina Bartolomeu was conducted via Teams. Dr. Bartolomeu is an Advocacy Vet Channel representative as a Purina Brand Manager, at Nestlé.

In this situation I had the opportunity to validate the information I had gathered earlier in my research. Thanks to her expertise and influential position at Nestlé, she provided me with insights into the industry. This allowed me to deepen my understanding of how different dog food brands impact the lives of dog owners.

4. Results and Analysis

4.1. Qualitative Research

Interviews:

I conducted interviews with 23 individuals, including dog owners, breeders, and veterinarians to gain insights, into their perspectives. Here is a summary of their viewpoints.

4.1.1. Dog's Owners Point of View:

To better understand the dynamic between dog owners and their pets, as well as its impact on the owners social, emotional, and economic well-being, 10 dog owners were interviewed. All interviews were conducted with dog owners who had a monthly income ranging from 1000 to 2000 euros.

Answers exploring owners' lives before and after having a dog were explored, to understand how their "new best friends" have influenced their way of life.

Answers **Before** Having a Dog:

What are the habits, attitudes, motivations, and lifestyles of families/individuals who keep dogs as pets (focus on the way of life and not on the fact of having a dog)?

The respondents' answers varied, from walking, reading, spending time with friends to going for walks or engaging in activities.

What factors contribute to the happiness of families/individuals who have dogs as pets - physical, mental, social, and financial health and balance (focus on the way of life, not on the fact of having a dog)?

To explore this, I interviewed people about what influenced their psychological well-being before having decided to adopt a dog. Spending quality time with friends, engaging in activities like reading, surfing the internet and taking walks in nature were among the mentioned factors.

Also, it was concluded that the average person, before getting a dog, spends approximately 200 euros on personal programs.

Answers **After** Having a Dog:

What factors contribute to the happiness of families/individuals who have dogs as pets - physical, mental, social, and financial health and balance (focus now on having a dog)?

Now shifting our focus to those who already have dogs as pets - when discussing this topic with them - it became clear that owning a dog significantly contributes to happiness. Respondents highlighted reasons for this; besides being companions who offer unconditional love and support, dogs also encourage owners to plan and structure their lives better, while fostering a sense of responsibility. Moreover, many owners emphasized that walking their dogs provides them valuable moments for introspection and contemplation about life.

Furthermore, dog owners mentioned that they became physically active due to the long walks that having a dog requires. As a result, having a dog served as motivation for them to participate in sports and engage in activities.

When I inquired about their expenditure on dog food, most of them stated that they spend over 60 euros, per month.

What factors contribute to the health and well-being of dogs as pets?

When I asked the owners what they believed contributed to their dog's health and well-being, they emphasized the importance of good nutrition, engaging in activity together and regular outings. Giving attention, affection and providing companionship for playtime were the other factors highlighted as triggers for dog well-being.

How does the lack of health and well-being of dogs as pets affect the happiness (physical, mental, social, and financial health and balance) of their owners?

I also sought to understand how an owner's emotional satisfaction was affected by their dog's health and overall well-being. Each participant expressed feelings of depression, anxiety and loneliness when faced with situations where their dog was unwell.

When discussing the topic of dog illness, we also touched upon the issue of visiting the vet and how it can have an impact on owners' well-being. Veterinary care tends to be quite expensive and time-consuming, disrupting owners' daily routines, lifestyles, and financial stability.

Moving on to the topic of food, I asked owners about their decision-making process when it comes to choosing what and how much food to give their dogs.

Focusing on food, how do owners decide what food and how much food to give their dogs (what are the factors that influence this decision): product composition, brand, communication (traditional/digital), influencers (breeder, vet, friends, public figures, you because you have experience, ...), stores?

Factors that influence this decision include the characteristics of the product itself – brand, food composition – as well as recommendations from various sources. These recommendations can come from experiences or external sources like veterinarians, breeders, or even online reviews.

Lastly, I inquired about any connection between owners' choice of a food brand and their own well-being. Everyone agreed that if the dog is fed the right food and feels good and satisfied, it can immediately change its mood and, consequently, the mood of its owners.

4.1.2. Dog's Vets Point of View:

To give more substance to the research topic at hand, I decided to consult with eight veterinarians.

What do you consider to be the main factors that contribute to the health and well-being of dogs from a clinical point of view?

I began by asking them about the elements they believe are important for dog's well-being and health. They emphasized that access to nutrition is of importance, as it plays a significant role in dogs overall health. It is vital to provide a diet that meets each dogs' requirements based on their age, size, and breed. However, they also advised owners to consult their veterinarian for advice.

Additionally, regular exercise was highlighted as a factor. Dogs need exercise to maintain a healthy weight and cardiovascular health. The type and intensity of exercise vary depending on the breed, age, and energy level of the dog. It was noted that obese dogs are more prone to issues such as diabetes, arthritis, heart problems and kidney complications.

Exercise is important for dogs because it helps them to maintain a weight. To prevent disease and avoid infections, veterinarians recommend following dogs' immunization schedule and taking measures to protect them from parasites like fleas, ticks, and internal parasites. Therefore, it is crucial for owners to regularly visit the veterinarian for checkups and preventive care, to identify and treat any health issues before they worsen.

Focusing on the food that dogs eat, do you think that your opinion, as a veterinarian, is an influencing factor in the decision to choose food and the amount of food that owners give their dogs?

When discussing the role of veterinarians in deciding the type and amount of food given to dogs, it has been observed that proper nutrition greatly impacts their health. That is the reason why this subject is always discussed with owners, during consultations. The advice provided

by veterinarians does influence the choices regarding food type and portion size. However, some owners may be less inclined to follow recommendations when it comes to non-higher quality meals. This may happen due to the higher price of these meals or to the lack of necessity perceived by owners. Even with these hurdles, veterinarians often highlight that these specialized diets can help prevent issues.

As veterinarians, how do you influence dog owners' choice of food?

I also wanted to understand how vets encourage owners to consider the type of food. Every veterinarian interviewed agreed that the main intention is to help owners understand the importance of nutrition in the general wellbeing of dogs and its role in preventing health issues.

Based on what I have learned, a good diet should include fats like fatty acids of saturated fats. It should have balanced salt levels, provide a source of fiber, be enriched with minerals and vitamins, and contain high quality proteins, for optimal protein content. It was observed that commercial pet meals often lacked these qualities, when compared with more premium options. These commercial meals tend to contain sugar, have little nutritional value and be high in salt and low in protein. Such diets could have an impact on animals, as they lack nutrients and may lead to future health problems, such as joint pain, diabetes, skin issues or kidney complications.

Veterinarians often explain to owners that the food they choose for their pets has an impact on their health. They emphasize that, even though some meals may be pricier, investing in them can prevent health issues that would ultimately cost more to treat. During the discussions about how different dog food brands affect the stability and financial well-being of dog owners, it was noted that animal health can also be expensive. They therefore strongly advised switching between a good feed from a brand that was suggested and a less excellent one, realizing that the value of good feed is significantly higher.

How do you think the well-being of dog owners is related to the choice of dog food brands?

When I asked a professional about how the choice of dog food brands relates to the well-being of dog owners, they explained that opting for a high-quality brand ensures nutrition for dogs,

which in turn contributes to their health and well-being. A healthy and free from allergies content requires attention and becomes less burdensome for owners, both emotionally and financially.

A high-quality brand of food, even though it may be more expensive, helps prevent issues that can become costly.

On average, how much does a routine vet consultation cost?

When inquired, veterinarians stated that many factors, such as the type of appointment and the location of the clinic, can affect the cost of a vet appointment. Despite that, the average consultation costs around 65 euros.

How many times a year does a healthy dog go to the vet?

When I asked how frequently a healthy dog should go to the vet, I was told that, for adult dogs, an annual checkup is generally recommended. This yearly visit allows veterinarians to assess the health of dog's update vaccinations if needed and conduct tests.

What kind of diseases is a dog that doesn't have a balanced diet likely to have?

Dogs that do not have a balanced diet may experience problems; Firstly, obesity can be associated with various health issues, like joint problems, diabetes, and heart disease. Additionally, malnutrition can manifest in ways including coat quality and weight loss. Dogs can also experience issues if they follow a diet that doesn't prioritize oral health. This can lead to disease and other dental problems. An imbalanced diet can also result in disorders, like diarrhea or constipation. When a dog's diet contains quality or inappropriate ingredients, it may trigger food allergies or sensitivities resulting in skin problems, digestive issues, and ear infections. Bone problems can arise when dogs follow unbalanced diets, impacting bone and joint development and potentially leading to conditions such as hip dysplasia or osteoarthritis.

Insufficient nutrition can weaken a dog's system, making them more prone to infections and diseases. Additionally, high levels of sodium and inadequate nutrients in a dog's diet can contribute to heart disease. Organ dysfunction may occur due to nutrients affecting organs, like the liver and kidneys.

How many times should a dog with some of the problems highlighted go to the vet? How much does it cost, per year?

For a dog experiencing any of these problems, the average annual cost of care and the frequency of vet visits would depend on many factors. When it comes to managing obesity, in dogs, it usually involves checkups along with dietary adjustments, which might include medications or supplements. The costs associated with treating food allergies can differ based on their severity, ranging from a hundred euros to thousand euros per year. Treatment typically involves making changes to one's diet and taking medications. For issues like cleanings and extractions, the expenses can vary depending on the seriousness of the problem. It may cost between a hundred euros to over a thousand euros. Addressing skin and coat problems may require shampoos, medications, and adjustments in diet. The annual expenses for managing these issues range from a hundred to more than a thousand euros. Managing bone problems, like arthritis, might involve veterinary checkups, pain relievers and supplements. The annual costs can vary from hundred euros to over a thousand euros. Chronic conditions such as diabetes, heart disease and kidney disease often necessitate medication specialized diets and frequent visits, to the veterinarian. These treatments can be quite costly potentially exceeding thousands of euros, annually.

4.1.3. Dog's Breeders Point of View:

To gather viewpoints, I also consulted with five trusted breeders from the Alentejo region. Through in-depth conversations, lasting around one and a half hours each, it became evident that they all shared perspectives.

How do you think the well-being of dog owners is related to the choice of dog food brands?

In relation to the well-being of dog owners and their choice of dog food brands, I asked how these aspects are intertwined. All breeders unanimously agreed that providing the right diet to dogs, from a certain age, is crucial for ensuring their overall health and well-being. This not only benefits the dogs themselves, but also enhances their owners' quality of life.

Additionally, it was emphasized that investing in food brands reflects a commitment to prolonging the lifespan of dogs. By maintaining health, dogs are less likely to fall, which ultimately saves owners money on veterinary visits and prescribed medications.

As breeders, how do you influence dog owners' choice of food?

When inquired about how they assist dog owners in making the food choices for their pets, breeders explained that their main responsibility is to provide guidance on nutrition. They always recommend brands that they believe are most suitable for the breed they are raising. Their aim is to educate dog owners, by explaining the composition and various options available. This emphasis on nutrition also helps to foster a bond between owners and their dogs, right from the start.

Curious about the connection between choosing the food and the stability of an owner's life, I asked them for their thoughts. They explained that poor nutrition can lead to health issues like obesity, allergies, or digestive disorders, which may limit a dog's activity and consequently impact the lifestyles of their owners, as they might have to invest time and money in medical treatments.

4.1.4. Nestlé Case Study

In the interview with Dr. Ana Carolina, I tried to have an insider view from the industry.

How is the dog food market in Portugal? How do you position yourself?

Pets have become a part of people's lives and ensuring their well-being and nutrition is a constant concern for pet owners. Therefore, Purina, a subsidiary of Nestlé, has emerged as one of the growing businesses in Portugal, Europe and worldwide.

What impact does the well-being of dogs have on their owners' lifestyles?

According to the veterinarian interviewed, pets are now regarded as members of families. Consequently, any health problems affecting them ultimately affect the family unity. Animals attending veterinary visits can have significant emotional and financial consequences on their families.

What types of consumers do you think there are in the dog food market? How are they different? How does Nestlé react to these differences?

According to a study, feeding dogs homemade food has led to issues encountered by veterinarians. As this has proven to be a potentially hazardous matter, it is on the hearth of regulation on animal nutrition. Having that in mind, FEDIAF (European Pet Food Industry Federation) requires brands to incorporate nutrients for the well-being of pets.

Nestlé boasts a range of dog food brands under Nestlé Purina. The brand aims to cater to diverse consumer preferences by offering options tailored to their needs. Emotional pet owners prioritize their dogs' reactions towards the food itself, while rational owners seek out high quality products that provide nutrition for their pets.

This type of food is regarded as having a high nutritional value, and it has been the subject of scientific and clinical research submitted to journals, with the results published after testing; for

quality-price owners, who aren't willing or able to pay a high price, but don't want to give up quality; for the health-conscious, those who also want the best for their animals, Nestlé has created pet food using super ingredients such as sweet potatoes to replace rice or wheat. Finally, there is dog food designed for sick dogs, where the company uses recipes to treat or prevent issues, with nutrition playing a major role in this regard.

How does the well-being of dogs relate to the choice of food brands?

Current research indicates that modern nutrition goes beyond meeting dietary needs. Scientific evidence supports the idea that the modern diet can boost dogs' system, protecting them from diseases and promoting overall well-being. The choices made in dog's overall diet play a role in strengthening their immunity system, preventing imbalances, and improving overall health.

What impact does veterinary advice have on the choice of feed recipes? How does Purina Nestlé ensure that the brand complies?

Veterinarians have an impact on the revenue generated by Nestlé, demonstrating the company's strong commitment to animal welfare.

The company invests heavily in research facilities where thousands of cats and dogs are accommodated for testing purposes, across 800 locations. These teams consist of veterinarians specialized in food nutrition, microbiologists, and behaviorists who are experts in understanding animal behavior. In addition, to ensure safety and provide quality, involving veterinarians guarantees that the food offers benefits beyond fulfilling animals' basic needs.

Each dog at these facilities is assigned a handler for activities like exercise, grooming and socialization with other dogs and people. To maintain the animals' physical and mental well-being, the facilities are equipped with runs and toys. Regular physical examinations and tests, assessing fur, skin, digestive systems, and a blood teste every six months, contribute to the overall health monitoring.

Dogs utilized in testing come from breeders and represent to specific breeds, ensuring a diverge range and the ability to test the food on various dog sizes (small, large, and medium). Following

their tenure at the research facilities, the dogs are adopted with Nestlé overseeing the provision of their food.

4.2. Quantitative Research

4.2.1. Dog's Owners Point of View:

From better assess the impact that dogs have on owners' daily life, a questionnaire targeting dog owners has been distributed and analyzed. (Appendix 1)

Because my study was aimed at dog owners, and I needed to distinguish between those who had dogs and those who did not, I started the questionnaire with the question "Do you have a dog?" Those who answered yes completed the questionnaire, while those who answered no did not.

The first question asked for a multiple-choice answer about monthly household income. 0-700€, 700€-1400€, 1400€-2100€, 2100€-2800€, 2800€-3500€, and >3500€ were the six options. The biggest share of the respondents, 21.1%, had their income between 2100€ and 2800€. This modal range is aligned with the average monthly household income of 2309.40€, calculated through an arithmetic average, in which a last range of 3500€-4500€ was assumed. (Appendix 4)

The first section of the questionnaire consisted of four questions that owners were to answer thinking about the time prior to having a dog.

On the first question, dog owners were asked how much they spent on leisure activities such as restaurants, sports, and events. There were five options: 0-50€, 50€-100€, 100€-200€, 200€-300€, and >300€. With a percentage of 35.3%, the range with the most responses was 100€-200€. After calculating the average amount spent on leisure activities such as restaurants, sports, and events, the amount received by the interviewees is 186.35€, which corresponds to approximately 8% of the average income. The arithmetic mean was calculated using 300€-500€ as the highest range, as an assumption. (Appendix 5)

On the third question, I wanted to assess dog owners' exercise routine before getting a dog. Once a week, more than once a week, once a month, or never were the answer options. 46.3%

of the respondents already exercised, more than once a week before getting a dog. (Appendix 6)

When asked what they thought was the most contributing factor for their emotional and physical balance before getting a dog, respondents listed work, health food, professional help, family, friends, and leisure as their top priorities. The top 3 factors were friends, family and healthy food, with 64.22%, 56.88%, and 45.41% responses, respectively. (Appendix 7)

To round out the first section of the questionnaire, I asked the interviewees how they spent their free time before getting a dog. Friends, sports, the beach, and TV were among the options suggested. The most popular answers were TV, Family, and Countryside, which received 44.5%, 43.6%, and 42.2% votes, respectively. (Appendix 8)

In the second section of the questionnaire, owners were asked to describe current their lives, in which they have a dog. The first question asked how much they spend on their dog's food, health, and well-being, on average per month. There were four price ranges to choose from: 0-30€, 30€-60€, 60€-100€, and >100€. The most popular range, with a percentage of 50.9%, was 60€-100€. The arithmetic mean, equal to 88.76€, is on the top border of this range It was decided to take 100€-300€ as the top range, as an assumption. (Appendix 9)

I wanted to know how often dog owners exercise now that they have a dog in the second question. The answer options were once a week, more than once a week, once a month, or never. The most popular answer, with 52.8% of the votes, was more than once a week. (Appendix 10)

When asked what they thought was the most important emotional and physical balance now that they had a dog, the most popular answers were friends, family, and work, with 133,107, and 91 votes, respectively. (Appendix 11)

I also inquired about the interviewees' leisure activities now that they have a dog. Some of the suggestions included friends, the weather, sports, the beach, and television. The most popular answers were Family with 48.62%, Countryside with 39.45%, and a tie of 38.53% between Beach and TV. (Appendix 12)

When I asked the owners to rate the dog's impact on their physical and emotional well-being on a scale of 1 to 5, with 1 being a low relationship and 5 being a strong relationship. the average

was 3.77, with a standard deviation of 0.947. This points towards a relatively high relevance of dogs on well-being, despite the variability in the sample (Appendix 13)

To determine how the owners' financial balance, emotional and social happiness were affected by their lack of health and well-being, I created a scale from 1 to 5, with an average of 3.84 and a standard deviation of 1.040. Based on these findings, we can conclude that a dog benefits its owner's well-being, and that the dog's poor well-being has an impact on the owner's life. (Appendix 14)

A question along these lines was also asked to determine what aspects owners valued in terms of their dogs' health and well-being. Affection, walks, companionship, play, healthy food, and other options were provided. Based on the responses, I concluded that companionship is, by far, the most valued with 62.84% of responses, followed by walks with 49.54% of responses, and healthy food with 46.79% of responses. (Appendix 15)

So, it was concluded that dog food was considered on the most important factors for dog's health and well-being. To better understand what was valued when it came to choosing food, respondents were asked to rate, from 1 to 5 (in which 1 is low influence and 5 high influence) some different factors that may move the needle in terms of pet food preference: food composition, brand, price, communication or recommendations, being them from the breeder veterinarians pet food stores or even self-recommendation, based on previous experiences. Recommendations from veterinarians are highly influential, with an average of 4.17 and a standard deviation of 0.859. Highly important as well is self-recommendation based on previous experiences, registering an average of 4.13 and a standard deviation of 0.799.

According to respondents, brand composition also plays a role, with a perceived average influence of 3.92 in 5 and a standard deviation of 0.855., Breeder recommendations are perceived with not as influential, with an average of 3.69 and a standard deviation of 1.039 but are still more valued than factors such as price and brand, with averages of 3.66 and 3.64 and standard deviations of 1.049 and 0.966, respectively.

Finally, recommendation in stores is considered the less influential, with an average classification of 3.36 and a standard deviation of 1.169, and communication has been considered the least impactful factor, with an average score of 3.15 and a standard deviation of 1.186. All the factors were considered at least neutral, on average, and answers have shown some variability. We can

see from the standard deviation results that there was a significant difference between the mean and the answers given, which shows that. (Appendix 16)

I asked two questions to round out the questionnaire. The first was to see what relationship and relevance they thought existed between the choice of dog food brand and the dog's well-being on a scale of 1 to 5, with 1 being a low relationship and 5 being a strong relationship. Results clearly confirmed the hypothesis raised in the qualitative analysis, as answers show a clear connection food and well-being of dogs, with an average of 3.92, with a standard deviation of 0.814 (Appendix 17). The second question asked them to rate the relationship and relevance of the choice of dog food brand and the owner's well-being on a scale of 1 to 5, with 1 being a weak relationship and 5 being a strong relationship. Results also confirmed the hypotheses raised and the choice of dog food was indeed considered impactful for owners' well-being, with an average of 3.76, with a standard deviation of 0.917. (Appendix 18)

According to the questionnaire, people spend an average of 186.35 euros on their dog's expenses. In terms of physical activity and free time, the dog had no effect on its owners' lifestyle. When it comes to food, the veterinarian's opinion, previous self-experiments, and food composition are the most important factors to consider. When it comes to the relationship between food selection and the well-being of owners and dogs, it has a significant impact.

4.2.2. Dog's Vets Point of View:

Data on the conditions that veterinarians consider impactful for health and well-being of dogs was also collected. (Appendix 2)

The first question was designed with seven sub-questions, each exploring aspects such as nutrition, regular exercise, vaccination, veterinary visits, hygiene and grooming, weight control and stress management. Participants were asked to rate these factors on a scale of 1 to 5, according to their contribution for dogs' health and well-being. Here, 1 signified low influence, 2 somewhat low influence, 3 neutral, 4 somewhat high influence and 5 high influence (Appendix 19)

When analyzing the responses related to nutrition, the average rating was 4.50 with a deviation of 0.820. These results highlight that veterinarians consider a diet as an important factor for dog

health. The low standard deviation suggests that there is generally consensus among veterinarians regarding this aspect.

Regarding vaccination, the average rating was 4.33, with a deviation of 0.758. This indicates that vaccination is also considered a significant factor. As for nutrition, there is little variation in opinions among veterinarians when it comes to vaccination.

Lastly, in terms of weight control, the average rating was found to be 4.23 with a deviation of 0.774. This implies that maintaining weight is also seen as a factor contributing to dog health.

Regular exercise is ranked fourth in significance, with a response of 4.20 and a standard deviation of 0.805. These numbers suggest that exercise is also considered crucial.

Stress management is not at the top of their priorities, but is still considered to hold relevance, as indicated by an average classification of 4.10 and a standard deviation of 0.845.

Similarly, hygiene and fur care are not prioritized highly. Are seen as significant based on a response of 4.07 and a standard deviation of 0.785.

Surprisingly, the frequency of visits to the vet was considered the least relevant factor, with a response rating of 3.80 and a standard deviation of 0.664.

Based on this data, veterinarians consider weight control to be the most important factor. The responses collected have little deviation from the average, indicating consistency on experts' opinion.

To examine how veterinarians perceive their impact on owners when it comes to selecting and providing the amount of food for their animals, a scale question was presented. This question ranged from 1 (low influence) to 5 (high influence). From a dataset of 30 responses, an average score of 3.70 was obtained, suggesting that professionals do not view themselves as that influential in this decision. The standard deviation was calculated as 1.022 indicating a dispersion of values around the average. (Appendix 20)

The final query in this survey involved ranking the importance of different fact feeding dogs, with the brand of food from a perspective. The options presented were ranked on a scale from 1 (most important) to 3 (least important). The factors proposed included dog well-being owner well-being and owner financial stability. Based on the findings 56.67% of respondents prioritize

the well-being of dogs, as their concern while 10% prioritize the well-being of owners and 33.33% focus on the financial stability of owners. As for importance, 20% consider the well-being of dogs 30% focus on owners' well-being and 50% emphasize stability. Lastly, in terms of importance, 23.33% prioritize the well-being of dogs 60% focus, on owners' well-being and 16.67% emphasize financial stability.

Summing up, veterinarians think that owners should take into account nutrition, vaccination and weight control when treating their dogs. Additionally, we can conclude that veterinarians consider themselves important, but not that important, in food choices – average score of 3.70.

4.2.3. Dog's Breeders Point of View:

Considering breeders' perspectives is essential to gain insight into factors influencing dog health and well-being.

Therefore, I began the questionnaire by asking breeders about these influencing factors (Appendix 21). For that, I had the opportunity to inquire about aspects that contribute to pet care, such as proper nutrition, regular exercise, vaccinations, frequent visits to the vet, hygiene and grooming practices, weight control and stress management. The survey used a rating scale from 1 to 5 to assess their importance. In this scale lower numbers indicated low influence (1) somewhat low influence (2) neutral (3) somewhat high influence (4) and high influence (5).

According to the responses received, regular exercise was considered important by breeders with a rating of 4.50 and a small variation of 0.583. This suggests that breeders see exercise as an aspect of pet well-being.

Similarly, stress management was ranked as an important factor, with an average rating of 4.35 and a standard deviation of 0.485.

With the same importance as Stress Management, appropriate nutrition received a rating of 4.35 with a deviation of 0.629, based on the responses received.

Weight control emerges as an important aspect, with an average rating of 4.23 and a relatively low standard deviation of 0.587. This reveals that breeders tend to agree in considering weight control to be highly significant.

Vaccination follows closely, with a rating of 4.15 and a standard deviation of 0.675 indicating its relevance despite not being ranked at the top.

The results show that hygiene and fur care receive attention and have been considered, with an average rating of 4.00 and a standard deviation of 0.632.

Lastly, and aligned with veterinarians' answer, veterinary visits have a rating of 3.92 and a deviation of 0.688 – indicating their frequency also holds significance, in breeder decisions.

Hence, the factor that experts consider to be of importance is the one related to how a person visits the veterinarian. We can also conclude that there is not a great difference between most of responses and the mean.

To understand how breeders perceive their influence on owners regarding selecting and providing the amount of food for their animals, a scale question was used. The scoring ranged from 1 (low influence) to 5 (high influence). The datasets average score of 3.92 suggests that professionals believe they have relatively high, but still limited relevance in this decision. There is no difference between the response and its standard deviation as indicated by a standard deviation of 0.688. (Appendix 22)

In these surveys, breeders were asked to rank the importance of feeding dogs with a brand of food based on three options: owners' financial stability, their own well-being and dogs' welfare. The results reveal that 76.92% of respondents prioritize their dog's well-being, followed by owners' well-being, at 15.39% and financial stability at 7.69%. In terms of priorities, 7.69% of the people consider the well-being of dogs to be important, while 57.69% prioritize the well-being of dog owners and 34.62% focus on the stability of owners. On the hand 15.39% of respondents think about the dog's well-being, 26.92% prioritize the owner's well-being and 57.69% emphasize the owner's financial stability.

Regarding breeders and based on the findings from the questionnaire, it can be inferred that regular exercise and stress management are more crucial for ensuring dog's overall well-being, compared to what owners and veterinarians reported. Interestingly it was found that breeders have an influence, on owners' decisions regarding what they feed their dogs.

4.2.4. Impact of the Financial Part

To identify the financial impact of each household monthly income interval, I carried out five crosstab analyses.

I performed a crosstab analysis to see what each monthly household income bracket spent on vets and treatments to understand the average amount spent on vets and treatments per year by a healthy dog owner. The average amount spent in the 0-700€ range is 30€-60€. The average spent for those earning between 700€-1400€, 1400€-2100€, 2100€-2800€, 2800€-3500€, and over 3500€ is around 60€-100€. (Appendix 23)

I conducted a crosstab analysis for each income target of dog owners to analyse the level of concern they have with the brand of food, and I was able to conclude the following statements: The importance of the brand is neutral in the price ranges of 0-700€ and 700€-1400€. It becomes a somewhat important factor for ranges of 1400€-2100€, 2100€-2800€, and 2800€-3500€. The brand becomes extremely important for those earning more than €3500 per month. (Appendix 24)

Finally, I ran three crosstab analyses to examine the annual social and financial impact of each income target for dog owners whose dogs have weaknesses caused by poor nutrition. In the first, I examined the relationship between each household's monthly income and the impact a dog has on your physical and emotional well-being. The most popular answer for those earning 0-700€ and more than 3500€ was neutral. The most popular answer for the ranges 700€-1400€, 1400€-2100€, 2100€-2800€, and 2800€-3500 was somewhat high influence. (Appendix 25)

I then performed the same analysis, but this time between each household's monthly income and the impact that your dog's lack of health and well-being has on your financial balance, emotional and social happiness. The most popular answer for the 0-700€ range was neutral. The most popular answer for the ranges 700€-1400€, 1400€-2100€, 2100€-2800€, and 2800€-3500€ was somewhat high influence. High influence received the most votes from those earning more than 3500€. (Appendix 26)

Finally, I performed another crosstab analysis to examine the relationship between each household's monthly income and what they perceived to be the relationship and relevance between your choice of dog food brand and your well-being as an owner. I managed to get the most responses for the somewhat strong relationship across all intervals. (Appendix 27)

5. Conclusion

This dissertation investigated the impact of dog food brands on the stability and sustainability of their owners' active lives. The quantitative and qualitative data collected for this study yielded results that allowed me to draw some important conclusions and learnings.

When asked what contributes to well-being and physical, mental, social, and financial balance, it was stated that dogs, in addition to providing unconditional love, force owners to plan and structure their lives and gain a sense of responsibility. It was also mentioned that walks with dogs can be a good time to keep active and reflect on life, which allows owners to build a healthy life with physical and mental balance.

From the vets, I learned that nutrition, exercise, and play were the most important factors in the dogs' well-being. A checkup at the vet is also part of a dog's well-being because veterinarians can prevent and detect health problems. When speaking with breeders, they referred that stress management and exercise are the most impactful factors for dogs' well-being.

When it comes to feeding, the most important factors considered are the veterinarian's opinion, previous self-experiences, and the composition of the food. It has a significant impact on the relationship between food selection and the well-being of owners and dogs.

Now looking at spending with dogs, owners with monthly income between 0-700€ are reported to spend 30€-60€ per month with their dogs. All the other income ranges, 700€-1400€, 1400€-2100€, 2100€-2800€, 2800€-€3500€ and >3500€, are reported to spend 60€ to 100€ per month, so, I conclude that, for monthly income higher than 700€, there are no big differences in dog-related expenditure between income ranges.

It was tested how dog food brands influence owners' decisions regarding the type and quantity of food given to their dogs. In the lower income ranges, 0-700€ and 700€-1400€ monthly, brands tend not to have a very big influence, with 42.11% and 38.24% of the owners, respectively, stating the impact is "neutral". As income increases, impact starts to be higher, with 40%, 60.87% and 41.94% of the owners with monthly incomes of 1400€-2100€, 2100€-2800€ and 2800€-3500€, respectively, considering impact to be "somewhat high important". The brand becomes "high important" for those earning more than €3500 a month, with a majority of responses of 32.56%.

From the analysis that was made between the monthly income of each household and the effect that the lack of health and well-being of their dog has on the emotional, social, and financial balance of the owners, it is possible to conclude that, for the range between 0-700€ per month, the most chosen answer, with 36.8%, was the neutral option. For the 700€-1400€ range per month, the influence was considered “somewhat high” by 44.12% of the respondents. This percentage was 53.33%, 76.09%, 67.74% for the monthly income ranges of 400€-2100€, 2100€-2800€ and 2800€-3500€, respectively. On their hand, 41.86% of the respondents with monthly income >3500€ said that the influence was “high”.

When I analysed the relationship between each household's monthly income and their assessment of the impact that dog food has on their well-being, I managed to get the most responses for the “somewhat strong relationship” across all monthly income intervals.

To facilitate comprehension, the calculations have been evaluated on a monthly basis.

According to the information given to me by the vets I spoke to, an annual routine visit to the vet, for a healthy dog, costs around 65€. Since the costs were calculated on a monthly basis, this works out at around 5.42€ per month. For a dog with nutritional needs resulting from an unbalanced diet, the monthly cost can vary between 100€ and 1000€, corresponding to an average of 550€ per year. This value corresponds to approximately 83.33€ per month, for a dog whose needs are the result of an unbalanced diet.

On average, a medium-sized dog consumes 7.3 kg of food per month, so, 87.6 kg of food per year. Based on the price of Purina dog food and the amount of food a dog consumes, I can determine that the average cost of food for a healthy dog is 3.64€ per kg, or 26.57€ per month. A dog with health problems will normally cost more, with values of 9.58€ per kg and, so 69.93€ per month.

Therefore, the overall cost for an owner of a healthy dog is about 31.99€ per month, while the cost for an owner of a dog with health issues is about 153.26€ monthly.

Monthly Average Expenses	Healthy Dogs	Unhealthy Dogs
Dog Food	26.57€	69.93€
Dog Vet	5.42€	83.33€
TOTAL Expenses	31.99€	153.26€
Personnal Leisure	186.35€	---
Theoretical Expenses	218.34€	218.34€
Personnal Leisure	---	65.08€
Personnal Leisure Result	186.35€	65.08€

Evaluating the information and keeping in mind that the amount of money spent on animals determines the amount of money available for leisure (restaurants, sports, and events), in practice, a dog owner's theoretical expenses between the animal itself and their leisure time amount to 218.34€. Those who have a healthy dog tend to be able to spend 186.35€ per month on their leisure time, while an owner of an unhealthy dog only has 65.08€ available per month.

$$\boxed{\text{Average Amount Spent}} = \boxed{\text{Average Amount Spent on Leisure}} + \boxed{\text{Amount Spent on Dog}}$$

$$\boxed{\text{Average Amount Spent on Leisure}} = \boxed{\text{Average Amount Spent}} - \boxed{\text{Amount Spent on Dog}}$$

**Assuming they have a fixed amount to spend on leisure and dogs.*

$$\boxed{\text{Average Amount Spent on Leisure} \downarrow} = \boxed{\text{Average Amount Spent}} - \boxed{\text{Amount Spent on Dog} \uparrow}$$

So, as the amount spend with their dogs **increases** (e.g. when a dog is sick) , the amount available to spend on leisure will **decrease** (variables are inversely relatated).

I can conclude that dogs have a significant impact on the well-being and mental stability of their owners. A healthy diet is essential for dogs and their health. The poor health of dogs has a wide-ranging impact on their owners. As a result, we can conclude that the brand of dog food is directly related to the well-being of the owners. This leads us to the conclusion that a dog will be less likely to become sick if its owner gives it sufficient attention when it comes to its diet. If it stays healthy, the owner will be able to save more money for personal leisure and won't have to pay as much for the vet or even for the dog's special diet.

So, according to the data we have and the relationship they consider relevant and trustworthy food brands, we can conclude that for those with a monthly personal income between 0-700€, the most chosen answer was neutral with 5.26% of respondents. For the 700€-1400€ range per month, the influence was considered "somewhat strong high relationship" by 58.82% of respondents. The percentage was 68.89%, 65.22%, 74.19% and 65.12% for the monthly income range of 1400€-2100€, 2100€-2800€, 2800€-3500€ and more than 3500€ respectively, for the answer "somewhat strong relationship". (Appendix 28). On the other hand, and according to the results on the percentage that respondents report having to change their lifestyle and well-being if their dog is unhealthy, for those with a monthly personal income between 0-700€, the most chosen answer was neutral with 36.84% of respondents. For the 700€-1400€, 1400€-2100€, 2100€-2800€, 2800€-3500€ monthly personal income "somewhat high influence" the percentage was 44.12%, 53.33%, 76.09% and 67.74% respectively. For those earning a monthly income higher than 3500€, 41.86% claimed to have a high influence. (Appendix 26)

6. Limitations and Further Research

The conclusions presented were the result of three phases: qualitative, quantitative, and an interview with Nestlé.

To begin, one limitation that I felt strongly about was the lack of more interviews in the qualitative analysis. The difficulty I had in finding veterinarians and breeders willing to answer my questions was a limiting factor in my research.

In the quantitative phase, I think I received fewer responses from breeders and vets than I expected. I think that if I had had a wider range of responses, I would have had a broader view of my topic.

Regarding Nestlé case study, and to gain a broader perspective of the market, I believe that if I had the opportunity to interview another company of the same style, it would have been extremely beneficial to my thesis.

In terms of future research, I believe that broadening the analysis to include new types of stakeholders would be very beneficial. To gain a more psychological perspective on the issue, it would be beneficial to consult with a psychologist who can explain the clinical impact he believes it has.

Another point to note is the lack of significant differences in dog's expenses for the different income targets. Therefore, I think that expenses should be explored with more exact or in-depth questions.

It is also important to keep in mind that, since the analysis was limited to medium-sized dogs, variations in the data gathered and, subsequently, in the conclusions drawn from the data, may occur due to variations in the dogs' sizes.

I also believe that international research could be beneficial to gain a broader and more developed perspective.

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8. Appendix

Appendix 1 – Dog's Owners Survey

Hello! This survey aims to investigate how dog food brands impact the stability and sustainability of their owners' active life. It is part of the final dissertation for the Master's in Management, with Specialization in Strategic Marketing, at Católica Lisbon School of Business and Economics. Your participation, which will only take 5 minutes, significantly contributes to advancing our study. Thank you!

Question 1

Do you have a dog?

- a) Yes
- b) No

If the answer is No, the questionnaire ends.

Question 2

What is your monthly household income?

- a) 0-700
- b) 700-1400
- c) 1400-2100
- d) 2100-2800
- e) 2800-3500
- f) >3500

Before having a dog:

Question 3

Before having a dog, how much monthly personal income did you spend on leisure activities (e.g eating at a restaurant, sports, events or other leisure activities)?

- a) 0-50
- b) 50-100
- c) 100-200
- d) 200-300
- e) >300

Question 4

How often did you practice physical activity before having a dog?

- a) Once a week
- b) More than once a week
- c) Once a month
- d) Never

Question 5

What do you consider brought you emotional and physical balance before having a dog?

- a) Leisure
- b) Friends
- c) Family
- d) Professional help (e.g., psychologist)
- e) Healthy food
- f) Work
- g) Other

Question 6

How did you spend your free time before having a dog?

- a) Walking
- b) Beach
- c) Countryside
- d) TV
- e) Cinema
- f) Theater

- g) Reading
- h) Sports
- i) Being with family
- j) Being with friends
- k) Other - Specify

After having a dog:

Question 7

On average, how much do you spend on dog food, health and wellness expenses?

- a) 0-30
- b) 30-60
- c) 60-100
- d) >100

Question 8

How often do you engage in physical activity since having a dog?

- a) Once a week
- b) More than once a week
- c) Once a month
- d) Never

Question 9

What do you consider brought you emotional and physical balance after having a dog?

- a) Leisure
- b) Friends
- c) Family
- d) Professional help (e.g., psychologist)
- e) Healthy food
- f) Work
- g) Other

Question 10

How do you spend your free time since having a dog?

- a) Walking
- b) Beach
- c) Countryside
- d) TV
- e) Cinema
- f) Theater
- g) Reading
- h) Sports
- i) Being with family
- j) Being with friends
- k) Other - Specify

Question 11

Rate the following factors based in the influence a dog has to your physical and emotional well-being? (Rate on a scale of 1 to 5, where 1 corresponds to low influence and 5 to high influence).

Question 12

What do you consider the main factors contributing to your dog's health and well-being?

- a) Affection
- b) Walks
- c) Companionship
- d) Play
- e) Healthy Food
- f) Other - Specify?

Question 13

Rate the influence that the lack of health and well-being of your dog has on your financial balance, emotional and social happiness? (Rate on a scale of 1 to 5, where 1 is low influence and 5 is high influence).

Question 14

Rate the following factors, based in the influence they have in your decision regarding the type and quantity of food you give to your dog? (Rate on a scale of 1 to 5, where 1 is low influence and 5 is high influence).

- a) Food Composition
- b) Brand
- c) Price
- d) Communication (traditional, digital, ...)
- e) Recommendation from the breeder of your dog
- f) Recommendation from veterinarian
- g) Recommendation in stores
- h) Self-recommendation based on previous experiences

Question 15

How do you consider the relationship and relevance between your choice of dog food brand and your dog's well-being? (Rate on a scale of 1 to 5, where 1 is low relationship and 5 is strong relationship).

Question 16

How do you consider the relationship and relevance between your choice of dog food brand and your well-being as an owner? (Rate on a scale of 1 to 5, where 1 is low relationship and 5 is strong relationship).

Appendix 2 – Vet's Survey

Hello! This survey aims to investigate how dog food brands impact the stability and sustainability of their owners' active life. It is part of the final dissertation for the Master's in Management, with Specialization in Strategic Marketing, at Catolica Lisbon School of Business and Economics. Your participation, which will only take 5 minutes, significantly contributes to advancing our study. Thank you!

Question 1

From a clinical perspective, rate the following factors according to the influence they have on dog's health and well-being: (Rate on a scale of 1 to 5, where 1 is low influence and 5 is high influence).

- a) Proper nutrition
- b) Regular exercise
- c) Vaccination
- d) Regularity of vet visits
- e) Hygiene and fur care
- f) Weight control
- g) Stress management

Question 2

From a clinical perspective and focusing on the dogs' food, is a vet an influencing factor in the owners' choice of dog food and the quantity of food they provide? (Rate on a scale of 1 to 5, where 1 is low influence and 5 is high influence).

Question 3

From a clinical perspective, order from 1 to 3 (in which 1 is the most important and 3 the least important) what are the main impacts of having the right food brand?

- a) The well-being of dogs
- b) The well-being of the owners
- c) The financial stability of the owners

Appendix 3 – Breeder's Survey

Hello! This survey aims to investigate how dog food brands impact the stability and sustainability of their owners' active life. It is part of the final dissertation for the Master's in Management, with Specialization in Strategic Marketing, at Catolica Lisbon School of Business and Economics. Your participation, which will only take 5 minutes, significantly contributes to advancing our study. Thank you!

Question 1

From a breeder's perspective, rate the following factors according to the influence they have on dog's health and well-being: (Rate on a scale of 1 to 5, where 1 is low influence and 5 is high influence).

- a) Proper nutrition
- b) Regular exercise
- c) Vaccination
- d) Regularity of vet visits
- e) Hygiene and fur care
- f) Weight control
- g) Stress management

Question 2

From a breeder's perspective and focusing on the dogs' food, is a breeder an influencing factor in the owners' choice of dog food and the quantity of food they provide? (Rate on a scale of 1 to 5, where 1 is low influence and 5 is high influence).

Question 3

From a breeder's perspective, order from 1 to 3 (in which 1 is the most important and 3 the least important) what are the main impacts of having the right food brand?

- a) The well-being of dogs
- b) The well-being of the owners
- c) The financial stability of the owners

Appendix 4 - Percentage and frequency of responses on the monthly household income about owners.

What is your monthly household income?

		Frequência	Porcentagem	Porcentagem Válida	Porcentagem Acumulativa
Válido	0€-700€	19	8.7	8.7	8.7
	700€-1400€	34	15.6	15.6	24.3
	1400€-2100€	45	20.6	20.6	45.0
	2100€-2800€	46	21.1	21.1	66.1
	2800€-3500€	31	14.2	14.2	80.3
	> 3500€	43	19.7	19.7	100.0
	Total	218	100.0	100.0	

Appendix 5 - Percentage and frequency of responses on the monthly personal income on leisure's activities about owners.

Before having a dog, how much monthly personal income did you spend on leisure activities (e.g eating at a restaurant, sports, events or other leisure activities)?

		Frequência	Porcentagem	Porcentagem Válida	Porcentagem Acumulativa
Válido	0€-50€	10	4.6	4.6	4.6
	50€-100€	43	19.7	19.7	24.3
	100€-200€	77	35.3	35.3	59.6
	200€-300€	64	29.4	29.4	89.0
	>300€	24	11.0	11.0	100.0
	Total	218	100.0	100.0	

Appendix 6 - Mean of owners' physical activity before having a dog.

How often did you practice physical activity before having a dog?

		Frequência	Porcentagem	Porcentagem Válida	Porcentagem Acumulativa
Válido	Once a week	54	24.8	24.8	24.8
	More than once a week	101	46.3	46.3	71.1
	Once a month	52	23.9	23.9	95.0
	Never	11	5.0	5.0	100.0
	Total	218	100.0	100.0	

Appendix 7 - Responses about what is considered most relevant to having an emotional and physical balance before having a dog.

Estatísticas Descritivas

	N	Média	Desvio Padrão
What do you consider brought you emotional and physical balance before having a dog? - Selected Choice Other	2	1.00	.000
What do you consider brought you emotional and physical balance before having a dog? - Selected Choice Work	83	1.00	.000
What do you consider brought you emotional and physical balance before having a dog? - Selected Choice Healthy food	99	1.00	.000

What do you consider brought you emotional and physical balance before having a dog? - Selected Choice Professional help (e.g., Psychologist)	81	1.00	.000
What do you consider brought you emotional and physical balance before having a dog? - Selected Choice Family	124	1.00	.000
What do you consider brought you emotional and physical balance before having a dog? - Selected Choice Friends	140	1.00	.000
What do you consider brought you emotional and physical balance before having a dog? - Selected Choice Leisure	70	1.00	.000
N válido (de lista)	0		

Appendix 8 - Responses on how the interviewees spent their free time before getting a dog.

Estadísticas Descriptivas

	N	Média	Desvio Padrão
How did you spend your free time before having a dog? - Selected Choice Other	1	1.00	.
How did you spend your free time before having a dog? - Selected Choice Being with friends	73	1.00	.000
How did you spend your free time before having a dog? - Selected Choice Being with family	95	1.00	.000

How did you spend your free time before having a dog? - Selected Choice Sports	88	1.00	.000
How did you spend your free time before having a dog? - Selected Choice Reading	68	1.00	.000
How did you spend your free time before having a dog? - Selected Choice Theater	62	1.00	.000
How did you spend your free time before having a dog? - Selected Choice Cinema	81	1.00	.000
How did you spend your free time before having a dog? - Selected Choice TV	97	1.00	.000
How did you spend your free time before having a dog? - Selected Choice Countryside	92	1.00	.000
How did you spend your free time before having a dog? - Selected Choice Beach	75	1.00	.000
How did you spend your free time before having a dog? - Selected Choice Walking	34	1.00	.000
N válido (de lista)	0		

Appendix 9 - Percentage and frequency of responses about how much owners spend on average on their dog's food, health and well-being.

On average, how much do you spend on dog food, health and wellness expenses?

		Frequência	Porcentagem	Porcentagem Válida	Porcentagem Acumulativa
Válido	0€-30€	13	6.0	6.0	6.0
	30€-60€	55	25.2	25.2	31.2
	60€-100€	111	50.9	50.9	82.1
	>100€	39	17.9	17.9	100.0
	Total	218	100.0	100.0	

Appendix 10 - Mean of owners' physical activity after having a dog.

How often do you engage in physical activity since having a dog?

		Frequência	Porcentagem	Porcentagem Válida	Porcentagem Acumulativa
Válido	Once a week	35	16.1	16.1	16.1
	More than once a week	115	52.8	52.8	68.8
	Once a month	54	24.8	24.8	93.6
	Never	14	6.4	6.4	100.0
	Total	218	100.0	100.0	

Appendix 11 - Responses about what is considered most relevant to having an emotional and physical balance after having a dog.

Estatísticas Descritivas

	N	Média	Desvio Padrão
What do you consider brought you emotional and physical balance after having a dog? - Selected Choice Leisure	66	1.00	.000
What do you consider brought you emotional and physical balance after having a dog? - Selected Choice Friends	133	1.00	.000
What do you consider brought you emotional and physical balance after having a dog? - Selected Choice Family	107	1.00	.000
What do you consider brought you emotional and physical balance after having a dog? - Selected Choice Professional help (e.g., psychologist)	85	1.00	.000
What do you consider brought you emotional and physical balance after having a dog? - Selected Choice Healthy food	85	1.00	.000
What do you consider brought you emotional and physical balance after having a dog? - Selected Choice Work	91	1.00	.000
What do you consider brought you emotional and physical balance after having a dog? - Selected Choice Other	4	1.00	.000

N válido (de lista)	0		
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Appendix 12 - Responses about how the interviewees spent their free time since having a dog.

Estadísticas Descriptivas

	N	Média	Desvio Padrão
How do you spend your free time since having a dog? - Selected Choice Walking	53	1.00	.000
How do you spend your free time since having a dog? - Selected Choice Beach	84	1.00	.000
How do you spend your free time since having a dog? - Selected Choice Countryside	86	1.00	.000
How do you spend your free time since having a dog? - Selected Choice TV	84	1.00	.000
How do you spend your free time since having a dog? - Selected Choice Cinema	81	1.00	.000
How do you spend your free time since having a dog? - Selected Choice Theater	58	1.00	.000
How do you spend your free time since having a dog? - Selected Choice Reading	69	1.00	.000
How do you spend your free time since having a dog? - Selected Choice Sports	77	1.00	.000

How do you spend your free time since having a dog? - Selected Choice Being with family	106	1.00	.000
How do you spend your free time since having a dog? - Selected Choice Being with friends	70	1.00	.000
How do you spend your free time since having a dog? - Selected Choice Other	2	1.00	.000
N válido (de lista)	0		

Appendix 13 – Mean and standard deviation of the owner's perspective on the influence a dog has on the owners' physical and emotional well-being.

Estatísticas Descritivas

	N	Média	Desvio Padrão
Rate the following factors based in the influence a dog has to your physical and emotional well-being? (Rate on a scale of 1 to 5, where 1 corresponds to low influence and 5 to high influence).	218	3.77	.947
N válido (de lista)	218		

Appendix 14 – Mean and standard deviation on the influence that the dog's lack of health and well-being has on the owners' financial balance, emotional and social happiness.

Estatísticas Descritivas

	N	Média	Desvio Padrão
Rate the influence that the lack of health and well-being of your dog has on your financial balance, emotional and social happiness? (Rate on a scale of 1 to 5, where 1 is low influence and 5 is high influence).	218	3.84	1.040
N válido (de lista)	218		

Appendix 15 – Responses about the main factors contributing to a dog's health and well-being.

Estatísticas Descritivas

	N	Média	Desvio Padrão
What do you consider the main factors contributing to your dog's health and well-being? - Selected Choice Affection	100	1.00	.000
What do you consider the main factors contributing to your dog's health and well-being? - Selected Choice Walks	108	1.00	.000
What do you consider the main factors contributing to your dog's health and well-being? - Selected Choice Companionship	137	1.00	.000

What do you consider the main factors contributing to your dog's health and well-being? - Selected Choice Play	104	1.00	.000
What do you consider the main factors contributing to your dog's health and well-being? - Selected Choice Healthy food	102	1.00	.000
What do you consider the main factors contributing to your dog's health and well-being? - Selected Choice Other	1	1.00	.
N válido (de lista)	0		

Appendix 16 – Mean and standard deviation about how important the factors are, based in the influence they have in your decision regarding the type and quantity of food given to dogs.

Estadísticas Descriptivas

	N	Média	Desvio Padrão
How important are the following factors, based in the influence they have in your decision regarding the type and quantity of food you give to your dog? (Rate on a scale of 1 to 5, where 1 is Not at all important and 5 is Extremely important). - Food Composition	218	3.92	.855

<p>How important are the following factors, based in the influence they have in your decision regarding the type and quantity of food you give to your dog? (Rate on a scale of 1 to 5, where 1 is Not at all important and 5 is Extremely important). - Brand</p>	218	3.66	1.049
<p>How important are the following factors, based in the influence they have in your decision regarding the type and quantity of food you give to your dog? (Rate on a scale of 1 to 5, where 1 is Not at all important and 5 is Extremely important). - Price</p>	218	3.64	.966
<p>How important are the following factors, based in the influence they have in your decision regarding the type and quantity of food you give to your dog? (Rate on a scale of 1 to 5, where 1 is Not at all important and 5 is Extremely important). - Communication (traditional, digital, ...)</p>	218	3.15	1.186

<p>How important are the following factors, based in the influence they have in your decision regarding the type and quantity of food you give to your dog? (Rate on a scale of 1 to 5, where 1 is Not at all important and 5 is Extremely important). - Recommendation from the breeder of your dog</p>	218	3.69	1.036
<p>How important are the following factors, based in the influence they have in your decision regarding the type and quantity of food you give to your dog? (Rate on a scale of 1 to 5, where 1 is Not at all important and 5 is Extremely important). - Recommendation from veterinarian</p>	218	4.17	.859
<p>How important are the following factors, based in the influence they have in your decision regarding the type and quantity of food you give to your dog? (Rate on a scale of 1 to 5, where 1 is Not at all important and 5 is Extremely important). - Recommendation in stores</p>	218	3.36	1.169

How important are the following factors, based in the influence they have in your decision regarding the type and quantity of food you give to your dog? (Rate on a scale of 1 to 5, where 1 is Not at all important and 5 is Extremely important). - Self-recommendation based on previous experiences	218	4.13	.799
N válido (de lista)	218		

Appendix 17 - Mean and standard deviation of the relationship and relevance between the dog's well-being and the owner's choice of dog food brand.

Estadísticas Descritivas

	N	Média	Desvio Padrão
How do you consider the relationship and relevance between your choice of dog food brand and your dog's well-being? (Rate on a scale of 1 to 5, where 1 is low relationship and 5 is strong relationship).	218	3.92	.814
N válido (de lista)	218		

Appendix 18 – Mean and standard deviation about the relationship and relevance between choice of dog food brand and well-being as an owner.

Estatísticas Descritivas

	N	Média	Desvio Padrão
How do you consider the relationship and relevance between your choice of dog food brand and your well-being as an owner? (Rate on a scale of 1 to 5, where 1 is low relationship and 5 is strong relationship).	218	3.76	.917
N válido (de lista)	218		

Appendix 19 – Mean and Standard Deviation of the veterinarian’s perspective on factors according to their influence on the dog's health and well-being.

Estatísticas Descritivas

	N	Média	Desvio Padrão
From a clinical perspective, rate the following factors according to the influence they have on dog’s health and well-being: (Rate on a scale of 1 to 5, where 1 is low influence and 5 is high influence). - Proper nutrition	30	4.50	.820
From a clinical perspective, rate the following factors according to the influence they have on dog’s health and well-being: (Rate on a scale of 1 to 5, where 1 is low influence and 5 is high influence). - Vaccination	30	4.33	.758

<p>From a clinical perspective, rate the following factors according to the influence they have on dog's health and well-being:</p> <p>(Rate on a scale of 1 to 5, where 1 is low influence and 5 is high influence). - Weight control</p>	30	4.23	.774
<p>From a clinical perspective, rate the following factors according to the influence they have on dog's health and well-being:</p> <p>(Rate on a scale of 1 to 5, where 1 is low influence and 5 is high influence). - Regular exercise</p>	30	4.20	.805
<p>From a clinical perspective, rate the following factors according to the influence they have on dog's health and well-being:</p> <p>(Rate on a scale of 1 to 5, where 1 is low influence and 5 is high influence). - Stress management</p>	30	4.10	.845
<p>From a clinical perspective, rate the following factors according to the influence they have on dog's health and well-being:</p> <p>(Rate on a scale of 1 to 5, where 1 is low influence and 5 is high influence). - Hygiene and fur care</p>	30	4.07	.785

From a clinical perspective, rate the following factors according to the influence they have on dog's health and well-being: (Rate on a scale of 1 to 5, where 1 is low influence and 5 is high influence). - Regularity of vet visits	30	3.80	.664
N válido (de lista)	30		

Appendix 20 – Mean and Standard Deviation from a clinical perspective, how veterinarians influence owners' choice of food for their dogs and the amount they feed them.

Estatísticas Descritivas

	N	Média	Desvio Padrão
From a clinical perspective and focusing on the dogs' food, is a vet an influencing factor in the owners' choice of dog food and the quantity of food they provide? (Rate on a scale of 1 to 5, where 1 is low influence and 5 is high influence).	30	3.70	1.022
N válido (de lista)	30		

Appendix 21 – Mean and Standard Deviation of the breeder’s perspective on factors according to their influence on the dog's health and well-being.

Estatísticas Descritivas

	N	Média	Desvio Padrão
From a breeder’s perspective, rate the following factors according to the influence they have on dog’s health and well-being: (Rate on a scale of 1 to 5, where 1 is low influence and 5 is high influence). - Regular exercise	26	4.50	.583
From a breeder’s perspective, rate the following factors according to the influence they have on dog’s health and well-being: (Rate on a scale of 1 to 5, where 1 is low influence and 5 is high influence). - Stress management	26	4.35	.485
From a breeder’s perspective, rate the following factors according to the influence they have on dog’s health and well-being: (Rate on a scale of 1 to 5, where 1 is low influence and 5 is high influence). - Proper nutrition	26	4.35	.629

<p>From a breeder's perspective, rate the following factors according to the influence they have on dog's health and well-being:</p> <p>(Rate on a scale of 1 to 5, where 1 is low influence and 5 is high influence). - Weight control</p>	26	4.23	.587
<p>From a breeder's perspective, rate the following factors according to the influence they have on dog's health and well-being:</p> <p>(Rate on a scale of 1 to 5, where 1 is low influence and 5 is high influence). - Vaccination</p>	26	4.15	.675
<p>From a breeder's perspective, rate the following factors according to the influence they have on dog's health and well-being:</p> <p>(Rate on a scale of 1 to 5, where 1 is low influence and 5 is high influence). - Hygiene and fur care</p>	26	4.00	.632
<p>From a breeder's perspective, rate the following factors according to the influence they have on dog's health and well-being:</p> <p>(Rate on a scale of 1 to 5, where 1 is low influence and 5 is high influence). - Regularity of vet visits</p>	26	3.92	.688
N válido (de lista)	26		

Appendix 22 – Mean and Standard Deviation from a clinical perspective, how breeders influence owners' choice of food for their dogs and the amount they feed them.

Estatísticas Descritivas

	N	Média	Desvio Padrão
From a breeder's perspective and focusing on the dogs' food, is a breeder an influencing factor in the owners' choice of dog food and the quantity of food they provide? (Rate on a scale of 1 to 5, where 1 is low influence and 5 is high influence).	26	3.92	.688
N válido (de lista)	26		

Appendix 23 – Cross Tab between What is your monthly household income? * On average, how much do you spend on dog food, health and wellness expenses?

		On average, how much do you spend on dog food, health and wellness expenses?				Total
		0€-30€	30€-60€	60€-100€	>100€	
What is your monthly household income?	0€-700€	1	8	7	3	19
	700€-1400€	2	11	13	8	34
	1400€-2100€	5	16	18	6	45
	2100€-2800€	1	5	33	7	46
	2800€-3500€	0	6	19	6	31
	> 3500€	4	9	21	9	43
Total		13	55	111	39	218

Appendix 24 – Cross Tab between What is your monthly household income? * How important are the following factors, based in the influence they have in your decision regarding the type and quantity of food you give to your dog? (Rate on a scale of 1 to 5, where 1 is Not at all important and 5 is Extremely important). - Brand

		How important are the following factors, based in the influence they have in your decision regarding the type and quantity of food you give to your dog? (Rate on a scale of 1 to 5, where 1 is Not at all important and 5 is Extremely important). - Brand					Total
		1 Not at all important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Extremely important	
What is your monthly household income?	0€-700€	1	1	8	5	4	19
	700€- 1400€	3	1	13	11	6	34
	1400€- 2100€	3	3	10	18	11	45
	2100€- 2800€	1	1	11	28	5	46
	2800€- 3500€	1	0	10	13	7	31
	> 3500€	4	3	12	10	14	43
	Total	13	9	64	85	47	218

Appendix 25 – Cross Tab between What is your monthly household income? * Rate the following factors based in the influence a dog has to your physical and emotional well-being. (Rate on a scale of 1 to 5, where 1 corresponds to low influence and 5 to high influence).

		Rate the following factors based in the influence a dog has to your physical and emotional well-being? (Rate on a scale of 1 to 5, where 1 corresponds to low influence and 5 to high influence).					Total
		1 Low Influence	2 Somewhat Low Influence	3 Neutral	4 Somewhat High Influence	5 High Influence	
What is your monthly household income?	0€-700€	0	4	6	5	4	19
	700€-1400€	0	3	8	15	8	34
	1400€-2100€	1	5	6	21	12	45
	2100€-2800€	1	4	4	26	11	46
	2800€-3500€	0	2	5	22	2	31
	> 3500€	0	6	15	11	11	43
	Total	2	24	44	100	48	218

Appendix 26 – Cross Tab between What is your monthly household income? * Rate the influence that the lack of health and well-being of your dog has on your financial balance, emotional and social happiness? (Rate on a scale of 1 to 5, where 1 is low influence and 5 is high influence).

Rate the influence that the lack of health and well-being of your dog has on your financial balance, emotional and social happiness? (Rate on a scale of 1 to 5, where 1 is low influence and 5 is high influence).

		1 Low Influence	2 Somewhat Low Influence	3 Neutral	4 Somewhat High Influence	5 High Influence	Total
What is your monthly household income?	0€-700€	1	3	7	4	4	19
	700€- 1400€	4	1	5	15	9	34
	1400€- 2100€	3	0	3	24	15	45
	2100€- 2800€	2	0	5	35	4	46
	2800€- 3500€	0	2	4	21	4	31
	> 3500€	4	1	8	12	18	43
	Total	14	7	32	111	54	218

Appendix 27 – Cross Tab between What is your monthly household income? * How do you consider the relationship and relevance between your choice of dog food brand and your well-being as an owner? (Rate on a scale of 1 to 5, where 1 is low relationship and 5 is strong relationship).

How do you consider the relationship and relevance between your choice of dog food brand and your well-being as an owner? (Rate on a scale of 1 to 5, where 1 is low relationship and 5 is strong relationship).

		1 Low Relationship	2 Somewhat Low Relationship	3 Neutral	4 Somewhat Strong Relationship	5 Strong Relationship	Total
What is your monthly household income?	0€-700€	1	0	2	13	2	18
	700€-1400€	3	0	7	19	5	34
	1400€-2100€	1	1	6	27	10	45
	2100€-2800€	3	1	6	29	7	46
	2800€-3500€	1	0	6	21	3	32
	> 3500€	3	3	9	25	3	43
	Total	12	5	36	134	31	218

Appendix 28 –Cross Tab between What is your monthly household income? * How do you consider the relationship and relevance between your choice of dog food brand and your dog's well-being? (Rate on a scale of 1 to 5, where 1 is low relationship and 5 is strong relationship).

How do you consider the relationship and relevance between your choice of dog food brand and your dog's well-being?
(Rate on a scale of 1 to 5, where 1 is low relationship and 5 is strong relationship).

		1 Low Relationship	2 Somewhat Low Relationship	3 Neutral	4 Somewhat Strong Relationship	5 Strong Relatio nship	Total
What is your monthly household income?	0€-700€	0	0	9	7	3	19
	700€- 1400€	2	0	5	20	7	34
	1400€- 2100€	0	1	2	31	11	45
	2100€- 2800€	1	1	4	30	10	46
	2800€- 3500€	1	1	3	23	3	31
	> 3500€	2	3	4	28	6	43
Total		6	6	27	139	40	218