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Understanding consumer purchase behavior toward natural food labeling for dogs based on the theory of extended-self and self-identity in Mexico

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By
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SE APRUEBA LA TESIS:

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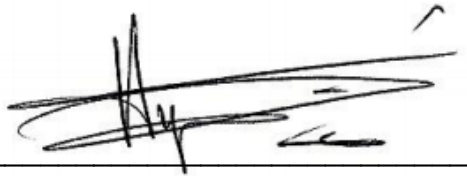

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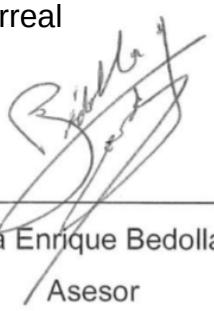

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To my family, friends, all the people who believed in me,
Also, the ones who love knowledge.

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Resumen

El consentimiento de la importancia de la comida orgánica ha incrementado significativamente en México. Por lo que ahora las personas están más conscientes de la importancia de la calidad de sus alimentos, es por eso que esta investigación explica la intensión de compra de alimento con etiquetado natural u orgánico para perros. Con esto se puede explicar de igual forma la cercana relación entre dueño y su mascota, que influye en la toma de decisiones de estos productos. Como primera parte se propone un marco teórico con conceptos referentes al comportamiento del consumidor, seguido de algunas teorías que soportan el modelo de esta investigación, más un panorama general de lo que se pretende evaluar. Como segunda parte, se presenta un marco contextual, presentando la situación actual en México. Seguido de una recolección de datos de personas que compraban específicamente alimento con etiquetado natural u orgánico para perros. Con ayuda de un modelo de ecuaciones estructurales (SEM), se demuestra en los resultados que existe una relación entre los valores de alimentos saludables de las personas lo que a su vez son transferidos a sus compañeros caninos. Asimismo, la compra actual de comida orgánica influye como factor a la compra de estos alimentos orgánicos para mascota. Sin embargo, se descarta el antropomorfismo como factor influyente a estos productos.

Abstract

The awareness of the importance of organic food has increased significantly in Mexico. Therefore, in the case of dog owners who consume these foods, the stronger the bond with their companion dogs, the greater the interest in purchasing healthier foods for their dogs has been increasing and has been a fundamental factor in purchasing food with natural or organic labeling. This research explains the intention to purchase natural or organic labeled dog food. This awareness may also explain the close relationship between the owner and the pet, which influences the decision-making towards these products. In the first part, a theoretical framework is proposed with concepts related to consumer behavior, followed by some theories that support the model of this research, plus a general overview of what is to be evaluated. In the second part, a contextual framework is presented, showing the current situation in Mexico. The second part is followed by a data collection of people who specifically bought natural or organic labeled dog food. With the help of a structural equation model (SEM), it is demonstrated in the results that there is a relationship between people's nutritional food values and their choice of food for their canine companions. Also, the current purchase of organic food influences these organic pet foods. However, anthropomorphism is discarded as an influential factor towards these products.

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CHAPTER 1

1. Introduction

This study intends to prove that the decision to purchase healthy food for dogs (e.g., organic or natural food) depends on the close relationship between owners and dogs, the owners' values, and other factors. It will also help future businesses, enterprises, research, and media outlets improve their business goals targeting owners and dogs.

The current chapter will explain the research's importance the objectives and outline the research problem and questions.

1.1 Problem Statement

A significant number of authors (Archer, 1997; Jyrinki & Leipamaa-Leskinen, 2005; Jyrinki, 2005; Wood et al. 2005; Crawford et al. 2006; Gómez et al. 2007; Durgee, 2008; Hill et al. 2008; Tesfom & Birch, 2010; Boya et al. 2012, 2014; Rothgerber, 2013; Meyer & Forkman, 2014; Angelica et al. 2016; Videla, 2017; González-Ramírez, 2019; Tarazona, Ceballos, & Broom, 2020) have been searching and studying the relationship between owners and dogs in some areas such as Psychology, Medicine (health), Marketing (consumer behavior), Veterinarian, Animal Welfare and Animal Behavior. All of them because of the influences and the important impacts they have in both lives. According to a press release from the government, research shows that 7 out of 10 households in Mexico currently have pets, and 80% of pet owners have canines in their homes. Likewise, the National Population Council (CONAPO) indicated that, from 2008 to 2018, people acquired canine pets, indicating that domestic dogs increased by 20% (Gómez, 2021).

Having a dog in human's life has many benefits, and there are many reasons why the domestication of dogs has increased. Some of them are – for our own company or, with kids or, house care or, taking care of a business (Gómez, Atehortua, & Orozco, 2007), or even health psychological benefits (Crawford, Worsham & Swinehart, 2006). Nevertheless, according to a survey by World Animal Protection (2018), in Latin America, 95% of the dog-owners who love their companion animals see their pets like children or a family member. Pet humanization (i.e., pets seen as if they were people) has become the number one factor driving the growth of the global pet food market with new brands and personalized food for each dog owner's lifestyle (Taylor, 2014; Blouin, 2012).

According to Linder and Mueller (2014), dog-owners are paying more attention to their dog's health and wellness, and one way to increase their bonds is with good habits such as a walk or healthy food instead of high-calorie treats. Thus, dog owners are not only caring about animal welfare, but they are also concerned about their fellow humans and the importance of their health and well-being.

Companion dogs have developed an essential role in human life, and due to the increased bond, that has been generated between canines and humans, people have realized the importance of a healthy diet, so dog food has become an essential factor in the dog's life. (Deng & Swanson, 2015). Moreover, a few empirical studies have confirmed that the decision to purchase healthy food has been increasing. According to Izquierdo et al. (2004) approximately since 2002, where a literature review was conducted wherein various media such as books, brochures, and magazines began to include and argue the importance of healthy eating. With the increase of healthy food products purchases, considering that consumers are more aware of the importance of buying healthy products, there are many reasons why consumers may prefer natural or organic food products, such as health, quality (e.g., taste), ethics (e.g., animal welfare), politics (e.g., environmentalism), and national origin (Hjelmar, 2011).

The product name in pet foods can influence consumers' decision to prefer a product. Associations like The United States Food Administration (FDA) and the Association of American Feed Control Officials (AAFCO) have regulations in labeling pet food. For AAFCO, the term 'natural' is used because of the lack of artificial preservatives, flavors, and colors; meanwhile, they can be labeled as organic products based on what vitamins and amino acids are used (FDA, 2020).

According to a study by Nielsen (2016), at least 67% of Mexican consumers want more than 100% natural ingredients, in their meals, with a better excellent offering of low sugar and fat-free products. Further, almost half of Mexicans would like to find more organic products because they are worried about the long-term impact of artificial ingredients. Also, those ingredients are considered dangerous for human health (Nielsen, 2016).

Moreover, some researchers (Bontempo, 2005; Kumcu & Woolverton, 2015; Deng & Swanson, 2015; Liñán, Arroyo & Carrete, 2019; Viana et al. 2020) have shown an increase

in natural food for dogs. Also, they have shown how companion pets are considered self-extensions of the owners. Therefore, nutrition is an essential part that many owners are looking for in the pet food industry to improve the quality and health of companion animals (Viana et al. 2020).

From an economic perspective, Schwarz, Troyer, and Walker (2007) researched families with dogs and kids. They found evidence that couples that do not have kids substituted dogs for children. Families with old kids preferred dogs more than families with younger children. The reflexive behavior toward the preferences of healthy food products (e.g., natural and organic) can be motivated in a similar way than people with children (Hjelmar, 2011).

However, this research aims to identify the connection between people and their dogs as another influenced decision. In addition, that several factors influence the decision to buy natural food for dogs, this research focuses on the consumer's behavior in choosing the natural food of their canine companion by presenting different psychological theories. Furthermore, the close relationship between owners and dogs has been studied; some variables have been the focus of research on the pet's relationship that influences the client's decision-making towards specific products.

1.2 Justification

Since the market is constantly changing, this project can solve the consumer market of wellness products, specifically in health, food, and quality of life, that provide information for new advertising methods, ideas, strategy, business, and communication. Nowadays, people are trying to be more aware of their products and making a change. Hence, they worry more about the world, the environment, and their loved ones. This mentality indicates the importance of understanding that consumers care for their health; there is also a concern from those around them, and they are more conscious of their well-being (Tesfom & Birch, 2010).

Further, the market needs to know its challenges due to variabilities in segmentation and new consumers. In a market of varying tendencies, people are looking to become more aware of what to buy to decrease global consumption. Furthermore, they are looking to become more aware and respectful of human beings, animals, and the environment, seek

solutions to negative impacts from the harmful global overconsumption and, generate healthier trends based on this (Euromonitor, 2019).

For example, consumers prefer to purchase organic and natural food (Rong-Da Liang & Lim, 2020). In the research report of Nielsen (2016), more than 40% of the global respondents want no artificial colors and flavors, reduced sugar and fat, and more organic options, giving a total of 58% of the respondents who wish to have more 'All-natural' products. In addition, many pet owners are looking for food products that improve the health and well-being of their pets; thus, sales of healthier and organic products have been increasing (Nielsen, 2019).

According to the American Pet Product Association (APPA, 2020) the first place in the statistics for spending on pets in the United States is food, with 42.0%; while in second place is veterinary care and product sales with 31.4%. In Mexico, according to Franco (2020) recorded a 13.3% growth in value in 2019 compared to 2018. Some analysts believe that the growth of pet food is unstoppable since a large segment of millennial Mexican consumers spend more and more of their income on pets and pet food (Franco, 2018).

Additionally, these purchase preferences toward organic or natural food labeling for dogs are sustained by different psychological theories, such as extended-self and self-identity, which are relevant for developing this thesis. The theory of extended-self is used with external objects, personal positions, persons, and places (Russell, 1988). For instance, research has shown the implementation of this theory in the digital world with new consumption of objects, love toward objects, parents with their children, and even green hotels that match the personality of the consumer (Russell,2013; Holiday, Norman, & Densley, 2020; Yarimoglu & Gunay, 2020). Marketers can also have a different perspective on what can be involved in future marketing strategies and pet industry research. Therefore, this research also aims to explain the concept of extended self in owners to affect future trends towards exciting and creative innovations and further research on behavior analysis.

The increment of natural food consumption, the consciousness around healthy products, and the importance of animal welfare, especially in companion dogs, is increasing worldwide. Nevertheless, this is a new topic to check, especially in Mexico, and several questions have not yet been answered. This trend covers ethical food values, strong preference of brands that promote natural pet food consumption, and the self-extended

concept in owners and dogs according to self-owner identity. What we eat is what we are, and our pets follow the same (Clemens, 2014; Tesfom & Birch, 2010).

People are generating more awareness about the products and services offered by the companies and want to be sure that there is no animal abuse. The more aware they are, the more they can open up about controlling abuse, expanding to other sectors such as beauty, food, fashion, home, and pet food, among others (Euromonitor, 2019).

1.3 Objectives.

1.3.1 General Objective.

Explain the intention to purchase food with natural labeling for dogs and the factors influencing the consumer behavior toward this category.

1.3.2 Specific Objectives.

- Evaluate whether the concept of self-extension in dog food purchase intention is satisfactorily met depending on the owner's identity.
- Identify a link between the health values of the owner extended to their companion dog.
- Identify anthropomorphism in Puebla, Mexico.
- Analyze a relationship of preference to natural labeled food for dogs because of the increase of organic food for human consumption in Puebla, Mexico.
- Assess the factors of purchasing natural or organic labeled food for dogs.

1.4. Research questions and hypothesis

1.4.1 Research questions

Question 1 (Q1): How much do the owner's healthy food values affect the healthy food values of their companion dogs with the extended-self concept?

Question 2 (Q2): How much do owners' healthy food values affect their attitudes towards natural or organic labeled dog foods?

Question 3 (Q3): How much is anthropomorphism related to attitudes towards natural or organic labeled dog food?

Question 4 (Q4): What is the influence that actual organic consumption preferences exert on attitudes toward natural or organic labeled dog food?
Question 5 (Q5): How much do positive attitudes towards natural or organic dog food affect the intention to purchase natural or organic labeled dog food?

1.4.2 Hypothesis

Hypothesis 1 (H1): Owners' healthy eating values have a significantly positive influence on dogs' healthy eating values.
Hypothesis 2 (H2): Dogs' healthy food values significantly affect dogs' natural or organic labeled foods.
Hypothesis 3 (H3): Anthropomorphism significantly affects attitudes toward natural or organic labeled dogs' food.
Hypothesis 4 (H4): There is a positive significant relationship between actual purchase behavior on organic food products on attitudes towards natural or organic food labeling for dogs.
Hypothesis 5 (H5): Attitudes towards natural or organic labeled dog food significantly affect the purchase intention of natural or organic labeling food for dogs.

1.5 Scopes and limitations

1.5.1 Scopes

The present research seeks to evaluate a relationship between consumer behavior when buying dog food with natural or organic labeling, based on the theories of self-identity and self-extension. Therefore, the instrument used for the evaluation was in electronic form; it was planned due to the pandemic generated by the Covid-19 disease. It was a non-probabilistic sampling with a snowball technique. It was applied to a specific type of segment with characteristics such as: having a dog and buying food with natural or organic labeling for dogs and living in the city of Puebla. It was applied in a single period. This was applied in a single period, in the year 2020. Being non-experimental research, in which the variables were not manipulated. Therefore, it is intended to get to know the

influence of the previously mentioned theories to explain the purchase of food with natural and organic labeling for dogs.

1.5.2 Limitations

The segment studied was limited only to the municipality of Puebla because the electronic survey reached Puebla. There was no sampling frame using a snowball technique, and it was non-probabilistic. The time that the survey was spread out was 1 -2 weeks in a row in 2020. It was a pretty complex segment to conduct due to the specific characteristics required, besides the fact that it is a type of food that very few people could know about the existence and consideration for their pets. Theoretical research was also challenging because of the lack of research on dog food in consumer behavior.

This thesis about consumer purchase behavior toward natural food labeling for dogs is organized as follows: In the first chapter, the problem, the questions, the answers, the scopes, and the limitations are exposed. The theoretical framework is explained in the second chapter; the definition of marketing is discussed, pet marketing and essential concepts are included, and some psychological theories related to the topic are being discussed for a better understanding. Further, a background study is discussed related to natural food for dogs worldwide, with the principal variables defining why this purchase of natural food for dogs phenomenon originated. To finalize the chapter, the model based on this research is presented.

In chapter three, the methodology is mentioned, with details on how to reach the goal of this thesis. The sample and the segmentation are included, ending with the survey results that have been implemented. In the fourth chapter, the general analysis, including demographics results, is presented, followed by the specific analysis for each hypothesis; then, the average and frequencies are presented with graphics. Results conclude a significant relationship between the importance of the owner-dog relationship and the owner values. Anthropomorphism is another essential concept in the chapter and the overall analysis, which significantly relates to dogs' attitudes toward natural food. Chapter five includes the general conclusions for each specific objective, and some recommendations are presented for further research.

CHAPTER 2

1. Theoretical Framework

The purpose of this chapter is to present a theoretical analysis of the related research. So, first of all, is defined theoretical concepts such as marketing, psychology, customer behavior, and more. Moreover, definitions of different theories and information from various researches that support this project.

2.1 Marketing

2.1.1 Definition of marketing

The definition of marketing has been evolving. Various authors have several definitions of what marketing is now and has been over the years. According to Keith (1960), the marketing revolution began in 1869; this rebellion brought a change of philosophy in companies consecrating the origination of marketing as a powerful tool in business (Keith, 1960). In fact, the first definition of marketing emerged in the 60s, when it began to be recognized that companies needed to look beyond numbers, statistics or economics, and developed strategies for detecting consumer needs through their behavior to identify what affected purchasing decisions (Keith 1960; Brunswick, 2014).

One of the fundamental marketing concepts is: “Meet the needs in a cost-effective way” (Kotler & Keller, 2016 p.5). Furthermore, an extensive explanation of that is by Kotler (2016), offered started that marketing is the coordination between reason and artistic creation. The reason is to generate in-depth research to inquire into the target audience. The artistic creation is planning an adequate brand strategy for the public's satisfaction about a brand, product or service, and value creation. Likewise, the American Marketing Association (AMA, 2017) commented that marketing is a predetermined activity in creating communication strategies to deliver value that intends to be known and thus generate a reciprocal exchange of offers for both the client and the company.

Marketing involves various activities for different purposes, depending on the firm goals. Marketers also need to gather information, analyze, and take it to action to achieve their objectives. Nowadays, according to circumstances, marketing has been changing because of new necessities and forms of communication. Many authors have been trying to define marketing, but with new eras, innovations, and technologies, marketing definitions and activities change (Brunswick, 2014).

2.1.2 Pet marketing

Due to this increase in pet ownership, consumers are more willing to devote significant resources to their pets, such as money and time. This devotion can be due the increase in the multiple products and services available today (Jyrinki, 2005). For some time now, marketers have been studying the relationship between pets and owners; due to the trend of humanization, it has caught the attention of marketers and researchers (Aylesworth et al. 1999; Boya et al. 2012). In early investigations, Hirschman (1994) identified the impact that companion animals have on the social culture by observing these animals on television and prints advertisement, the apparition in motion pictures, television, and children's books that encode many cultural beliefs. This trend had an impact on marketing without having been studied in consumer behavior. According to Srivastava and Kar (2020), marketers have identified that consumers tend to anthropomorphize products, services, and more, so they can buy and empathize with brands. This phenomenon could explain the industry's growth in animal products such as clothes, beds, and games in the last 30 years (Serpell, 1996; cited on Sollund 2011).

Dotson et al. (2010) mention that dog owners relate more easily to other dog owners. Hence, this new market segment is more susceptible to new social media marketing strategies; it is considered a new consumer-based subculture and is seen engaging in similar activities. This niche market could show higher levels of loyalty to companies that perceive that they support their values (Dotson, 2010).

To date, there is no universal definition of 'pet marketing' among marketers. However, the 'Pet market' is currently growing in several countries such as the United States, Brazil, UK, Germany, France, Japan, China, and Latin America. (Chaves, 2020). Nevertheless, as

the marketing concept evolves, new ways of creating added value to brands or companies with animal-loving consumers as their target market are also innovative.

The concept ‘Pet marketing’ refers to a branch of marketing whose sector is pets and covers the integral strategy of the business, the brand image, the project, the points of sale, websites, online and offline advertising campaigns, customer service, and monetization of results. These activities help both the position and the differentiation with competitors and to generate or increase value by improving profits, always thinking about the welfare of pets, and helping the consumer choose a business or product (Animales del Marketing, 2021).

2.2 Consumer behavior.

The importance of consumer behavior has been increasing in marketing strategy since 1960 (Keith, 1960). This theory is essential for marketers to make the right decisions. Additionally, this concept has a significant weight in marketing because it is the one that studies the behavior of the people, how the consumers make decisions, and what influences those decisions.

According to Corredor (2013), the first influence of psychology on consumer behavior began in 1901 from the possibility of using industrial psychology for advertising hypotheses. So after the Second World War, psychologist Walter Dill Scott helped implement media such as advertising instead of human relations (Corredos, 2013).

The evolution of the concept evolved through phases in which advertising was considered the solution to communication in the early years, but through marketing and advertising, the conscious consumer began to generate more impact on future discoveries of ideas such as consumer behavior (Curti 1967; Corredor 2013). There are several conscious consumers, according to different authors, e.g. Anderson and Cunningham (1972) investigated the socially conscious consumer, where they analyzed both demographic and sociopsychological variables, finding in the first variable that socioeconomic level significantly influences social responsibility, while the second variable directly influenced cosmopolitism. On the other hand, Szmigin et al. (2009) mention that conscious consumers have a mix of behaviors while seeking ethical alternatives; other social and economic forces influence their behavior, and they do not always make positive ethical decisions.

Kraft and Goodell (1993) also put forward the idea of a health-conscious consumer who has wellness as a lifestyle, taking care of healthy food, exercise, and the environment around them.

According to Baron (1989, cited in Solomon, 2013), in later research, consumer behavior is the study process involved in purchasing to achieve satisfaction. According to Solomon (2013), consumer behavior is a process made up of three phases: pre-consumption, consumption, and post-consumption (table 1). The three are seen from two different perspectives - consumers' and marketers' perspectives- and the marketer must identify the consumer's decisions to choose a product. The most recent definition of consumer behavior comes from Perner (2020), who described the concept as a study of how decisions are made and motivated by individuals and groups of consumers. He analyzed in-depth the relationship that consumer behavior has with marketing strategies and the social environment to sell a service or product, and the ideology that studying consumer behavior should make better consumers.

The understanding of consumer behavior is the need to buy a product and the development of physical and psychological processes that the individual experiences when deciding to purchase a good or service, making this process rational or irrational. This concept could help marketers know more about strategies toward attracting consumers and the involvement of some areas such as the psychology of how people think and feel, are influenced, and with this act and chose the product, brand, or service for them convince (Perner, 2020).

Table 1

Consumer behavior three phases

Phase	Consumer behavior
Pre-purchase stage	Need awareness, information search, evaluation of alternatives, make decision on service purchase.
Consumption	Service delivery interactions and request service from chosen supplier or interaction of self-service.

Post- consumption	Evaluation of service/product performance, future intentions and satisfaction.

Source: Tsiotsou & Wirtz, (2015).

The area of consumer behavior includes many psychological areas and theories and concepts such as attitudes and values that influence each person's decision-making.

2.2.1 Attitudes and values in consumer behavior.

Attitudes, values, and beliefs, commonly called ‘culture’ are indispensable for human behavior and progress (Porter, 2000). The most widely used definition of attitudes is Allport (1933), which is a neural mental state created by lived experience that responds to a situation. This concept is essential to measure and predict consumer behavior and facilities for each research (Spears & Singh, 2004). In social psychology, this concept helps to predict consumer behavior in which the favorable or unfavorable valuation that a person has towards a company, product, or service, is measured (Ajzen, 1991).

On the other hand, Knapp (1972) showed that the word ‘Attitude’ is defined as an expression that can be favorable or unfavorable towards objects or situations, characterized by evaluative human responses. For example, a person may express their attitude by communicating that they like or dislike swimming in cold water.

According to Madichie (2012), an attitude has three components: *affect* (feels about an object), *behavior* (acts about an object), and *cognition* (believes about an object). Ajzen (2008) states that the expectancy-value model reveals the importance of researching consumer beliefs of a suitable product or service. According to what is stated above, different attitude-behavioral models support consumer behavior conduct, such as the Planned Behavior model and Reasoned Action theory; those have a reasonable value to predict behavior from intentions, beliefs, and attitudes (Burkhart, 2009).

According to Herek (1986), two categories of functions underlie this scheme: the evaluative or instrumental category and the expressive or symbolic category; in the former, attitudes are based on the direct benefits and costs of the object of the attitude; in the latter, attitudes toward the object are used to express personal values or self-identity.

Rokeach (1973) mentioned that the concept of values, more than any other, is the central concept of the social sciences; being the first dependent variable in the study of culture, society, personality, as well as the first independent variable in the study of attitudes and social behavior. Values are considered desirable norms that influence people's activities; likewise, value is a guiding force that determines people's choices when making decisions in their lives (Knapp, 1972). On the other hand, values influence attitudes and behaviors because they are generally defined as enduring beliefs that transcend specific objects and situations (Kinder and Sears, 1985; Robinson and Shaver, 1973; Rokeach, 1973, 1980 cited on Prentice 1987).

The concepts of attitudes and values are essential to determine consumer behavior in different areas and aspects of their lives, so they help make decisions. Therefore, marketers should be aware of the importance of attitudes for people. Furthermore, an excellent investigation of these can help generate more positive attitudes, so future brands or companies continue to generate value (Ajzen, 1991; Madichie, 2012).

Another way that consumer behavior in the area of wellness helps is with norms people, for example in the case of wellness issues, according to Bashir et al. (2019), green marketing has a close relationship with the theory of planned behavior, as they found that consumers' environmental awareness positively affects their norms and behavior towards green places. In the ecological or environmental areas, the concepts of attitudes and values are commonly used. For example, consumers evaluate their purchasing decisions according to ecological factors, which influence their values and attitudes since they are concerned about environmental issues (Fraj et al. 2007).

2.2.2 Purchase intention.

Attitudes and intentions go hand in hand and are closely linked to understanding human behavior. While the former is defined as a disposition to respond to a certain degree favorably or unfavorably (Ajzen & Cote, 2008), people's intentions when performing a behavior under volitional control are strongly correlated with the exhibition or not of a behavior (Morwitz, 2014). For instance, if a person has the intention to perform a behavior, they will likely do it. If they do not intend, they will likely not do it; when an individual has

complete control of their behavior, theories are sustainable. That is why intentions are the strongest predictor of behavior (Morwitz, 2014).

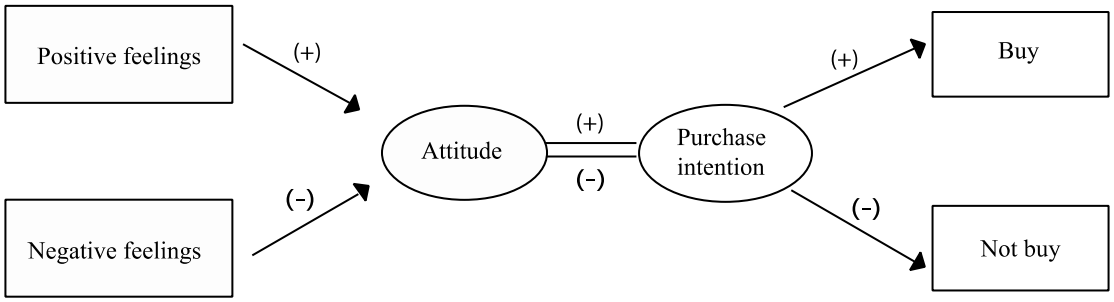
Spears and Singh (2004) defined *purchase intention* as: "An individual's conscious plan to make an effort to buy a brand."(p.56) Research indicates that purchase intentions should be predictive of people's future behavior because they allow each individual to think about and incorporate the most relevant factors to making a purchase decision. However, it has been shown that purchase intentions are not always a perfect predictor because they sometimes exaggerate and sometimes underestimate actual purchase behavior (Morwitz, 2014).

The correlation of "attitudes" and "purchase intention" to behavior is supported by social psychological models, like the theory of Reasoned Action (Fishbein and Ajzen, 1977), the theory of Planned Behavior (Ajzen, 1991), and Value–Attitude–Behavioral theory (Homer & Kahle, 1988). These theories carry links to various constructs that can predict the behavior of individuals.

The research found that in some cases, the constructor concept of purchase intention is used to measure consumer demand for new products in the market. It is common for researchers to use items from this construct, especially for food (Morrison 1979; Morwitz, 2014). The need for a better quality of life is related to the organic purchase intention that has increased in recent days, being necessary for businesses in the future (Rana & Paul, 2017). It is essential to be able to understand the panorama to understand future purchases.
To finish the process of buying shown in Figure 1, after the purchase intention is the state of acquisition, which is the process that consumers go through to decide to purchase a product (Aylesworth, 1999).

Figure 1.

Attitudes and Purchase intention



Consumer behavior related to attitude and purchase intention. Positive/negative feelings generate attitudes followed by the purchase intention, and then the individual buys the product (acquisition process)—own elaboration.

Once the concepts of attitudes and purchase intention have been explained, it is concluded that both positive and negative attitudes generate a reaction to the purchase intention. If an attitude is positive, it is more likely to buy a product/service than if it has a negative attitude. Therefore, decision-making is also influenced by one's own identity.

2.2.3 Self-identity and Extended-self.

Personality is essential for this research because it could have a possible independent predictive effect on the construct of self-identity in the structure of the models of Planned Behavioral theory and theory of Reasoned Action. Hence, it is considered a valuable potential candidate for extending and predicting the behavior of individuals (Sparks & Shepherd, 1992; Sparks, 2000). According to Sparks and Shepherd (1992), self-identity relation between personality and pleasures with self-perceptions. In other words, according to the Merriam-Webster dictionary, it is: the set of characteristics that allow you to identify yourself as a unique individual.

Hypothetically, the authors mention that the link between identity and behavioral intentions is based on identity theory, which conceives the self as a social construct (Stryker & Serpe, 1982; McCall & Simmons, 1966; and Burke, 1980). This theory refers to the fact that each person has different elements of the "self," depending on the situations that arise; therefore, the "self" is presented as a set of different identities, depending on the role in which an individual occupies social structure (Turner, 1978; Terry et al. 1999).

Thus, identity theory is based on the idea that to understand and predict an action or behavior; it is necessary to perceive the "self" and a broader social structure as inextricable. Therefore, this theory also provides a clear justification for the inclusion of self-identity as a predictor of intention, given that the theories that support this concept, such as Planned Behavior and the theory of Reasoned Action, consider intention to be the most assertive predictor of behavior (Turner, 1978).

In support of this proposition, Terry et al. (1999) showed that self-identity significantly predicted behavioral intention and further showed that the perceived norm of a group of behaviorally relevant participants was related to behavioral intention but only to those who strongly identified with the group. In other words, people can participate in activities according to their identity. Likewise, comparable results have been found between self-identity and intention to consume organically produced vegetables (Sparks & Shepherd, 1992).

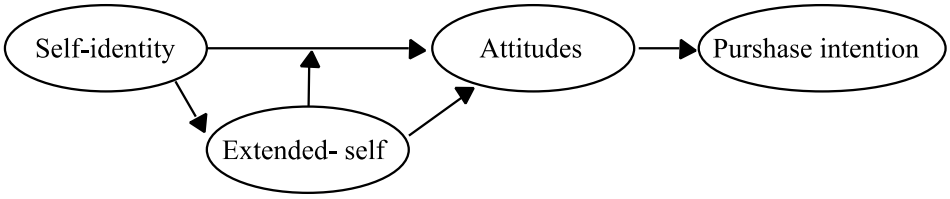
Recent research has focused more on identity concerns in consumer issues to examine the specific effects of the self and the different aspects of self-identity on consumer behavior (Escalas et al. 2013). This research needs to know how consumer behavior and self-identity evolve to understand future purchases. It has been investigated that people consume or perform activities with their sense of self for a long time. For example, Belk (1988) put forward the idea that consumers use possessions and brands to generate their identity and communicate it to others and themselves. Nevertheless, to better understand this, it is also essential to recognize that, knowingly or unknowingly, people consider possessions as part of the self (Belk 1988).

Also, this theory mentions the existence of possessions that are often incorporated into the sense of self; for example, money, other people, collections, body parts, and pets, which are categories of objects considered a part of the extended self (Belk, 1988). The construct of the extended self is considered to include both personal and social aspects. Thus, Belk found that the dog owners who were interviewed stated that their pets matched their lifestyles and personalities, reflecting these personal and social aspects (Belk 1996, p.127, cited on Jyrinki, 2005). However, according to Jyrinki (2005), this construct is also affected by different subcultures; in the research results, dogs may be seen more as extensions of themselves than others, indicating that the meanings related to pets are

socially constructed. The research found that when people bought healthy food for themselves, they were much more likely to do the same with their dogs. Just as owners are much more loyal to brands of dog food than to themselves, checking out the preoccupation of pets (Tesform & Birch, 2010). The construct of the extended self is more related to the consumer rather than buyer behavior; however, it is thought to be a construct that posits a relationship between self-concept and consumer brand choice (Belk, 1988). Figure 2 shows the development of the model for this research, incorporating the constructs of self-identity, extended self, attitudes, and purchase intention.

Figure 2.

Model development.



Model development. Shows the influence of self-identity and extended self toward attitudes, purchase intention, and consumer behavior based and adapted on Planned behavior theory. This model tries to explain the relationship that can be implemented in a behavior. To be specific, Self-identity can influence attitudes, then purchase intention, and consumer behavior—own creation. Adapted from Ajzen (1991).

This elaborated model helps the final model be better identified and understood since these ideas are an essential part of deciphering consumer behavior. A figure adapted from Ajzen's (1991) theories of Reasoned Action and Planned Behavior theory supports the knowledge base.

2.3 Theories related to consumption.

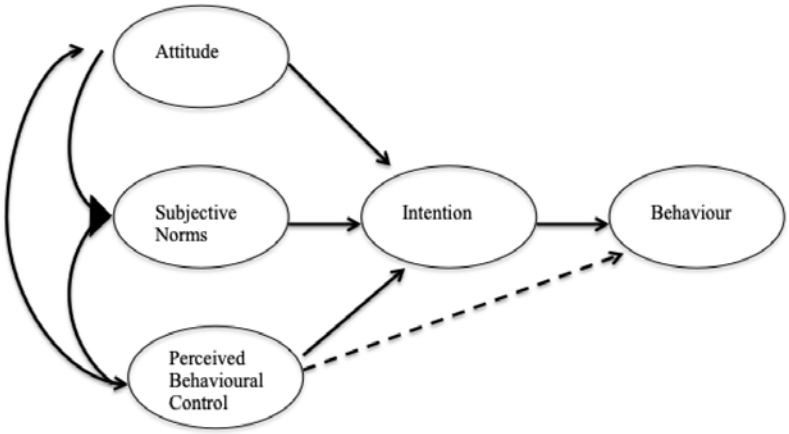
2.3.1 Theory of Reasoned Action and Planned Behavior theory.

To understand the model for this research, some theories that support the prediction of an individual's behavior are required as a basis. The theory created by Ajzen and Fishbein, which relates attitude-behavior by linking attitudes, subjective norms, behavioral intentions, and behavior in a fixed causal sequence, is known as the theory of Reasoned Action (TRA). (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975, cited on Sparks & Shepherd, 1992). In other words, this theory refers that an individual's behavior is due to the behavioral intention, which is exercised through the combination of attitudes towards the performance of the behavior in question and subjective norms, considered as the perception of the social pressure exerted on the person to perform a behavior (Sparks & Shepherd, 1992). Attitudes are understood to arise from a combination of the beliefs and evaluations that people have about behavior outcomes (Banaji & Heiphetz, 2010). On the other hand, subjective norms originate from the combination of people's perceptions of what they think other individuals of interest think they should or should not perform a behavior (Pender & Pender, 1986).

Subsequently, the structure of the TRA model was modified by adding a measure of perceptions of behavioral control, giving birth to the theory of Planned Behavior (TPB); this extension was due to behaviors that are not under a person's control (Sparks & Shepherd, 1992). A central factor in Planned Behavior theory is the individual's intention to perform a given behavior. Intentions are thought to capture the motivational elements of each person that influence the performance of the behavior. They are indicators of how hard people are willing to try to perform a behavior, and the stronger the intention to perform a behavior, the more likely it is to be performed (Ajzen, 1991). It is critical to define that behavioral intention can only be realized through self-will; however, other influencing factors such as the availability of resources and opportunities may also play a role. Perceived behavioral control refers to an individual's perception of the ease or difficulty of performing a behavior of interest; it varies depending on situations and actions (Ajzen, 1991). In figure 3 is shown the Planned Behavior model of Ajzen (1991).

Figure 3.

Planned behavior model.



Note: Main factors influencing the intention (Attitudes, subjective norms, and Perceived Behavioral control) to predict the behavior. Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, *50*(2), 179-211.

2.3.2 Value-attitude-behavior theory.

Findings demonstrated the potential role of values in a causal modeling approach; in turn, values have been shown to have internal and external dimensions that influence attitudes, thereby influencing behaviors (Homer & Kahle, 1988). For example, it has been found that people with internally oriented values want more control in all aspects of their lives (e.g., eating). In contrast, individuals with externally-oriented values (e.g., acceptance, security, sense of belonging) are more likely to let fate have control of their lives (Rotter, 1966; Kahle, 1983). For example, if they have internal values in natural foods, they are more likely to take care of their bodies and buy them (Kahle, 1983). In support of this theory, the results in the research of Kim et al. (2020) showed that individuals' perceived value of sustainability and the adoption of environmentally conscious/environmentally friendly eating had a highly significant effect on attitude, personal norms, and social norms on waste reduction behavior. Likewise, with a cross-cultural test, Milfont et al. (2010) found that environmental attitudes influenced altruist values and self-improvement in environmental behavior. This theory has been used for various aspects of food purchasing and is essential for support-related issues.

Figure 4. *Value – Attitude – Behavior theory.*

Value → attitude → behavior.

Note: VAB theory includes: Value orientation as the first step, followed by attitude as second and third behavior. From Vaske, Jerry and Maureen (1999).

2.4 Relationship between humans and dogs.

2.4.1 Dog-human bond.

The participation of companion animals has changed through time. In ancient times, in a cultural context, animals were used as partners in human survival, health, and healing: for example, hunting animals, herding, and protection; in the case of cats, they were used more to control plagues (Walsh, 2009).

Nowadays, they have become more important in humans' lives, and their interaction has created a close relationship and a strong connection with both. Dogs have similar characteristics to wolves. It is well known that dogs are known to descend from them; however, interaction and communication with these animals have been created mainly due to domestication (Elgier et al. 2008). This kind of communication is because dogs have auditory, olfactory, and visual skills that help communication between their breed and humans (Siniscalchi, 2018), and they tend to understand human emotions. In reaction, pet owners can interpret several reactions of their pets. With this bilateral communication, the human-companion animal bond increases (Sollund, 2011).

While it was unclear how the companion animals benefit us at the beginning of the dog-human relationship, some research has shown the importance of companion pets and how they can significantly improve the quality of life, thereby significantly impacting health. For instance, therapeutic, physiological, psychological, psychosocial, and help with some diseases (Geisler, 2004; Wood et al. 2005; Gomez et al. 2007).

Beyond the benefits of having a dog as a companion, Archer (1997) mention that this increases positive emotions in humans, relieving loneliness and giving them a sense of security; however, nowadays, these companion animals are mainly kept for companionship (Boya et al. 2012).

On Hirschman's literature, categorize two functions that may have companion animals in consumer's life: Animals as objects/ products (e.g., animals as ornaments, animals as status symbols, as an avocation, as equipment, as people, as extensions of the

consumer's self) and animals as companions (e.g., animals as friends, animals as self, animals as family members) (Boya et al. 2012). Hirschman, 1994 This is considered mainly because this literature about companionship between human-animal is due to the growth of humanization or anthropomorphism of companion animals by their owners (Boya et al. 2012). According to Epley, Waytz & Casioppo (2007), the concept of anthropomorphism can be defined when a person instills actual or imagined behaviors to objects and things with human characteristics, motivations, intentions, or emotions. However, the anthropomorphic thinking generated in humans allows the social behavior of companion animals to be interpreted in human terms, allowing these animals to function for their human owners as non-human social support providers (Serpell, 2003).

2.4.2 Dog-related buying behavior

The relationship between dogs and humans has been so significant that they have influenced various products. According to Diaz (2017), the trend of anthropomorphism associated with the perception of human-dog relationships is one of the most accurate. It can be used as a strategy to reduce perceived costs that a pet can incur and help foster the dog-human relationship in parallel with direct approaches to objective costs. This relationship has generated the importance of buying products with more care for pets, giving more time and importance to their health, and generating emotionally solid ties (Boya et al. 2012). Archer (1997), on the other hand, found that the relationship between owners and their pets is comparable to the relationship that parents have with their children, discovering that a large number of people consider their pets as members of the family. When pet owners overwhelm their animals with affection will pay almost anything so that they do not lack anything.

Likewise, pets are considered part of a person’s identity because they have been considered possessions and, therefore, part of the extended self (Belk, 1988). Studies have shown that dog owners buy for them as if we were buying for ourselves, so they have become more concerned about the welfare of their pets (Tesfom & Birch, 2010). Jyrinki & Leipamaa-Leskinen (2005) found a strong relationship between the extended self and their owners' purchase of food for dogs, demonstrating that people who considered their dogs as part of their extended-self showed more empathy than what they wanted for themselves

also wanted for their dogs. The increase in pet welfare on the part of pet owners has been increasing significantly, and it has been shown that owners who feel a strong attachment to their canine companion are more likely to care for their pets and spend more on healthy food for their dogs (Boya et al. 2012).

Dotson et al. (2010) showed that dogs play an increasingly important role in household consumption, including travel and vacations and the hotel sector. Therefore, they should be careful about selling through the human-dog relationship and should think more about this segment when including the possibility of bringing their pets into airports and hotels.

2.5 Dog-owners and pet food.

2.5.1 Pet food industry in the market.

Very few studies have been done on the dog food industry concerning consumer behavior; however, systematic studies related to companion animals and their owners have significantly impacted the pet food industry. As owners have become closer to their pets, this has been changing and expanding. In a report by Fiormarkets (2021), the pet food market is expected to grow with a CARG (compound annual growth rate) of 4.44% from 2020 to 2028, projecting a total of $111.27 billion in 2028. Currently, there are different kinds of dog's foods, of which the common ones are: dry, wet, grain-free, while those known as premium are holistic and even natural and organic, which are derived from the growing concern of pet owners for their pets (Fiormarkets, 2021). Moreover, Deng and Swanson (2015) showed that passionate consumer pet owners are willing to spend a considerable amount of money to buy food even in times of economic downturn, demonstrating that the survival of this pet food industry has withstood global economic instability.

It is shown that the pet food industry has been changing dynamically due to the increasing demand for quality food from pet owners. This demand is due to numerous improvements in pet nutrition, resulting in the development of a wide range of foods that provide complete and balanced nutrition (Bontempo, 2005; Deng & Swanson, 2015). Also, the trend of humanization and the importance placed on the health of our dogs has been a major contributing factor to the interest in this topic (Boya et al. 2012; Bontempo, 2005).

The importance pet owners given to their pets has been a factor in the growing demand for specialty and premium products in the dog food industry (Bootempo, 2005). Specialty or premium dog food is considered the same as human food; they are targeted to specific consumers with particular lifestyle preferences, such as good health or low environmental impact, and are considered value-added foods (Kumcu & Woolverton, 2015).

Dog owners are faced with a variety of options for their dogs and are influenced by different factors when choosing. Among those factors, consumers focus on the benefits provided, such as improved health, increased energy, improved performance, or more excellent resistance to diseases such as obesity, hypertension, diabetes, and heart disease (Clemens, 2014). That is why Boya et al. (2015) concluded that the wide range of dog food is a clear example of different target groups among dog owners. Additionally, further that consumer segmentation based on sociodemographic aspects did not work for dog owners. The relationship between pet owners and their dogs significantly influences pet food purchase behavior (Boya et al. 2012).

Concluding, numerous researches have shown that the greater the relationship between pet owners and their pets, the more likely they are to buy products that help them in any area of their lives, and they usually prefer premium products.

2.5.2 Consumer behavior toward organic and natural food for pets.

It is a fact that natural and organic pet food exists, but no studies have been done on consumer behavior regarding these recent products on pets. However, there has been growing concern for the health of companion pets as well as pet owners. This concern is because many consumers are becoming more informed about the ingredients in their food and their dogs' food. Consequently, dog food manufacturers have considered and communicated that dogs should be fed the same quality food as humans (Fleenor, 2009). That is why there is more variety of dog food, like organic, natural, nowadays. It has also been found that animals' humanization has contributed to the concern of animals for food, creating a new market for natural and healthy food. This increase in pet foods has left a wide variety for consumers to choose from, making it difficult to know which is the best option; nevertheless, studies shown that consumers are increasingly opting for healthier and more sustainable foods (Nielsen, 2019).

To be clear is essential to know the difference between organic and natural food for dogs. According to the Association of American feed control officials (2012) (AAFCO), natural food must be foods derived only from plants, animals, or extracted sources that have not been processed or have been subjected to chemical processes. They must not contain additives, except in specific amounts that can be attributed to the product. Meanwhile, according to the U.S Department of Agriculture (USDA, 2015), it must have strict indications and natural food to be certified as organic. In this case, the ingredients in the manufacturing of these foods, the animals must be in organic feed and not be treated with hormones or antibiotics that may impair the performance or nutritional value of the food, and it is more regulated than “natural food.”

The increase in demand for natural products is due to dog owners' belief that they are high quality and safe, that they are made with ingredients that fit the concept of naturalness of the individual, and that they provide functional benefits to the health of their canine companions (Buff et al. 2014). Carter et al. (2014) showed that the immense growth of natural foods is due to the perception that natural is often based on personal biases, experiences, or perceptions rather than the regulatory definition of natural. Other studies mentioned that buying these products was due to product design, concern for food safety and the environment, and consumers' ethical identity (Hwang, 2016).

These reasons can also influence the decision to buy organic or natural dog food. However, it has been found that variables such as palatability (referring to the perception of taste, texture, and smell that food produces when eaten) for dog food increases consumer demand (Nupec, n.f). Nevertheless, nutrition is considered one of the most critical parameters for maintaining animal health (Viana, Mothé & Mothé, 2020). On the other hand, other results have shown the lack of awareness of some consumers about organic food, health issues, and quality, so in the same way, they do not agree with the price of these products (Pilelienė & Tamulienė, 2021). So, they are making it difficult to purchase these foods.

The variety of natural pet food products is expanding, and companies such as Hills, Nupec, Pet Naturals, Organix, Petguard, Newman's Owns, TruDog, among others, have been some of the brands offering this type of food. The lack of visibility and understanding has led to confusion and disagreement of the true definition of natural pet food and natural

pet nutrition (Viana, Mothé & Mothé, 2020). For example, there are raw meat-based diets for dogs (RMBD) (Morelli et al. 2019). However, this research focuses on food (kibble) labeled ‘natural’ for dogs. Nevertheless, more products can be confused in the pet food market, like organic and natural food for dogs. Moreover, a study related to consumer research by Wee et al. (2014) demonstrated the intense relations of purchase intention to organic products because of the safety, health, environmentally friendly, and animal welfare perception. In addition, organic food has been increasing in popularity for some time now. Consumers choose organic products because of health, animal welfare, environmentalism, and quality considerations (Hjelmar, 2011).

Additionally, people concerned about their health and prefer more natural products comment that the impact could be more significant if the labels say ‘natural’, which gives them a better perception (McFadden & Huffman, 2017). However, it is essential to understand that the terms natural and organic may not be differentiated in many places due to a lack of information.

2.5.3 Consumer healthy food values and animal welfare

Due to the increase in companion animals and the strong relationship between both, concern for animal welfare has increased (Spencer et al. 2006). Previously, consumers chose foods based on taste and price but recent research has shown that other food values influence these decisions, such as health and wellness, environmental impact, safety, and ethical concerns (Ringquist et al. 2016). For example, Liñán, Arroyo, & Carrete (2019) showed that consumers valued aspects such as physical surroundings and intangible values such as taking care of oneself significantly influenced preferences for healthy foods. Similarly, Manan (2016) showed that people have around 200 food choice decisions, thus proving that personal values influence attitudes towards food and thus food choice.

In recent years, the attributes of new consumer products, such as the ecological impact of production, social responsibility of producers, health and environmental awareness, and animal impact, are topics of interest to know one's behavior (Ghvanidze et al. 2017). However, when researchers talk about food attributes, there can be infinite options; nevertheless, only a few can be considered (Martínez-Ruiz & Gómez-Cantó 2016). Therefore, these attributes became the consumer's values regarding food; thus, it is claimed

that researchers found that purchase decisions were influenced by personal values (Martínez-Ruiz & Gómez-Cantó 2016; Lang & Lemmerer 2019), indicating that people's values are attributed to food products.

However, for this research, animal welfare is considered support for the model and the nutritional food values that dog owners have that influence attitudes and intention to purchase organic or natural dog food. Furthermore, the research found two different approaches to animal welfare for the decision of consuming a healthy product for dogs; the first related to the welfare of their pets, while the other focused on the welfare of other animals used to feed both pets and humans. Nevertheless, animal welfare must consider both direct (handling) and indirect impacts, e.g., the environment, the spread of diseases, availability of natural resources, culture, and society (Tarazona, Ceballos & Broom 2020).

Overall, pet owners are searching for a long and healthy life for their pets. In addition, they are looking for a better quality of life in terms of disease reduction and the ability to maintain an active life, so there are significant factors for the increasing search for specialized and high-quality pets' foods (Bontempo, 2005). Additionally, Marinelli, Adamelli, Normando, & Bono (2007) found that the characteristics of the dog-owner and the dog are essential for the dog-owner relationship, which affects the welfare of the animal. For example, the choice and preferences of a companion animal guarantee a better physical condition and care of the pet, improving the quality of life. However, research has shown that many owners consistently meet all or most of their companion animals' welfare needs throughout their lives, but some owners meet them sometimes, and others do not meet their needs all the time (Philpotts, Dillon & Rooney, 2019).

In the case of the second approach (Universia, 2015), a study showed that people who have animals are empathetic and high-altitude compared to what they do not have. Pirsich et al. (2017) proved that the solid human-dog companion bond transfers to some extent strong feelings towards farm animals; demonstrating a significant difference in the attitude of pet owners to non-pet owners about animal welfare concerns in animal husbandry, justifying the potential for more research and production of pet food with WFP (welfare-friendly production). For example, Boogaard et al. (2006) demonstrated that both values and emotional experiences influence the quality of life of farm animals in the

consumption of animals by humans. However, in addition, companion animals also influence the perceived well-being of farm animals.

In both cases, Homer and Kahle (1988) mention that people with internal values give more importance to decisions about what food to buy and where to buy it and are concerned about their nutrition. Therefore, they can also be extended to the food of their pets. For example, Rothgerber (2013) describes the dilemma of vegetarians as they are conflicted about feeding their pets an animal-based diet. Thus, some pet owners who abstain from eating meat for ethical and health reasons feed their pets a vegetarian or vegan diet (Rothgerberl 2013).

2.6 The research model and hypotheses.

In order to explain the purchase of natural labeled dog food, the following hypotheses are proposed.

Empirical evidence shows that people who have nutritional food values it is mainly due to animal welfare. So, they are more likely to take care of their health; however, it is considered that people who are more health-conscious and have pets are more likely to pass on these nutritional values to their pets. So, it is proposed:

H1: *The healthy food values of owners significantly influence the healthy food values for dogs.*

Due to the increased concern and care for self and pets, supported by the self-extension theory, it is likely that the identity one has of themselves, in this case, relates to nutritional food values, and extends to the companion dogs, thus more likely to generate a positive attitude towards foods labeled as natural dog food. H2 is proposed:

H2: *Dogs' healthy food values significantly affect dogs' natural or organic labeled foods.*

According to research, there is solid theoretical evidence that Anthropomorphism, the humanization of objects (in this case, pet dogs), has significantly impacted the purchase of various products related to animals. Hence, it can be considered that this phenomenon can generate optimistic attitudes towards purchasing food with natural labeling for dogs. Thus hypothesis 3 is the following:

H3: *Anthropomorphism significantly affects attitudes toward natural or organic labeled dogs' food.*

According to research, the current demand for organic food, whether for health care, animal welfare, or fashion, is seen as a propensity towards positive attitudes towards purchasing naturally labeled dog food. Therefore, hypothesis 4 is presented as follows:

H4: *There is a significant relationship between actual purchase behavior on organic food products on attitudes towards natural or organic food labeling for dogs.*

According to the theoretical framework, positive attitudes towards something can be sufficient motivation for the purchase intention of a product so that the product's purchase would follow, which is also present in explaining consumer behavior. Therefore, hypothesis 5 is shown:

H5: *Attitudes towards natural or organic labeled dog food significantly affect the purchase intention of natural or organic labeling food for dogs.*

Figure 5.

Research model

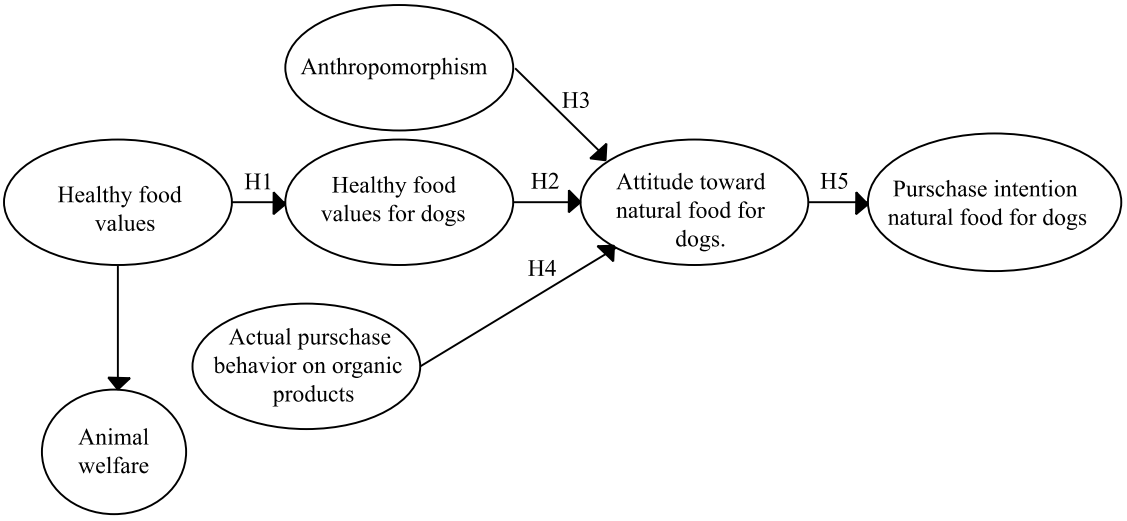


Figure 5. The planned behavior model and vale – attitude – model were modified to explain this research project. Explaining how self-identity (Healthy food values and organic food products) and extended- self (Healthy food values and Anthropomorphism) influence attitudes, purchase intention, and consumer behavior. Own elaboration. Adapted from TRA and TPB, (Ajzen 1991).

2.7 Purchase of healthy food in Mexico

2.7.1 Actual purchase of organic food in Mexico.

Organic food has been growing thanks to the benefits and awareness that people have for their health. Because of that, the market and demand for organic products are constantly increasing, and more countries are following the increase in their organic food production (Golijan & Popović, 2016). These organic products are based on organic agricultural production, which, unlike conventional production, does not contain chemicals or synthetic materials. As a result, organic production allows the regeneration of soil, maintaining the essential nutrients of its elements (without genetic modifications), and promotes, in some cases, less external dependence on inputs such as fertilizers, pesticides, among others (CEDRSSA, 2015).

Due to the allowance to use these organic products, countries have become more aware of the importance and development of these foods. According to Golijan and Dimitrijević (2018), in the last 15 years, the market for organic products has multiplied fourfold, with the majority being in the North American market, representing significant

international sales. Meanwhile, in Latin America, the largest market for organic products is in Brazil, while the leading exporters are Argentina, Peru, Chile, and Colombia, where fruits and vegetables, bread and cereals, beverages, milk, and meat are the leading organic products produced (Golijan & Dimitrijević, 2018). However, according to Forbes (2018), Mexico is the fourth-largest producer globally and is among the 20 largest worldwide. Likewise, more than 45 organic foods are grown, being coffee, safflower, avocado, corn, and agave, the main ones (Forbes, 2018). The consumption of organic products depends on demographics and beliefs since each region has different incomes, lifestyles, product availability, among others (Hughner et al. 2007).

The variation in the consumer profile of organic food consumers depends on perceptions, attitudes, and motivations for an accurate definition of the consumer profile, which affects product purchase intention (Wee et al. 2014; Feil et al. 2020). According to a study by Nielsen (cited on Alto Nivel, 2021), the consumption habits of Mexicans have been changing. In Mexico, organic food consumption has increased by 53%, 30% in the purchase of products low in sugar, sodium, and fat, and 17% in the sale of natural products. This type of consumtion is mainly for health reasons (Víquez, Hernández, & Ávila 2015). However, three types of consumers stand out, those who buy healthy and environmentally friendly products, consumers who buy organic products daily doing it mainly for health, and consumers who do it only for fashion (Lopez Salazar, 2019). Another study by Perez Vazquez et al. (2012) in Mexico showed that people consume organic products mainly for health because it helps preserve the environment, taste, freshness, and support the local economy.

On the other hand, Schifferstein and Ophuis (1998) defined the traditional consumer of organic products as people who consider consuming these foods as a way of life since it connects with their particular value system that affects their personality and attitudes, and consumption behavior. According to Gottschalk and Leistner (2013), price is the most important criterion when buying organic products. The price of organic food is relatively high, so Mexicans are more willing to pay for organic products if people know the advantages of consuming these products (Lopez Salazar, 2019). It has been proven that people who consume organic products are located in a medium to the high economic range

and therefore have a high level of education. They also care about their health and the environment, so they are willing to pay the price (Perez Vazquez et al. 2012).

However, the growing demand for organic products has been increasing in Mexico. In a report made by Nielsen Connect Mexico (quoted in Herrera, 2021), it is noted that organic markets in Mexico grew by 53% in the last quarter of 2020; due to the changes in habits that consumers are acquiring.

Likewise, the demand for new organic products such as organic potato chips, organic milk, organic cheeses, instant or sugar-free chocolates, a line of vegan products, among other things, has increased (Herrera, 2021).

2.8 Market food for dogs in Mexico.

2.8.1 Market food for domestic dogs in Mexico.

According to research, 7 out of 10 households have a pet; likewise, domestic dogs have increased by 20% from 2008 to 2018, revealing that 80% of pet owners have canines at home (Senado, 2018).

According to Forbes (2020), businessmen have observed an increase in the pet market in Mexico because pets have become part of families. With the close relationship that has occurred, Mexicans have begun to worry more about feeding them. Likewise, consumers are willing to pay up to 20 billion pesos a year for their pets' food (Forbes, 2020).

As we have been observing, this trend of the closeness of dogs to their owners has been the reason for the increase in the pet food industry worldwide (Viana et al. 2020). In the case of Mexico, the pet food market registered a 13.3% growth in value in 2019, with millennials being the primary consumers of pet food (Franco, 2020). However, almost 45% of people do not buy exceptional dog food (Moran, 2017).

Nevertheless, in recent studies, in a Euromonitor report (cited in Robayo 2019), it is mentioned that Latin America occupies the second place in dog food consumption in the world, with sales of 10,847 million dollars, below North America, which tops the list with 23,244 million dollars. This consumption is also because more and more Mexicans who own dogs are concerned about providing a healthy diet for their pets, which has generated an upward movement in the food market in all segments (Robayo, 2019).

CHAPTER 3

2. Methodology

The purpose of the study was to find out the factors that influence purchase behavior towards natural and organic labeled dog food. In addition, hypotheses were tested to determine if there is a relationship between theories such as self-identity, whether dogs are an extension of oneself, and the constructs used for verification. This chapter will present the research design, the objects of study, the unit of analysis, the size of the universe, the sample size, the type of sampling, the instrument, and the questionnaire. It will also explain the methodological instruments used to fulfill the objectives and the development of the work.

3.1 Research design

The study was used to determine factors affecting the purchase of natural food for dogs. The research design is done to define the research focus. Therefore, the research instruments significantly influence, especially since the work hypotheses were verified (Malhotra, 2008).

The demographic factors considered in the study include gender, age, level of studies, and marital status. In addition, four other variables related to consumer behavior were also considered. However, they were not manipulated due to the limitations (Agudelo, Aigneren & Ruiz, 2008). Therefore, the research design selected for this study is a non-experimental, quantitative, correlational design.

The similarity is a cross-sectional design because a single sample was drawn at a specific time, with snowball sampling (Malhotra, 2008). Further, it is exploratory and correlational since it seeks to explain behavior and the relationship between 1 or 2 variables.

The design was used to compare variables to determine whether significant statistical relationships exist between independent and dependent variables (Cozby, 2001). The variables were measured on a Likert-type survey questionnaire to collect data on dog-owners purchase intention toward natural leveling food for dogs and the demographic characteristics of dog-owners (Appendix 1). A statistical correlational design is appropriate

for predictive analysis regarding relationships among and between variables (Gregar, 1994; Salkind and Rainwater, 2006).

A survey instrument was developed to measure the constructs established for the research and some demographic aspects. However, it was conducted online due to the limitations related to Covid-19. The research design chosen was quantitative because an association was made between variables. Moreover, the association was determined by quantitatively assigning numerical values to the variables.

3.2 Study objects.

The purpose of the quantitative correlational study was to examine dog-owners' demographic characteristics, with four different variables to determine whether these characteristics significantly affected purchasing natural labeling food for dogs.

The sample for the study was comprised of dog-owners

The study object selection was determined under specific characteristics considered for their validation. Men and women were considered to be aged 15 to 60 years who lived in Mexico. A population group has agreed to take an online survey and has one or more dogs as pets. Pets-owners were considered people who understand the importance of good nutrition; they care about the environment and their pets. This target population was considered because of natural/organic food for dogs in pets' shops.

3.3 Unit of analysis, universe size, sample size, type of sampling.

The information used for this thesis was only preliminary information with a survey sent electronically. The survey was created in Google forms because of the limitations mentioned and the ease of sending; furthermore, it is a non-probability sample with a snowball technique (Malhotra, 2008).

The population corresponding to this research is infinite (N represents the whole population or universe). Although the segmentation has specific characteristics, they are general, and their elements cannot be counted. This analysis will be done with a confidence level of 90% and a sampling error of +-8%.

$$n = \frac{Z_{\alpha}^{2} * p * q}{e^{2}}$$

n: the size of our market

Z: for a statistical meter that depends on the confident interval

e: maximum accepted estimation error

p: the probability of occurrence of the statistical event.

q: (1-p) probability that the event does not occur.

Using the former formula, remembering the level of confidence is 90%, the maximum accepted estimation error is 8%. The survey was for 250, and finally, the useful questionnaires were 107, a sample that is adequate for this research.

3.4 Instrument.

The survey was formed with 31 items divided into four different sections, with the first question *ad hoc* that filtered out people with the characteristics required for research (Appendix 1). In the first section, demographic questions were implemented. The second was evaluated the concept of "Extended-self" with variables of anthropomorphism and nutritional food values for dogs; While in the third, the concept of "Self-identity" was evaluated with nutritional food values and actual purchase behavior on organic food products. The final section evaluated attitudes toward natural food for dogs and dogs' purchase intention to analyze and connect the relationships among variables.

A researcher-developed questionnaire was used to measure the stated main variables.

The Likert-type questionnaire was presented to the participants. The first part of the survey was developed with multiple choice and open questions. At the same time, the other three sections were measured on a seven-point Likert-type scale with responses coded as 7 = Totally agree, 6 = Agree, 5 = Agree somewhat, 4 = Neutral, 3 = Disagree somewhat, 2 = Disagree, 1 = Strongly disagree. For the evaluation of results, SPSS and Smart PLS were considered.

3.5 Questionnaire

The following is the questionnaire used in this research, showing the questions for each item we needed to know to find the useful data for the purpose of this research.

Table 2.

Questionnaire section

Construct	Item	Authors	Scale
Anthropomorphism	A1. I see dogs as more like people than wild animals. A2. My dog is a part of my family. A3. I feel like I can communicate with my dogs. A4. My dog is like a child to me. A5. I learn a lot from my dogs. A.6 I have the same responsibilities as a parent when it comes. A.6 I have the same responsibilities as a parent when it comes to taking care of my dog.	Michael J. Dotson, Eva M. Hyatt (2015)	1-7 points Likert scale
Healthy food values for dogs.	HFVD1. My dog´s health means a lot to me HFVD2. It is important to me that my dog is in good health HFVD3. I often think about my dog´s health HFVD4. I consider myself a person concerned about healthy food for my dog. HFVD5. I am very concerned about the health consequences that are related to what my dog eats.	Adapted from Alina Tudoran et al. (2009)	1-7 points Likert scale
Healthy food values	HFV1. It means a lot to me to have a good health HFV2. Good health is essential to me HFV3. I often think about my health HFV4. I think of myself as a person who is concerned about healthy food HFV5. I am very concerned about the health-related consequences of what I eat	Alina Tudoran et al. (2009)	1-7 points Likert scale

Actual purchase behavior on organic food products	APBOP1. I often buy organic food products. APBOP2. I often buy organic food products regularly APBOP3.I often buy organic food products because they are more environmentally friendly APBOP4. I often buy organic food products that are against animal testing. APBOP5. I often buy organic food products that are safe to consume. APBOP6. I often buy organic food products for my health.	Wee et al. (2014)	1-7 points Likert scale
Attitude toward Natural food for dogs	ATNFD1. It is valuable for me for food products to be enriched with healthy ingredients. ATNFD2. I find it positive if food products have been enriched with healthy ingredients. ATNFD3. Adding healthy ingredients to food products is good for my health.	Adapted from Alina Tudoran et al. (2009)	1-7 points Likert scale
Natural food for dogs Purchase intention	NFDPI1. I would buy organic food products soon. NFDP2.I plan to buy organic food products in regular basics. NFDP3. I intend to buy organic food products for my long-term health benefits. NFDP4. I intend to buy organic food products because they are more concerned about food safety. NFDP5. I intend to buy organic food products because they are more environmentally friendly. NFDP6. I intend to buy organic food products because I am concerned about animal welfare.	Adapted Wee, et al. (2014)	1-7 points Likert scale

Note: The operationalization of this instrument was based on and adapted from other authors. Because the segmentation was based in Puebla city, these questions were translated to Spanish.

3.6 Data collection.

The survey was conducted online using Google forms due to the quarantine in Mexico from March to July year due to COVID-19. This application may give general graphics while the surveys are being collected. A total of 275 online surveys were sent out, of which only 107 were valid, due to the specific characteristics that the respondents had to have; firstly, they needed to have dogs, and secondly, they had to feed their companion animal with natural or organic labeling food for dogs. This complicated the number of people required. This survey suggests that few people buy natural or organic food for their dogs in Mexico. Even if the research in the theoretical framework shows that the growth of organic food is booming, in the case of this research project, the number of people surveyed was reduced due to limitations by COVID-19 that did not help this research and specific characteristics that did not help the required audience. The results of the survey were imported into an Excel spreadsheet. Each row in the spreadsheet corresponded to one survey respondent. Each column represented the responses from the survey instrument. In this way, the Excel data made it feasible to be imported to the statistical tool of SPSS. Moreover, for the analysis, PLS smart software was also implemented.

3.7 Study variables

The unit analysis for the study is if the self-identity of the owner affects food purchases for their dog. The owners' Self-identity was measured through the survey instrument. The key objective for the study was to determine whether a relationship exists between the owners' purchases influenced by their Self-identity. The demographic characteristics consisted Age, gender, level of studies, and civil status. Dog-owners who completed the surveys selected answers from classification options in the survey questions on demographics. Therefore, demographic characteristics were categorical variables in the study. Table 3 shows the variables included in the study and some descriptions of those variables.

Table 3.

Summary of Study Variables

Type of variable	Variable	Data type
Dependent variables	Attitude toward natural food. Purchase intention toward natural food for dogs. Self-identity: • Healthy food values. Extended- self: • Healthy food values for my dogs.	Ordinal, nominal.
Independent variables	Self-identity: • Actual purchase intention toward organic food Extended- self: • Anthropomorphism Demographic characteristics: • Age • Gender • Level of studies • civil status	Ordinal, Nominal, and Interval

Own elaboration.

3.8 Data Analysis

For data analysis, all survey responses were entered into excel to generate graphs related to the constructs and observe a similarity. Then, IBM SPSS Statistics was used to identify reliability and descriptive analysis. Then, Smart PLS software was used to generate a structural equation modeling with the least-squares method SEM. The aim was to analyze the correlations between constructs.

CHAPTER 4

3. Presentation and analysis of results

In this chapter, we will show the analysis of the results from the model for this research, in order to provide the most important conclusions from the data and form the results.

4.1 Demographic analysis.

First, a descriptive analysis was made with the demographic results of the participants. The predominant gender were women with 69,5%, and the other 30,5% were male. Since it is a significant percentage difference, we could say that women buy more naturally labeled food for their dogs and have more dogs.

In terms of age, people between 21 and 40 years are the most predominant, with 61.9%, and secondly people between 41 and 56 years, with 32.3%. However, this does not mean that they are the ones who have bought the most dog food with natural or organic labeling; due to circumstances, it may not have reached all the predetermined correctly.

Another important aspect regarding the results shown in the table is that all respondents have a bachelor's degree or more educational levels. Just 7.7% of the respondents have finished high school, and at least 66.7% that is the majority have a bachelor's degree, and 21.9% have a Master's degree.

The people surveyed are mostly single with 53.4%, and in second place, there are 30.5 % married. The other percentages are divided among all other marital statuses. Table 3 shows the demographic data collected.

Table 4.

Respondent´s demographic profile.

	Item	N	%
Gender	Male	32	30.5
	Female	73	69.5
Age	15 – 20	1	1.33
	21 – 40	65	61.9
	41 – 55	34	32.3
	56 – 74	11	10.4
Level of studies	Primary school	0	0
	Secondary School	1	1
	High school	7	6.7
	Bachelor’s degree	70	66.7
	Master´s degree	23	21.9
	Doctorate	4	3.8
Marital Status	Single	56	53.4
	Married	32	30.5
	Divorced	10	8.6
	Widower	1	1
	Free Union	7	6.7

Note: own elaboration N = 107

To conclude this demographic analysis, it can be observed that many 'young' people buy natural or organic labeled dog food, higher participation of women or single people, and finally, the people interviewed tend to be more educated.

4.2 Overall Average items and Construct

Table 4 shows the average results of the surveys divided by construct and item. Where in bold, the significant amounts are shown.

Table 5.

Results from the questionnaire

Construct	Item	Average
Anthropomorphism		**5.83**
	A1. I see dogs as more like people than wild animals	5.41
	A2. My dog is a part of my family	**6.72**
	A3. I feel like I can communicate with my dogs	**6.15**
	A4. My dog is like a child to me	5.13
	A5. I learn a lot from my dogs	**5.88**
	A6 I have the same responsibilities as a parent when it comes to taking care of my dog	5.73
Healthy food values for dogs.		**6.45**
	HFVD1. My dog´s health means a lot to me	**6.70**
	HFVD2. It is important to me that my dog is in good health HFVD3. I often think about my dog´s health	**6.85** 6.19
	HFVD4. I consider myself a person concerned about healthy food for my dog.	6.30
	HFVD5. I am very concerned about the health consequences that are related to what my dog eats.	6.19
Healthy food values		**6.56**
	HFV1. It means a lot to me to have a good health	**6.80**
	HFV2. Good health is essential to me	**6.84**
	HFV3. I often think about my health	6.54
	HFV4. I think of myself as a person who is concerned about healthy food	6.26
	HFV5. I am very concerned about the health-related consequences of what I eat	6.33
Actual purchase behavior on organic food products		**4.94**
	APBOP1. I often buy organic food products.	5.00
	APBOP2. I often buy organic food products regularly	4.78
	APBOP3.I often buy organic food products because they are more environmentally friendly	4.64
	APBOP4. I often buy organic food products that	4.87

	are against animal testing.	
	APBOP5. I often buy organic food products that are safe to consume.	5.16
	APBOP6. I often buy organic food products for my health.	**5.21**
Attitude toward Natura food for dogs		**6.21**
	ATNFD1. It is valuable for me for food products to be enriched with healthy ingredients.	6.125
	ATNFD2. I find it positive if food products have been enriched with healthy ingredients.	
	ATNFD3. Adding healthy ingredients to food products is good for my health.	6.17
		6.34
Natural food for dogs Purchase intention		**5.78**
	NFDPI1. I would buy organic food products soon.	**5.90**
	NFDP2.I plan to buy organic food products in regular basics.	5.65
	NFDP3. I intend to buy organic food products for my long-term health benefits.	5.80
	NFDP4. I intend to buy organic food products because they are more concerned about food safety.	5.75
	NFDP5. I intend to buy organic food products because they are more environmentally friendly.	5.67
	NFDP6. I intend to buy organic food products because I am concerned about animal welfare.	**5.88**

Own creation.

Secondly, the average of each construct and item was calculated to determine the predominant factor. According to the average, each item's reaction and the average of each construct can be observed. The most predominant were "healthy food values for dogs" and "Healthy food values," which were the highest compared to the ones in addition to which the average turned out to be not so different. The mean that came out lower was the construct "Actual purchase behavior on organic food products," which indicates that not all people agreed to buy organic food or products regularly.

4.3 Self-identity & Extended-self

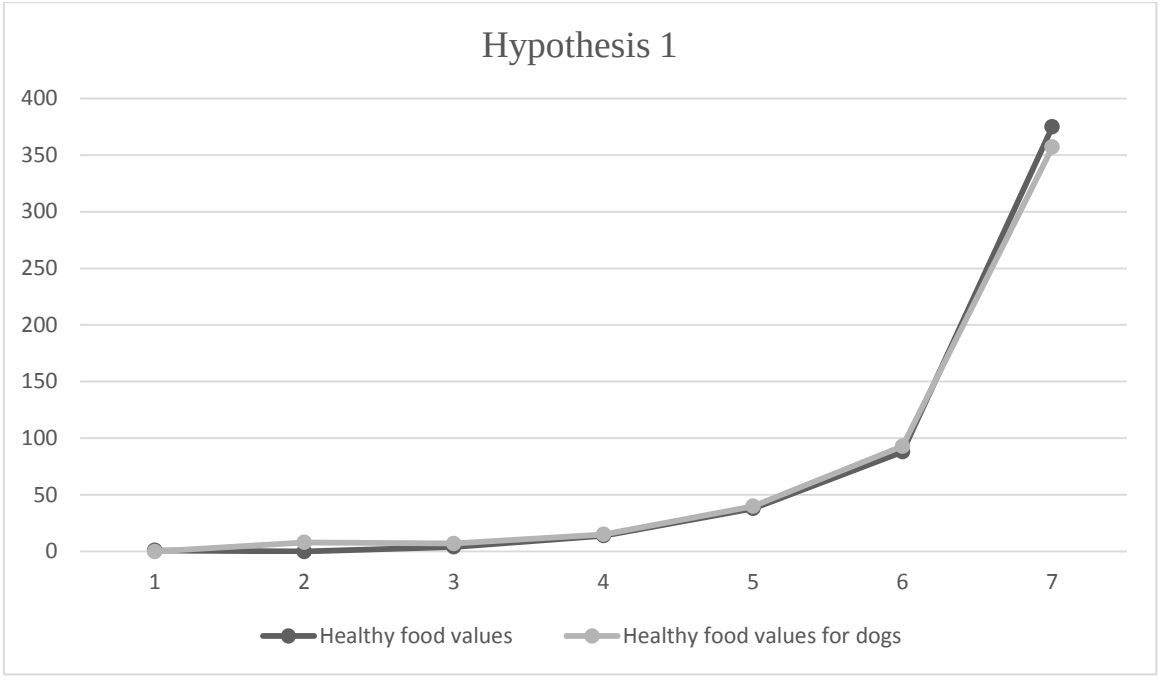
According to Sparks and Shepherd (1992), to understand what Self-identity is understood as one's perception of oneself. The "Healthy food values" (HFV) construct was considered to be measured to explain the theory. For Extended-self, being the extension of this identity, according to Belk (1988), an adaptation towards dogs of the previously said construct was created to verify both concepts.

Figure 7 shows the relationship of both constructs (HFV and HFVFD). According to the frequencies. It can be seen that there is a significant relationship between the healthy values of people and the healthy food values of dogs, since the total frequencies of each item gave the result of 375 in complete agreement for the first one and 357 compared to nutritional food values for dogs, observing a slight difference. Due to this, the similarity in both constructs can be observed, which confirms Hypothesis 1 (H1).

According to figure 8, there is another significant relationship between HFVFD and ATNFD; this means that nutritional food values are essential in having positive attitudes toward natural food for dogs. Therefore, the model developed in figure 2 can also be implemented to attitudes and purchase intention; with this explanation, H2 is confirmed.

Figure 6.

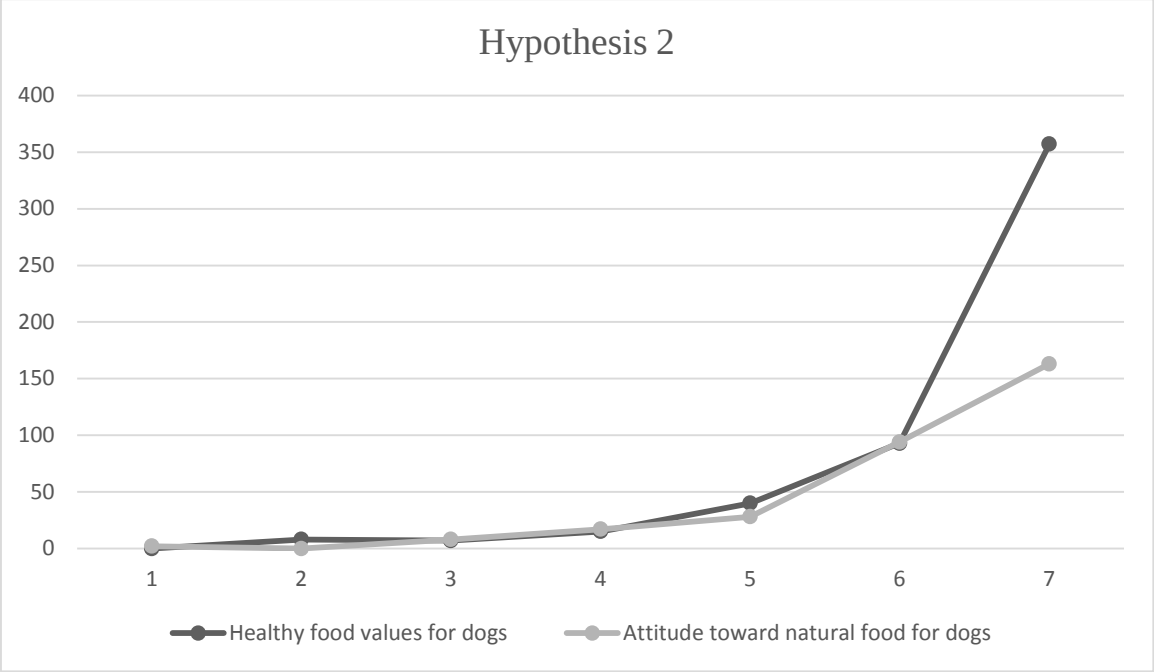
Self-identity and Extended-self



Note Table frequency, which indicates the closeness of questions answered. The numbers below indicate the Likert scale, where 1 = disagree, and 7 = agree.

Figure 7.

Attitude toward natural food for dogs.



Note Table frequency, which indicates the closeness of questions answered. The numbers below indicate the Likert scale, where 1 = disagree, and 7 = agree.

4.4 Anthropomorphism.

According to Diaz (2017), anthropomorphism is the humanization of objects or animals, which means that people treat objects or animals as equals. According to Boya et al. (2015), there is a way to measure this construct according to various items.

This construct has been used to explain the human-dog relationship. However, it may be one of the factors influencing the similar behavior of intention to buy food.

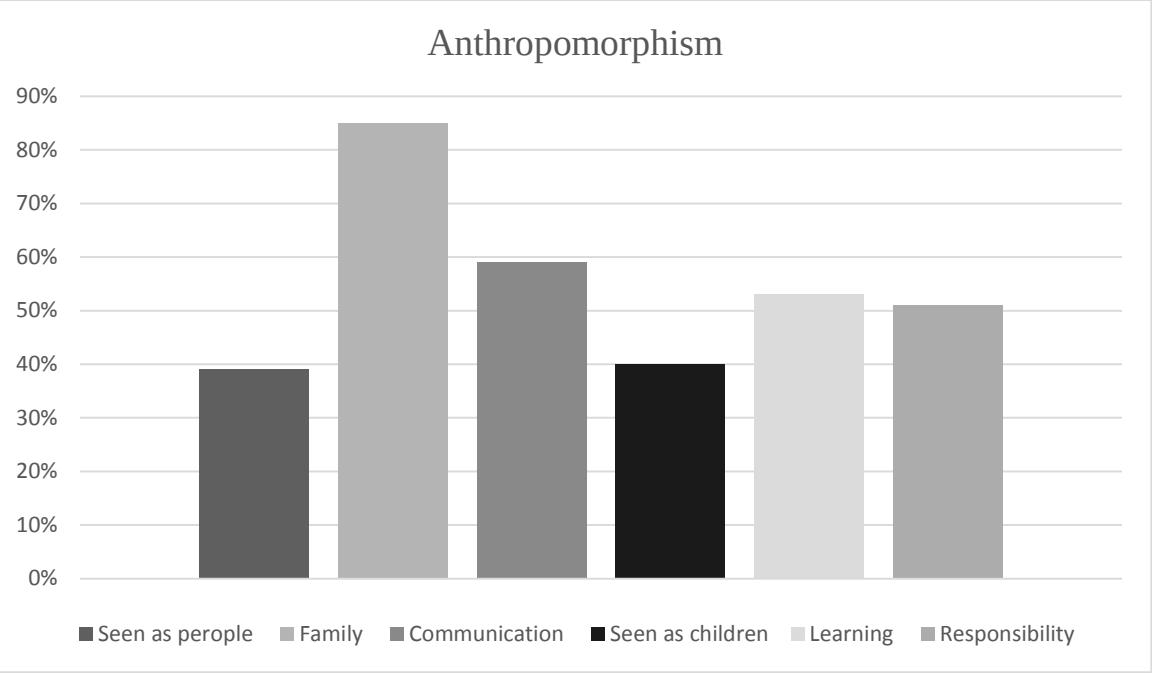
Figure 9 shows the percentage of people who answered the following variables; 39% of those surveyed see their dogs as people, being the lowest number of variables; however, according to 85%, they consider them part of their family. Furthermore, 59% agreed that they could communicate with their companion animal; in addition to that, 53% also totally agreed that they learn from their pet. On the other hand, less than half of the respondents see their pets as children or feel responsible as parents. In these percentages of the construct, we can also infer that people in Mexico see their dogs more like family and

companion animals than children to be more of a symbiotic relationship instead of anthropomorphism. In a study done by Dotson and Hyatt (2008), people who have a symbiotic relationship with their pets are very affectively involved with their dog to spend more energy and care on their canine companions.

Figure 10 shows a relationship between both constructs; Anthropomorphism and attitude toward natural food for dogs; this indicates that the H3 is confirmed.

Figure 8.

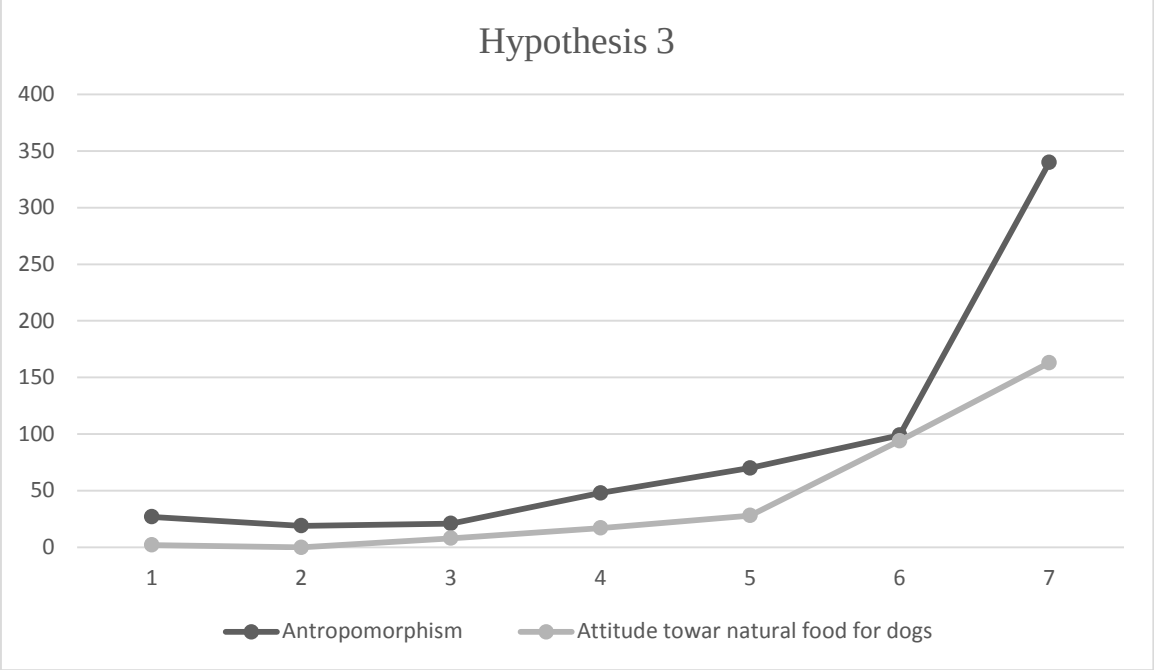
Percentages for each variable.



Percentages of Anthropomorphism construct. Own creation.

Figure 9.

Frequencies relationship



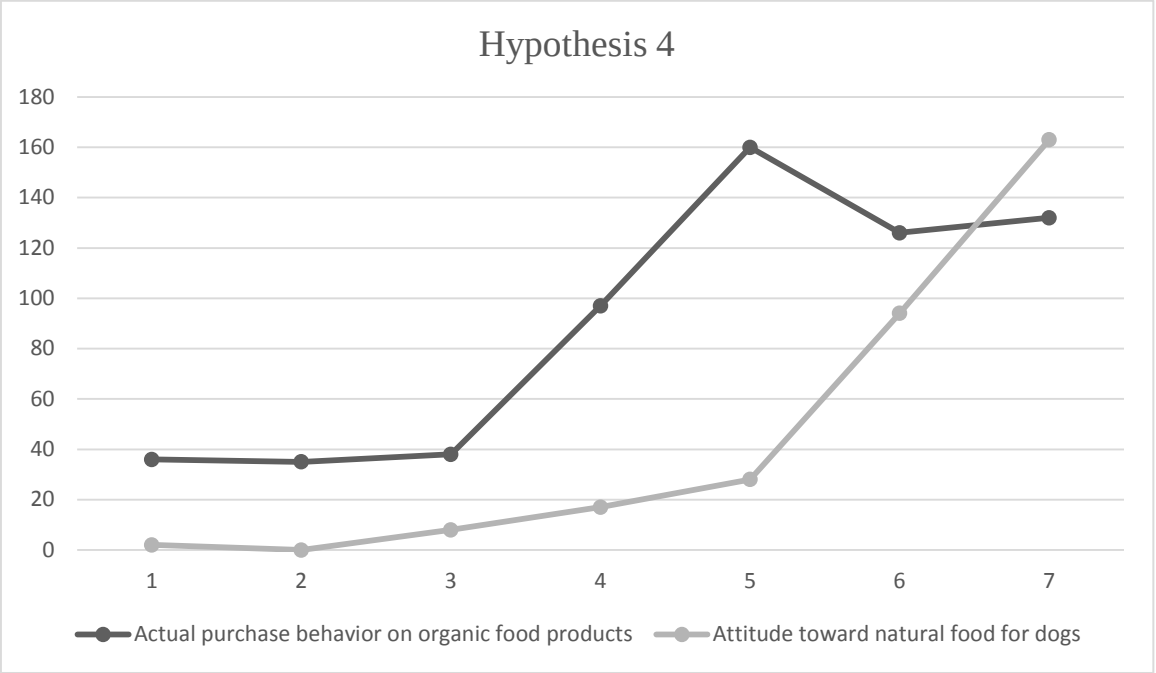
A close relationship between constructs. Own creation.

4.5 Actual purchase intention toward organic food products in Puebla.

Another construct that was implemented to explain buying natural food for dogs was the current purchase of organic products in Puebla since organic food has increased in Mexico (El Universal, 2016 & Hernandez, 2019). This construct was planned and part of the self-identity concept and was considered another factor in attitudes toward dogs' natural food. However, according to figure 11, there is no significant relationship between natural food for dogs' preferences. Furthermore, there is a variation of responses in the construct APTOP. The average purchase intention toward organic food products was 4.94, so it is not too close to the relationship between both constructs, so H4 is not fulfilled.

Figure 10

Frequencies relationship



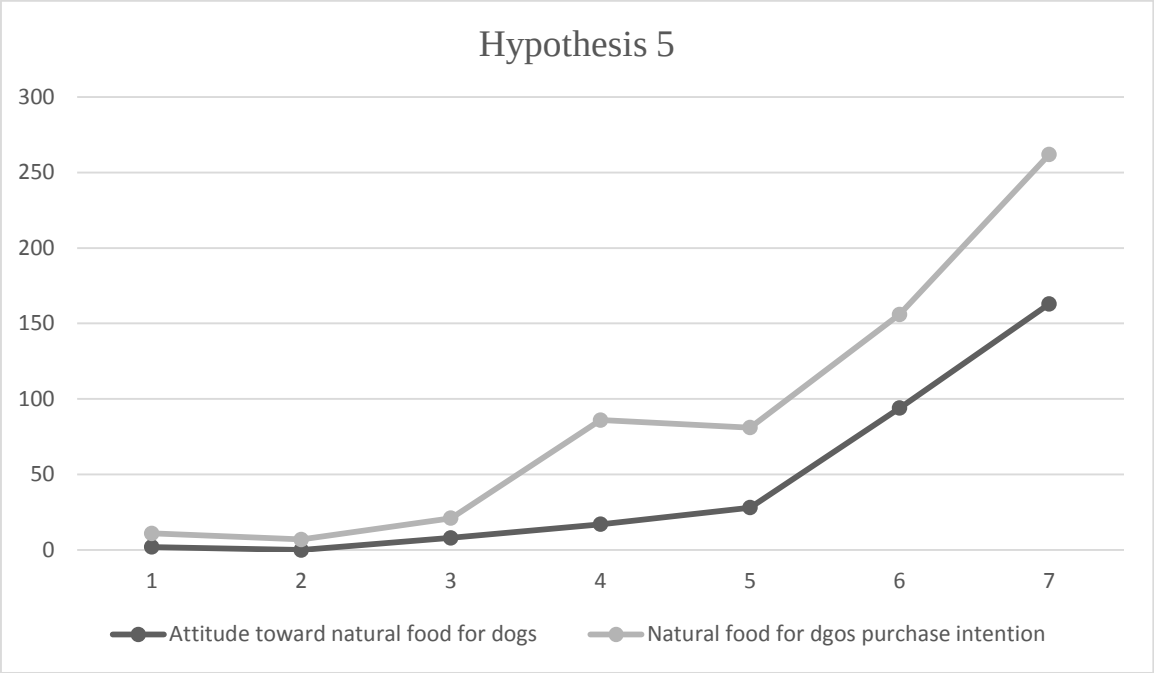
There is no significant relationship between actual purchase behavior on organic food products in Puebla, so it is irrelevant. Own creation.

4.6 Attitudes toward purchase intention.

Positive attitudes are essential to purchase intention. In Figure 12, there is also a relationship between attitudes and purchase intention; with this analysis, H5 is confirmed.

Figure 11

Frequencies relationship



Confirmation for H5. Own creation.

4.7 Cronbach's Alpha.

For model quality measurements, four coefficients were calculated. Cronbach's Alpha coefficient (a) was calculated for each construct, as well as Composite reliability (RC) for internal consistency; then divergent validity AVE (Average Variance Extracted), and Spearman correlation coefficient (rho_A). The Cronbach's alpha coefficient was evaluated using the guidelines suggested by George and Mallery (2018) where > .9 excellent, > .8 good, > .7 acceptable, > .6 questionable, > .5 poor, and ≤ .5 unacceptable. All of the constructs had a Cronbach's alpha coefficient higher than .8, which represents a good internal consistency according to Nunnally (1978). Table 6 presents the results of the reliability analysis. The overall grade of the instrument was 0.946, which according to Malhotra (2018) if Cronbach's Alpha is above 0.7, is reliable.

Table 6.

Construct reliability and validity

Construct	Cronbach's Alpha (α)	rho_A	Composite reliability (ρc)	Average Variance Extracted (AVE)
Anthropomorphism.	0.850	0.895	0.885	0. 563
Healthy food values.	0.810	0.819	0.867	0.568
Healthy food values for dogs.	0.894	0.919	0.922	0.703
Actual Purchase intention toward organic food products.	0.957	0.964	0.966	0.825
Attitude toward natural food for dogs.	0.927	0.928	0.954	0.873
Purchase intention toward natural food for dogs.	0.977	0.977	0.981	0.896

Note. The data were calculated using a 95% confidence interval. Own elaboration

For the analyses of the results, Anderson and Gerbing (1988) recommend realizing a Confirmatory Factor Analysis (CFA) and further a Structural Equation Model (SEM) could be conducted. Construct validity is quantified by two measures: convergent and discriminant validity (Shuttleworth, 2009). The first (convergent validity) evaluates if the constructs that are expected to be related are highly correlated. Meanwhile, the latter proves that constructs that should not have any genuine relationship do not have one (Shuttleworth, 2009). Convergent validity is performed by analysis of average variance extracted (AVE) (>0.5); this measure indicates the variance between a construct and its indicators as well as the fact that they are related (Chin, 1998; Steemkamp & Geyskens, 2006), on table 6 exceed the AVE vale over 0.5 which are considerate acceptable. In the case of composite reliability (RC), all the constructs must be greater than 0.6, and they are adjusted satisfactorily because they are superior to Alpha Cronbach's (Fornell & Lacker, 1981).

4.8 Descriptive Analysis

Descriptive analysis helps to summarize data in a meaningful way. In this case, table 7 will indicate the measures of spread, which describes how to spread out are the

scores (Laed Statiscis, 2018). In addition, the table includes the measure of minimum, maximum, mean, standard deviation, skewness, and kurtosis.

In the table below the observations with the variable A are significant statistically (Min = 9, Max = 42, Mean =34.89, SD = 7.103, Skewness = -1.178, Kurtosis = 1.067). The observations for the variable HFVD are (Min = 13, Max = 35, Mean = 32.15, SD = 4.247, Skewness = -2.376, Kurtosis = 6.876). The observations for the variable HFV are (Min = 25, Max = 35, Mean =32.78, SD = 3.017, Skewness = -1.457, Kurtosis = .963). The observations for variable APBOP are (Min = 6, Max = 42, Mean =29.70, SD = 9.233, Skewness = -.799, Kurtosis = -.017). The observations for the variable ANF statistically (Min = 5, Max = 21, Mean =18.56, SD = 3.103, Skewness = -1.748, Kurtosis = 3.620). The observations for the variable NFPI are (Min = 6, Max = 42, Mean =34.59, SD = 8.020, Skewness = -1.197, Kurtosis = 1.020). When the skewness is greater than 2 in absolute value, the variable is considered to be asymmetrical about its mean. When the kurtosis is greater than or equal to 3, then the variable's distribution is markedly different than a normal distribution in its tendency to produce outliers (Westfall & Henning, 2013).

Table 7.
Descriptive statistics

	Minimum Statistics	Maximum Statistics	Mean Statistics	Std. Deviation	Skewness Statistics	Std. Error	Kurtosis Statistics	Std. Error
A	9	42	34.89	7.103	-1.178	.234	1.067	.463
HFVD	13	35	32.15	4.247	-2.376	.234	6.876	.463
HFV	25	35	32.78	3.017	-1.457	.234	.963	.463
APBOP	6	42	29.70	9.233	-.799	.234	-.017	.463
ANF	5	21	18.56	3.103	-1.748	.234	3.620	.463
NFPI	6	42	34.59	8.020	-1.197	.234	1.020	.463

N = 107

4.9 Correlational analysis

A Pearson correlation analysis was conducted among A (Anthropomorphism), APBOP (Actual purchase behavior on organic food products), HFV (Healthy food values), HFVD (Healthy food values for dogs), ANF (Attitude toward Natural food for dogs), and NFPI (Natural food for dogs Purchase intention). Pearson’s correlation coefficient (r) is a measure that indicates the relationship between two variables measured on at least an interval scale. (Laerd Statistics, 2018). This measure was included in determining if there is

an association between the variables. We can obtain with the scatterplot the line of best fit through the data of two variables and the Pearson's correlation coefficient (r), indicating how well the data points fit this model/line of best fit (Leard Statistics, 2018).

Table 8.
Pearson correlation analysis

Construct	Anthropo-morphism (A)	Healthy food values for dogs (HFVD)	Healthy food values (HFV)	Actual purchase behavior on organic food products (APBOP)	Attitude toward Natural food for dogs (ANF)	Natural food for dogs Purchase intention (NFPI)
Anthropomorphism (A)						
Healthy food values for dogs. (HFVD)	.603**					
Healthy food values (HFV)	.199*	.380**				
Actual purchase behavior on organic food products. (APBOP)	.275**	.359**	.391**			
Attitude toward Natural food for dogs. (ANF)	.352**	.613**	.588**	.471**		
Natural food for dogs Purchase intention. (NFPI)	.239*	.515**	.400**	.500**	.694**	

Note: **. Correlations are significant at the 0.01 level, *. Correlations are significant at the 0.05 level.

The results are presented on the table 7 indicating the correlation among variables. There was a strong correlation, positive correlation between A and HFVD which was statistically significant (r = .603, n = 107, p = .000). The correlation between A and HFV indicates a significant correlation which is (r = .199, n = 107, p = 0.40). The correlation between A and APBOP has also a strong correlation statistically indicated (r = .275, n = 107, p= .004). A significant positive correlation was observed between variables A and NFPI statistically described as (r = .239, n = 107, p = .000). There was a strong positive correlation between HFVD and HFV which statically significant (r = .380, n = 107, p =

.000). The correlation between HFDV and APBOP was also strong, with significance of (r = .359, n=107, p = .000). Meanwhile, HFVD and ANF had a strong positive relation statistically described as (r = .613, n = 107, p = .000). Variables HFVD and NFPI had a positive significant relation, statistically significant (r = .515, n = 107, p = .000). There was another strong correlation, positive correlation between HFV and APBOP which was statically significant (r = .391, n = 107, p = .000). There was another strong correlation between variables HFV and ANF which statistically significant (r = .588, n = 107, p = .000). Variables HFV and NFPI have a strong relation statistically significant (r = .400, n = 107, p = .000). There is also a strong positive relationship between APBOP and ANF with a significance of (r = .471, n = 107, p = .000). There was a strong relation between variables APBOP and NFPI which was statistically significant (r = .500, n= 107, p = .000). Finally, the relationship between variables is (r = .694, n = 107, p = .000). All this means that if one of the variables increase, the other one tends to increase.

4.10 Structural Equation Model (SEM)

For the empirical research, a structural equation model (SEM) was utilized with the influence research of Salgado and Espejel (2016). The studies made by Salgado y Espejel (2016) showed the relationships among latent variables (organic food products purchase) and their items, the coefficient path, and the relation between each construct.

According to Chin (1998), the structural Equation Model comprises the media and structural models. The first one evaluates the reliability and validity of the measurements of the theoretical model as well as the factorial loads between observable variables and the relationship they may have with their constructs. The latter analyses the relation of causality between dependent and independent variables.

The aim is to explain the relationship between different factors affecting dogs-owner and buying food. The criteria considered for their application are based on consumer behavior theory with anthropomorphism, nutritional food values for humans, nutritional food values for dogs, and actual purchase toward organic food, as the principal causes that attempt to buy organic/natural food labeling for dogs.

4.11 Algorithm technique

The algorithm in SmatPLS is to evaluate the reliability and validity of a model. In this analysis, the R^2 is obtained by default. The trajectory coefficients vary between -1 and 1. The weights near 1 are the strongest trajectories, and those near 0 are the weakest; these paths must exceed the value of 0.20 to be considered valid (Chin, 1998). Table 9 summarizes the path coefficients. Figure 12 is shown the overall analysis of the variables; it is displayed the paths and the measures.

Table 9.
Path coefficients

	Actual purchase toward organic products	Anthropomorphism	Attitude toward natural food for dogs.	Healthy food values	Healthy food values for dogs	Purchase intention toward natural food for dogs
Actual purchase toward organic products			0.292			
Anthropomorphism			-0.053			
Attitude toward natural food for dogs.						**0.697**
Healthy food values					0.406	
Healthy food values for dogs			0.548			
Purchase intention toward natural food for dogs						

Own elaboration

Figure 12

Analysis of natural food for dog's SEM model.

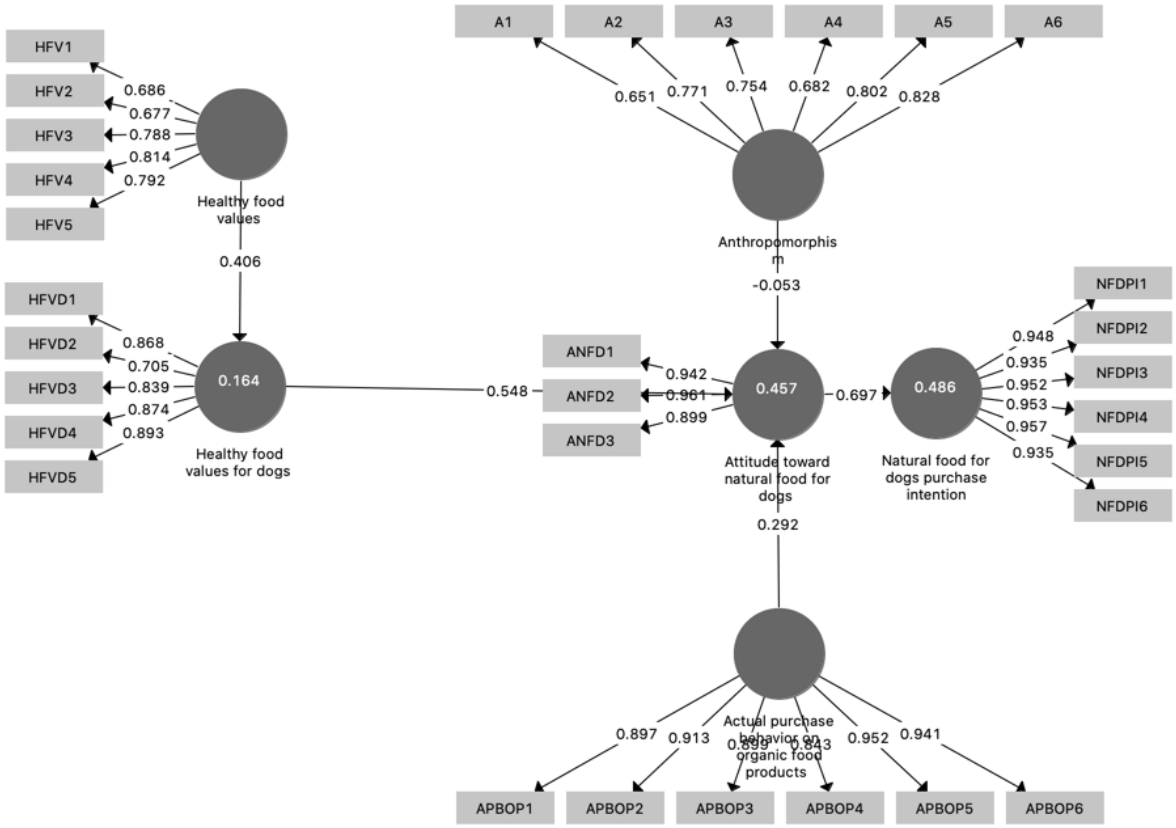


Figure 12 shows R^2 (Pearson's correlation coefficient), which measures a linear relationship between two random quantitative (Ringle et al. 2015). Pearson correlation requires that the relationship between each pair of variables is linear (Conover & Iman, 1981). In this case, for the variable HFVD (Heathy food values for dogs), the R^2 has a value of 0.164, meaning the model explains a 16% of the variance of this variable. Likewise, in the variable ANFD (Attitude toward natural food for dogs), R^2 has a value of 0.457, meaning 45% of the variance of this variable is explained by the model. Likewise, in the variable NFPI (Natural food purchase intention), the R^2 has a value of 0.486, meaning a 48% of the variance of this variable is explained by the model.

The F distribution (T^2) is a continuous probability distribution and measures the changes in R^2. A value of 0.03 represents a low effect, 0.15 represents a medium effect, and 0.35 represents a high effect (Ringle et al. 2015). The table10 represents the value of the F distribution.

Table 9
F Square

	Actual purchase toward organic products	Anthropomorphism	Attitude toward natural food for dogs.	Healthy food values	Healthy food values for dogs	Purchase intention toward natural food for dogs
Actual purchase toward organic products			0.134			
Anthropomorphism			0.003			
Attitude toward natural food for dogs.						**0.945**
Healthy food values					**0.197**	
Healthy food values for dogs			**0.276**			
Purchase intention toward natural food for dogs						

Own elaboration

In this case, a strong effect is shown between variables HFVD (Healthy food values for dogs) and ATNF (Attitude toward natural food for dogs) statistically ($T^2 = 0.276$), representing a significant effect. Also, between variables ATNF (Attitude toward natural food for dogs) and (HFV) nutritional food values, statistically ($T^2 = 0.197$) meaning a common effect. Likewise, in variables NFPI (Natural food for dog's purchase intention) and ATNF (Attitude toward natural food for dogs), statistically ($T^2 = 0.945$), meaning a high effect.

4.12 Loadings

According to Ringle et al. (2015), outer loadings are standardized weights that connect the indicators to the variables. The loads vary between 0 and 1; the closer they are to 1, the stronger they are. The value of the loads must exceed 0.70 to explain the variance of the indicator by its factor. If a load of an indicator is between 0.40 and 0.70, it is advisable to give up the indicator if this improves the composite reliability (Ringle et al. 2015).

Table 11

Outer loadings

	Anthropomorphism	Healthy food values for dogs	Healthy food values	Actual purchase toward organic products	Attitude toward natural food for dogs	Purchase intention toward natural food for dogs
A1	0.651					
A2	**0.771**					
A3	**0.754**					
A4	0.682					
A5	**0.802**					
A6	**0.828**					
HFVD1		**0.868**				
HFVD2		**0.705**				
HFVD3		**0.839**				
HFVD4		**0.874**				
HFVD5		**0.893**				
HFV1			0.686			
HFV2			0.677			
HFV3			**0.788**			
HFV4			**0.814**			
HFV5			**0.792**			
APBOP1				**0.897**		
APBOP2				**0.913**		
APBOP3				**0.899**		
APBOP4				**0.843**		
APBOP5				**0.952**		
APBOP6				**0.941**		
ANF1					**0.942**	
ANF2					**0.961**	
ANF3					**0.899**	
NFPI1						**0.935**
NFPI2						**0.952**
NFPI3						**0.953**
NFPI4						**0.957**
NFPI5						**0.935**
NFPI6						**0.948**

Own elaboration

Regarding table 11, there are significant loads between variables and their items. In the case of the construct Anthropomorphism (A), item A2 (0.771), A3 (0.754), A5 (802), and A6 (0.828) have a strong relation. On Variable Healthy food values, all the items have

a strong relationship with HFVD1 (0.868), HFV2 (0.705), HFV3(0.839), HFV4 (0.874), HFV5 (0.893). The case of the variable Healthy food values (HFV) has three strong items HFV3 (0.788), HFV4 (814), and HFV (0.792). On variable Actual purchase toward organic products (APBOP), all the items create a strong construct relationship; APBOP1 (0.897), APBOP2 (0.913), APBOP3 (0.899), APBOP4 (0.843), APBOP5 (0.952), APBOP6 (0.941). The items of variable Attitude toward natural food for dogs also have a strong relation, ANF1 (0.942), ANF2 (0.961), ANF3 (0.899). In the construct Natural food for dog's purchase intention have items with strong relations, NFPI1 (0.935), NFPI2 (0.952), NFPI3 (0.953), NFPI4 (0.957), NFPI5 (0.935) and NFPI6 (0.948).

4.13 Discriminant validity

Henseler et al. (2015) develop a methodology to evaluate the discriminant validity (HTMT). This kind of measure is a recommended criterion, especially in small samples. This criterion indicates the existence of a discriminant validity when the correlations between constructs are less than 0.70. For example, in the case of the variable Anthropomorphism and nutritional food values, the value is 0.739, indicating that the variables are not related.

Table 12
Heterotrail-Montrail Ratio (HTMT)

	Actual purchase toward organic products	Anthropomorphism	Attitude toward natural food for dogs	Healthy food values	Healthy food values for dogs	Purchase intention toward natural food for dogs
Actual purchase toward organic products						
Anthropomorphism	**0.319**					
Attitude toward natural food for dogs	**0.498**	**0.424**				
Healthy food values	**0.413**	**0.246**	**0.685**			
Healthy food values	**0.373**	0.739	**0.661**	**0.443**		
Purchase intention toward natural food for dogs	**0.516**	**0.288**	0.731	**0.476**	**0.526**	

Own elaboration.

4.14 Multicollinearity in reflective models

Collinearity increases standard errors. A common rule is that multicollinearity exists when the variance inflation factor (VIF) exceeds 4.0 (others use the value 5.0).

Table 13
Outer VIF Values

	VIF
A1	**1.545**
A2	**1.513**
A3	**2.207**
A4	**1.791**
A5	**2.462**
A6	**2.057**
HFVD1	**3.061**
HFVD2	**2.052**
HFVD3	**2.960**
HVFD4	**2.828**
HFVD5	4.036
HFV1	**1.544**
HFV2	**1.575**
HFV3	**2.004**
HFV4	**2.999**
HFV5	**3.521**
APBOP1	5.098
APBOP2	5.365
APBOP3	4.307
APBOP4	**3.307**
APBOP5	12.407
APBOP6	11.867
ANF1	5.287
ANF2	6.368
ANF3	**2.674**
NFPI1	7.811
NFPI2	6.331
NFPI3	8.250
NFPI4	8.986
NFPI5	8.865
NFPI6	**5.989**

Own creation

4.15 Bootstrapping Technique

For this research, the estimation of the model parameters was used through the Bootstrapping procedure, which was performed to analyze the robustness of the indicators loads and the significant relationship between variables and minimize standard errors (Efron and Tibshirani, 1994) indicated in Figure 13. From the statistical point of view, the significant relationship between variables and indicators, T Statistics value must be greater than ≥ 1.96, and P values < 0.05 (Efron and LePage 1992). Table 14 summarize the estimates of the path coefficients between the variables. Furthermore, Table 15 summarizes and indicates the indirect effects between variables.

Figure 13
Analysis of natural food for dog's SEM model two.

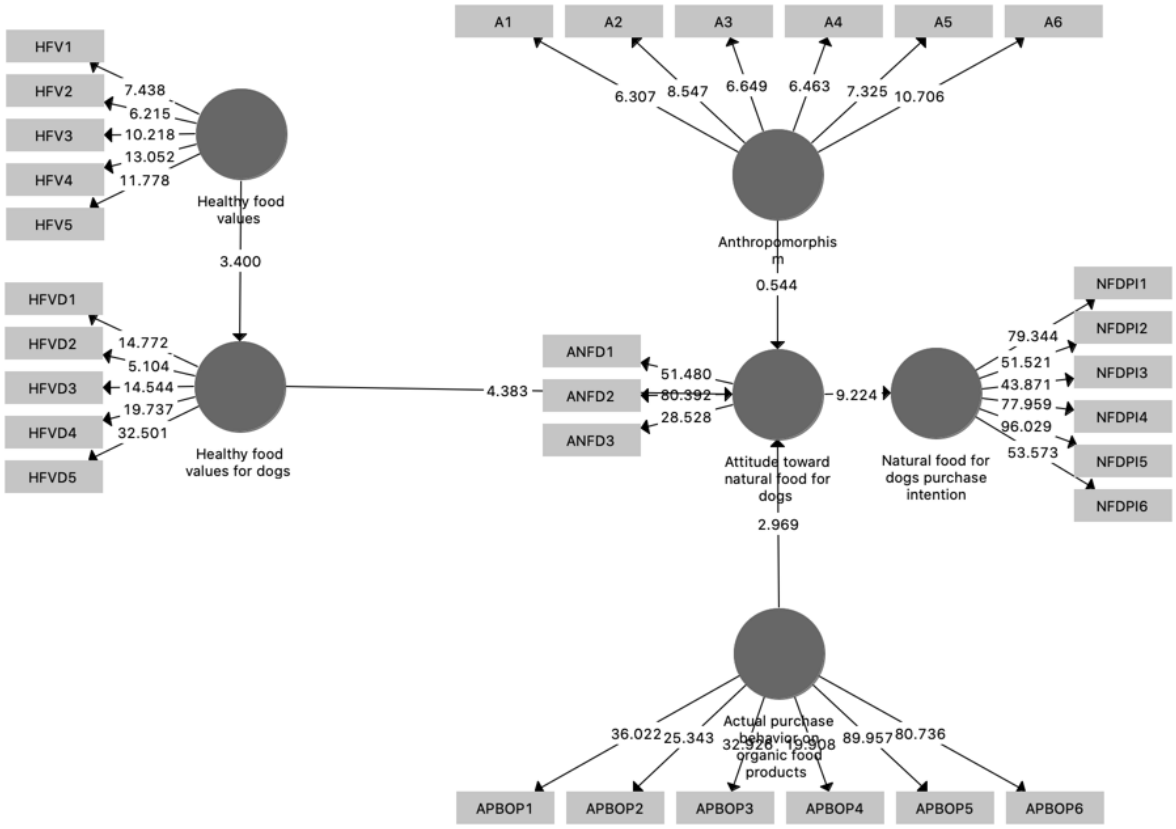


Table 14

Summaries of estimates – Direct effect model Assessment (Path coefficients)

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Anthropomorphism→ Attitude toward natural food for dogs	-0.053	-0.028	0.099	0.533	0.595
Healthy food values →Healthy food values for dogs	0.406	0.437	0.119	**3.412**	**0.001**
Healthy food values for dogs → Attitude toward natural food for dogs	0.548	0.531	0.138	**3.979**	**0.000**
Actual purchase toward organic products →Attitude toward natural food for dogs	0.292	0.290	0.101	**2.891**	**0.004**
Attitude toward natural food for dogs →Natural food for dog's purchase intention.	0.697	0.694	0.079	**8.841**	**0.000**

Own elaboration.

Altogether, SmartPLS, extracted five paths (A ANFD, HFV HFVD, APBOP ANFD, ANFD NFPI) ($P < 0.05$, t value ≥ 1.96). The first extracted path indicates a negative between Anthropomorphism (dogs seen as persons) and Attitude toward natural food for dogs, meaning that H3 is not supported ($p = 0.595$, $t = 0.533$). Likewise, the second extracted path indicates a positive relationship between Healthy food values for humans and Healthy food values for dogs, meaning that H1 is supported ($p = 0.001$, $t = 3.412$). Likewise, the third extracted path indicates a positive relationship between Healthy food values for dogs and Attitude toward natural food for dogs, meaning that H2 is supported ($p = 0.000$, $t = 3.979$).

Likewise, the fourth extracted path indicates a positive relationship between the Actual purchase of organic products and Attitude toward natural food for dogs, meaning that H4 is supported ($p = 0.004$, $t = 2.891$). Likewise, the fifth extracted path indicates a positive relationship between Attitude toward natural food for dogs, and Natural food dogs' purchase intention, meaning that H5 is supported ($p = 0.000$, $t = 8.841$).

Table 15

Specific indirect effects between variables

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Values
HFV → HFVD → ANF	0.222	0.235	0.096	**2.309**	**0.021**
APBOP → ANF → NFPI	0.203	0.204	0.079	**2.560**	**0.011**
A → ANF → NFPI	-0.037	-0.020	0.070	0.528	0.598
HFVD → ANF → NFPI	0.382	0.369	0.107	**3.672**	**0.000**
HFV → HFVD → ANF	0.155	0.164	0.071	**2.170**	**0.030**

Own elaboration.

The indirect effects mean the variable that is a mediator of the final stage. For instance, according to Hair et al. (2017), whereby *p*3 is the direct effect, *p*1· *p*2 is the indirect effect, and the indirect effect (*p*3) + the indirect effect (*p*1·*p*2) = the total effect. In this case, SmartPLS extracted five paths (HVF HFVD → ANF, APBOP ANF NFPI, A ANF NFPI, HFVD ANF NFPI, HFV HFVD ANF). The first mediation path extracted indicates a positive relationship between the first total path Healthy food values, Healthy food values for dogs, and Attitude toward natural food for dogs, meaning a solid significant relationship (p = 0.021, t = 2.309). The second mediation path extracted indicates a positive relation between the second total path Actual purchase toward organic products, attitude toward natural food for dogs, and natural food purchase intention, meaning a solid significant relationship (p = 0.011, t = 2.560). The third mediation path extracted indicates a negative relationship between anthropomorphism, attitude toward natural food purchase intention, and preference toward natural dog food, which is statistically measured (p = 0.598, t = 0.528).

The fourth mediation path extracted indicates a positive relationship between the fourth total path, Healthy food values for dogs, attitude toward natural food intention, and purchase intention toward natural food for dogs, meaning a solid significant relationship (p = 0.000, t = 3.672). The last mediation path extracted indicates a positive relationship between the fifth total path Healthy food values, nutritional food values for dogs and, Attitude toward natural food for dogs, meaning a solid significant relationship (p= 0.030, t = 2.170).

4.16 Second model development

Due to the results presented concerning discriminant validity, a basic model with its required analysis in Smart PLS was proposed. This basic model consists of the constructs healthy dog food values (HFVD), attitude toward natural dog food (ANF), and natural food purchase intention (NFPI) is because the results of the proposed model were not met but these constructs were the strongest in correlation.

4.17 Algorithm technique

The algorithm for this second model in SmatPLS is to evaluate the reliability and validity of a model. In this analysis, the R^2 is obtained by default. The trajectory coefficients vary between -1 and 1. The weights near 1 are the strongest trajectories, and those near 0 are the weakest; these paths must exceed the value of 0.20 to be considered valid (Chin, 1998).

Table 16 summarizes the path coefficients. Figure 14 is shown the overall analysis of the variables; it is displayed the paths and the measures.

Table 16
Path coefficients

	Attitude toward natural food for dogs	Healthy food values for dogs	Natural food for dog's purchase intention
Attitude toward natural food for dogs			0.689
Healthy food values for dogs	0.502		
Natural food for dogs purchase intention			

Own elaboration

Figure 14.
Second model development.

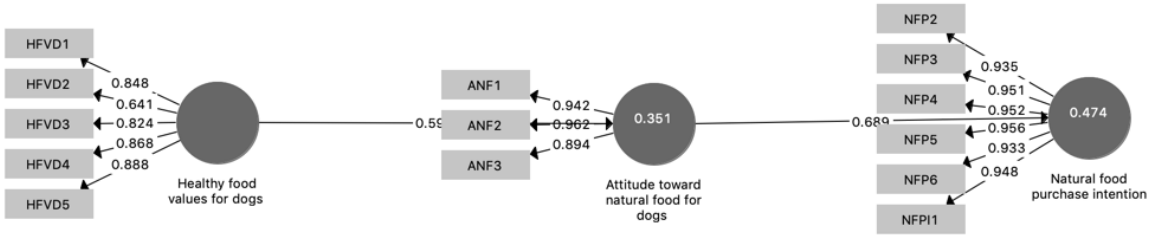


Figure 14 shows R^2 (Pearson's correlation coefficient). In this case, in the variable

ANFD (Attitude toward natural food for dogs), R^2 has a value of 0.351, meaning 35% of the variance of this variable is explained by the model. Likewise, in the variable NFPI (Natural food purchase intention), the R^2 has a value of 0.476, meaning a 47% of the variance of this variable is explained by the model.

The F distribution (T^2) is a continuous probability distribution and measures the changes in R^2. A value of 0.03 represents a low effect, 0.15 represents a medium effect, and 0.35 represents a high effect (Ringle et al. 2015). The table 10 represents the value of the F distribution.

Table 17

F Square

	Attitude toward natural food for dogs.	Healthy food values for dogs	Natural food for dogs purchase intention
Attitude toward natural food for dogs.			**0.902**
Healthy food values for dogs	**0.540**		
Natural food for dogs purchase intention			

Own elaboration

In this case, a strong effect is shown between variables HFVD (Healthy food values for dogs) and ATNF (Attitude toward natural food for dogs) statistically (T^2 = 0.540), representing a significant effect. Also, between variables NFPI (Natural food for dog's purchase intention) and ATNF (Attitude toward natural food for dogs), statistically (T^2 = 0.902), meaning a high effect.

4.18 Loadings

The loads vary between 0 and 1; the closer they are to 1, the stronger they are. The value of the loads must exceed 0.70 to explain the variance of the indicator by its factor. If a load of an indicator is between 0.40 and 0.70, it is advisable to give up the indicator if this improves the composite reliability (Ringle et al. 2015).

Table 18

Outer loadings

	Attitude toward natural food for dogs	Healthy food values for dogs	Natural food for dogs purchase intention
ANF1	**0.942**		
ANF2	**0.962**		
ANF3	**0.894**		
HFVD1		**0.848**	
HFVD2		0.641	
HFVD3		**0.824**	
HFVD4		**0.868**	
HFVD5		**0.888**	
NFPI1			**0.935**
NFPI2			**0.951**
NFPI3			**0.952**
NFPI4			**0.956**
NFPI5			**0.933**
NFPI6			**0.948**

Own elaboration

Regarding table 17, there are significant loads between variables and their items. In the case of the construct Attitude toward natural food for dogs (ANF), item ANF1 (0.942), ANF2 (0.962) and ANF3 (0.894) have a strong relation. On Variable Healthy food values, the items that have a strong relationship are HFVD1 (0.848), HFV3(0.824), HFV4 (0.868), HFV5 (0.888). In the construct Natural food for dog's purchase intention have items with strong relations, NFPI1 (0.935), NFPI2 (0.951), NFPI3 (0.952), NFPI4 (0.956), NFPI5 (0.933) and NFPI6 (0.948).

4.19 Discriminant validity

The basic classical criterion used is that of Formell and Larcker (1981), who recommend that the square root of the average variance extracted (AVE) be greater than the correlations of a construct with the other constructs.

Table 19
Discriminant validity

	Attitude toward natural food for dogs	Healthy food values for dogs	Natural food for dogs purchase intention
Attitude toward natural food for dogs	0.933		
Healthy food values for dogs	0.592	0.819	
Natural food for dogs purchase intention	0.689	0.487	0.946

Own elaboration.

4.20 Multicollinearity in reflective models

Collinearity increases standard errors. A common rule is that multicollinearity exists when the variance inflation factor (VIF) exceeds 4.0 (others use the value 5.0).

Table 20
Outer VIF Values

	VIF
ANF1	5.149
ANF2	6.230
ANF3	**2.638**
HFVD1	**2.573**
HFVD2	1.727
HFVD3	**2.774**
HVFD4	**2.589**
HFVD5	3.807
NFPI1	6.382
NFPI2	8.255
NFPI3	8.893
NFPI4	8.675
NFPI5	5.840
NFPI6	7.712

Own creation

4.21 Bootstrapping Technique

For this model, the bootstrapping technique was also made (Figure 15). From the statistical point of view, the significant relationship between variables and indicators, T Statistics value must be greater than ≥ 1.96, and P values < 0.05 (Efron and LePage 1992).

Table 20 summarize the estimates of the path coefficients between the variables. Furthermore, Table 21 summarizes and indicates the indirect effects between variables.

Figure 15

Bootstrapping technique

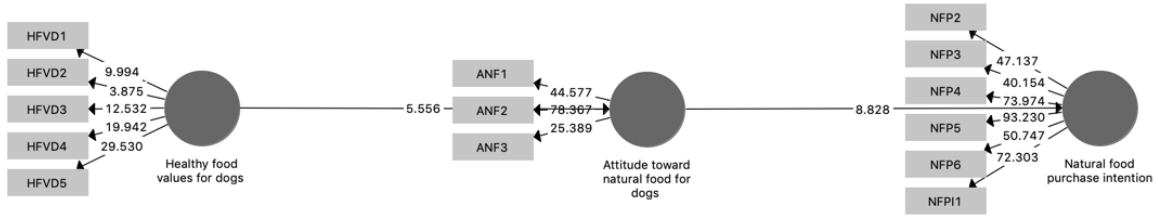


Table 21

Summaries of estimates – Direct effect model Assessment (Path coefficients)

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Attitude toward natural food for dogs → Natural food for dogs purchase intention	0.689	0.682	0.076	9.104	**0.000**
Healthy food values for dogs→ Attitude toward natural food for dogs	0.592	0.583	0.116	5.125	**0.000**

Own elaboration.

Altogether, SmartPLS, extracted two paths (ANFD→ NFPI and HFVD → ANFD) ($P < 0.05$, t value ≥ 1.96). The first extracted path indicates a positive relationship between Attitude toward natural food for dogs and Natural food for dogs purchase intention meaning that is supported (p= 0.000, t =9.104). And the second path between Healthy food values for dogs and Attitude toward natural food for dogs, is also supported (p = 0.000, t=5.125).

Table 22

Specific indirect effects between variables

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Values
HFVD → ANF	0.408	0.399	0.097	4.196	**0.000**

Own elaboration.

The indirect effects mean the variable that is a mediator of the final stage. For instance, according to Hair et al. (2017), whereby *p*3 is the direct effect, *p*1· *p*2 is the indirect effect, and the indirect effect (*p*3) + the indirect effect (*p*1·*p*2) = the total effect. In this case, SmartPLS extracted one path (HFVD ANF) which indicates a positive relationship between healthy food values for dogs and attitude toward natural food for dogs meaning a solid significant relationship (p = 0.000, t = 4.196).

4.22 Results of models 1 and 2

According to the analyses made and the modifications presented in this section, the tables of the accepted and rejected hypotheses for models 1 and 2 are presented. The following tables show the relationships and whether or not they fulfill the hypotheses. Table 23 shows that model 1 does not fulfill the hypotheses. Although the T-value and P-value in hypotheses 1, 2, 4, and 5 are significant, the discriminant validity does not meet the standards to confirm the hypotheses.

Because of this, a basic model was proposed with hypotheses 1 and 2 (table 24), where it is demonstrated that the hypotheses are fulfilled since, in the data marked in the above part, the discriminant validity is accepted.

Testing hypothesis

Table 23

Testing hypothesis Model 1.

Research	Relationship	Standard Deviation	T- value	P – value
H1	Healthy food values → Healthy food values for dogs.	0.119	3.412	0.001
H2	Healthy food values for dogs → Attiude toward natural food for dogs.	0.138	3.979	0.000
H3	Anthropomorphism→Attitude toward natural food for dogs.	0.099	0.533	0.595
H4	Actual purchase behavior on organic food products → Atitudes toward natural food for dogs.	0.101	3.979	0.004
H5	Attitudes toward natural natural →	0.079	8.841	0.000

	food for dogs Natural food for dogs purchanse intention.				

Note. Even if t and p values are supported on hypotheses H1, H2, H4, and H5 to be fulfilled, they cannot be verified because of the invalidity of the model. Own elaboration.

Table 24

Testing hypothesis Model 2.

Research	Relationship	Standard Deviation	T- value	P – value	Supported
H2	Healthy food values for dogs→Attiude toward natural food for dogs.	0.076	9.104	0.000	Yes
H5	Attitudes toward natural natural food for dogs → Natural food for dogs purchanse intention.	0.116	5.125	0.000	Yes

Own elaboration

In both models, the most robust hypotheses that were most likely to be significant are those of the second model, which also complies with theories of self-identity and extended-self.

4. Conclusions and recommendations

5.1 Conclusions

Marketing is closely related to the perception that consumers have of the products they choose to buy. Therefore, it can be considered a science since much of what is done in marketing is measurable (Thurstone, 1928, 1929; Likert, 1932).

The objective of this research was to explain the purchase of natural and organic labeled breath for dogs, being fulfilled but with some characteristics to improve. In consumer behavior, it is often challenging to measure complicated constructs such as self-identity, self-extension, and other theories that can be complicated to understand and measure. However, it is essential to understand that this type of theory is essential for behavioral predictions such as purchasing a product or acquiring a service. Thus, it can help marketers understand the consumer and generate valuable strategies for the interaction, demand, or purchasing of a service or product.

The theory part was enriching for this research topic. The complement of an area such as consumer behavior with psychology has generated a vision of future preferences for services or products that are increasingly related to our own identity. We are becoming more and more conscious and intelligent to make decisions about what we want to consume. Moreover, we are increasing including other living beings to influence and impact our behavior and decision-making.

The implemented theories gave a more realistic approach to what was intended to make known with this research because it is a rather complicated topic to perform and justify by the scarce information presented today. However, it is impressive how authors of some years ago predicted certain consumer behaviors, specifically with pets, which even today are leaving to talk about. Something equally impressive is how we equate pets with ourselves due to the bond; the stronger the bond, the more we treat them as equals.

Both self-identity and self-extension can be seen as a strategy to sell and communicate to audiences that share this phenomenon. Once it is understood in-depth, it is possible to generate more empathy and personification of products or services for more excellent customer retention and acquisition and greater customer loyalty.

It is giving credit to the software that can help to test theories that help to understand and predict consumer behavior such as Ordinary Least Squares (OLS), Structural Equation Modeling (SEM), Partial Least Squares (PSM), (Salgado and Espejel, 2015), which are often difficult to evaluate. Therefore, it was possible to carry out this research with which we conclude the following. First, each person is different, which the self-identity theory teaches us (Sparks and Shepherd, 1992).

Because of the values that each person adopts as their own, they are very likely to help analyze decision-making and behavior such as purchasing. However, theories such as self-extension (Belk, 1988) also help understand various humans' behavior with products, families, and even pets. In the case of this research, it was shown that pets are an extension of ourselves, so there is a high probability that people extend their own identity to their pets. Hence, it is very likely that we consider them as we consider ourselves. The extension theory can also happen with people, relatives, and even objects (Belk, 1988).

For instance, the nutritional values regarding food influence when buying food for the pet; therefore, it will be safer to consume healthily. Hence, the owner will prefer foods that ensure your pet's health, such as organic or natural food. Thus, the influence of health and knowledge regarding organic or natural food intervenes in decision-making, as is the case in this research.

On the other hand, the owner lacks these values or has other values, which can influence the decision making, buying or feeding the pet the food they believe is better according to their value system. Thus, it is essential to identify this for future pet product design, advertising, or interaction strategies. However, more research is needed because studies show that the pet owner and the pet influences decisions. For example, pets are often preferred to be better off than themselves (Boya, Dotson, and Hyatt, 2014).

Another important finding is that the theoretical information defends the idea that many owners buy products for their pets due to anthropomorphism (humanization of things, objects, etc.). Therefore, they attribute human characteristics to their pets (Boya et al. 2012;

Diaz, 2017). However, it was not considered a significant factor for dogs' attitudes and intention to purchase food with natural/organic labeling. Therefore, it is shown that it does not influence consumer behavior to a great extent. However, it does influence the expansion of brands, because according to theoretical support, this phenomenon was the main reason for the pet food industry to grow to a large extent (Boya et al. 2012; Bontempo, 2005).

However, there is a great deal of anthropomorphizing of dogs in Mexico. However, according to the results, they are not considered children but as additional family members. What also stands out and is rescued from the research is that the growing relationship between humans and dogs is evident. While at the beginning they were considered in one way, nowadays, they turn out to be an essential part of our lives, helping in health issues and being part of our family, generating concerns and more significant meaning in the lives of the owners.

This fulfills the objectives established for this research, which can help marketers, entrepreneurs, and researchers expand their knowledge and vision for the generation of our strategies, products, or lines of research.

5.2 Recommendations

This research was difficult to approach, from the theoretical framework to the constructs and variables to be included. The limitations Covid-19 presented were also a problem for this research to be conducted more efficiently since there was a lack of respondents. A focus group could have been conducted at the beginning to delimit some constraints or address more ideas.

As a first step, it is recommended that a different instrument be generated to improve the model's constructs. It is also recommended to expand the sample with another research instrument and directly in strategic locations. For example, an in-depth interview to detect better constructs that can help influence the purchase of organic or natural food with labeling for dogs to understand this behavior better.

However, in future research, it could be interesting to make different general evaluations of dog food, such as nutritional evaluation, veterinarian recommendations, the brand image that resembles the owner's dog, income, and another alternative that could

benefit and broaden the perception of retailers. In the end, it affects the decision-making towards a product, so it can and turns out to be attractive to understand more about the topic related to dogs and the relationship it has with the owners. Therefore, it is recommended to delve a little deeper into a theoretical topic or theory to consider the following research phases.

One of the ideas of this research is to invite more people, organizations, and institutions to be curious about the topic related to dogs and companion animals in general; besides being support for a better analysis, they are becoming more and more important in life in general. Finally, I would also like to recommend an association or a company that can go deeper into this subject. Because research in consumer understanding can help predict future events that can help both marketers and entrepreneurs project into the future and observe trends.

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Appendix

Appendix 1.

Survey

Comida natural para perros. (ONLINE)

Su participación en esta encuesta es totalmente voluntaria, no obstante, me ayudará a realizar una investigación sobre la intensión de compra de comida natural para perros. Le pido conteste de la forma más sincera. La encuesta durará alrededor de 10 minutos, muchas gracias.

Pregunta filtro.
¿Tienes perro(s)?

Si / No

Datos Demográficos.

1. Edad.
   _____

2. Sexo

- Mujer
- Hombre

3. Nivel de estudios

- Primaria
- Secundaria
- Preparatoria
- Licenciatura
- Maestría

- Doctorado

4. Estado civil
- Soltero
- Casado
- Divorciado
- Viudo
- Unión libre

5. ¿Cuántos perros tienes?
_____

Relación con su perro (En una escala del 1 al 7 indique que tan de acuerdo o en desacuerdo, dependiendo de la relación que tiene con su mascota. Siendo 1= totalmente en desacuerdo y 7= totalmente de acuerdo.)

6. Antropomorfismo.

	Totalmente en desacuerdo 1	2	3	4	5	6	Totalmete de acuerdo 7
Veo a los perros más como personas que como animales feroces.	☐	☐	☐	☐	☐	☐	☐
Mi perro es parte de mi familia.	☐	☐	☐	☐	☐	☐	☐
Siento que puedo comunicarme con mi(s) perro(s).	☐	☐	☐	☐	☐	☐	☐
Mi perro es como un niño para mí.	☐	☐	☐	☐	☐	☐	☐
Aprendo mucho de mi(s) perro(s).	☐	☐	☐	☐	☐	☐	☐
Tengo las mismas responsabilidades que un padre cuando se trata de cuidar a mi(s) perro(s).	☐	☐	☐	☐	☐	☐	☐

7. Valores de alimentos saludables para perros

Totalmente en desacuerdo Totalmente de acuerdo

	1	2	3	4	5	6	7
La salud de mi perro significa mucho para mí	☐	☐	☐	☐	☐	☐	☐
Es importante para mi que mi perro tenga buena salud	☐	☐	☐	☐	☐	☐	☐
Yo pienso a menudo en la salud de mi perro	☐	☐	☐	☐	☐	☐	☐
Me considero una persona preocupada por la comida saludable para mi perro	☐	☐	☐	☐	☐	☐	☐
Me preocupan mucho las consecuencias de salud que están relacionadas con lo que come mi perro	☐	☐	☐	☐	☐	☐	☐

Identidad Propia. (En una escala del 1 al 7 indique que tan de acuerdo o en desacuerdo, dependiendo de la percepción que se tenga de uno mismo. Siendo 1= totalmente en desacuerdo y 7= totalmente de acuerdo.)

8. Valores de alimentos saludables.

Totalmente en desacuerdo Totalmente de acuerdo

	1	2	3	4	5	6	7
Pienso en mí como una persona que está interesada en la comida saludable.	☐	☐	☐	☐	☐	☐	☐
Tener buena salud significa mucho para mí.	☐	☐	☐	☐	☐	☐	☐
Tener buena salud es relevante para mí.	☐	☐	☐	☐	☐	☐	☐
Yo pienso a menudo en mi salud	☐	☐	☐	☐	☐	☐	☐
Me preocupan mucho las consecuencias de salud que están relacionadas con lo que como.	☐	☐	☐	☐	☐	☐	☐

9. Comportamiento real de compra de alimentos orgánicos

Totalmente en desacuerdo
Totalmente de acuerdo

	1	2	3	4	5	6	7
A menudo compro alimentos orgánicos	☐	☐	☐	☐	☐	☐	☐
A menudo compro alimentos orgánicos como algo básico.	☐	☐	☐	☐	☐	☐	☐
A menudo compro alimentos orgánicos porque son más ecológicos.	☐	☐	☐	☐	☐	☐	☐
A menudo compro alimentos orgánicos porque están en contra de la experimentación de animales	☐	☐	☐	☐	☐	☐	☐
A menudo compro alimentos orgánicos que son seguros de consumir.	☐	☐	☐	☐	☐	☐	☐
A menudo compro alimentos orgánicos por mi salud.	☐	☐	☐	☐	☐	☐	☐

Comida de alimento con etiquetado natural para perros. (En una escala del 1 al 7 indique que tan de acuerdo o en desacuerdo, dependiendo de la percepción que se tenga de uno mismo. Siendo 1= totalmente en desacuerdo y 7= totalmente de acuerdo).

10. Attitude toward Natural food for dogs

Totalmente en desacuerdo
Totalmente de acuerdo

	1	2	3	4	5	6	7
Para mí es valioso que los alimentos naturales para perros se enriquezcan con ingredientes saludables.	☐	☐	☐	☐	☐	☐	☐
Me parece positivo si los alimentos naturales para perros se han enriquecido con ingredientes saludables.	☐	☐	☐	☐	☐	☐	☐
Agregar ingredientes saludables a los alimentos	☐	☐	☐	☐	☐	☐	☐

naturales es bueno para la salud de mi perro

11. Intensión de compra de comida natural para perros

	Totalmente de acuerdo 1	2	3	en 4	5	6	desacuerdo 7
Compraría alimento con etiquetado natural u orgánico para perros en un futuro cercano.	☐	☐	☐	☐	☐	☐	☐
Planeo comprar alimento con etiquetado natural u orgánico para perros de forma regular.	☐	☐	☐	☐	☐	☐	☐
Tengo la intención de comprar alimento con etiquetado natural u orgánico para perros para los beneficios de salud para mis perros a largo plazo.	☐	☐	☐	☐	☐	☐	☐
Tengo la intención de comprar alimento con etiquetado natural u orgánico para perros por que están más preocupados por la seguridad alimentaria	☐	☐	☐	☐	☐	☐	☐
Tengo la intención de comprar alimento con etiquetado natural u orgánico para perros porque son más ecológicos.	☐	☐	☐	☐	☐	☐	☐
Tengo la intención de comprar alimento con etiquetado natural u orgánico para perros por que me preocupa el	☐	☐	☐	☐	☐	☐	☐

bienestar animal.