

“Trick or Meat?”

A Quantitative Study of the Drivers of Consumption of Plant-based Meats in the Italian
Population

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ABSTRACT

The constant growth of the world population and the increasingly urgent climate and environmental disasters are raising concerns about what could be done to slow down this ecological exhaustion. The meat production industry is a significant polluter in the current environmental scenario, and there is an increasing trend that promotes plant-based meats as meat substitutes. Yet, in Italy, there is still widespread skepticism about plant-based diets and products. The main objective of this thesis was to determine whether an increased degree of environmental knowledge and concern among Italians would increase their willingness to try and purchase intention of plant-based meats.

Current literature, it lacks comprehension regarding the factors that can impact individuals' behavior and intentions concerning plant-based meat. Despite its extensive usage in academia, the MOA model which is implemented in the current study (motivation-opportunity-ability) had yet to be considered when investigating the factors driving individuals to embrace a sustainable lifestyle and through the consumption of plant-based meat within a specific country. A survey was conducted among 157 respondents with an Italian nationality above 18 years old.

The results showed a positive correlation between environmental concern on the one hand and motivation and ability to eat plant-based meat on the other hand. Furthermore, motivation was related to willingness to try and purchase intention, while ability was only related to willingness to try plant-based meats. Overall, motivation was also found to be a mediator between environmental concern and both willingness to try and purchase intention. No relationship was found between environmental knowledge and any of the other variables; similarly, the relationships for opportunity were insignificant in all analysis.

These results prove that the level of environmental concern of people plays a crucial role in their eating behaviors, together with their levels of motivation. This study underlines the importance of understanding the underlying drivers for pro-environmental behavior and advises marketers and policymakers to create campaigns and initiatives to address these factors effectively. Nevertheless, caution must be exercised when implementing these measures as there is still a prevailing skepticism about plant-based meats among Italians, as

the survey showed. This implies that Italy may not be deemed a favorable market to expand the range of these products.

KEYWORDS: *Plant-based Meats, Environmental Knowledge, Environmental Concern, MOA Model, Willingness to Try, Purchase Intention*

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1. Introduction

A crucial milestone for our planet Earth and history has been achieved. According to an estimation by the United Nations (UN), the world reached a population that counts 8 billion people on 15th November 2022, with an increase of 1 billion people since 2010 (United Nations, 2022). However, this rapid growth in the population has severe consequences on the environmental status of the planet, which is already on the verge of a point of no return, and that could, therefore, severely impact the lives of future generations. In fact, according to the research by Sherbinin et al. (2007), population growth and consumption are the two main factors contributing to humanity's ecological footprint globally. It is thus essential to consider whether the global food system is environmentally sustainable, as it is well known that it contributes to about one-fourth of global greenhouse gas emissions, is the most significant global cause of freshwater pollution, consumes more water compared to any other human activity, and is primarily to blame for the current biodiversity crisis (Fraser, 2020). Exploring methods to feed the world's expanding population in a sustainable, equitable, profitable, and nutrient-dense manner is undoubtedly a challenge that will, in some respects, characterize the 21st century from this point on.

According to research from the Worldwatch Institute (WI), worldwide meat production and consumption keep on increasing. In the past 40 years, the global output of meat production has tripled, and in the past ten years alone, it has grown by 20%. Industrial countries are consuming expanding amounts of meat, roughly double the level in poor countries. Due in part to population increase and, in many cases, to rising per capita demand, the global beef output continues to rise (Petrovic et al., 2015). The primary contributor to the greenhouse effect caused by beef production is the deforestation of trees and grasses on the land used for growing and harvesting feed crops, which would otherwise absorb carbon dioxide (Petrovic et al., 2015).

By the middle of the century, the amount of meat consumed worldwide is expected to increase by 76%, according to a significant analysis by the Food and Agricultural Organization (FAO) of the United Nations. This entails doubled poultry consumption, a 69% rise in beef consumption, and a 42% rise in pork consumption (Alexandratos & Bruinsma, 2012). Particularly, compared to plant-based diets, meat production, and consumption create higher emissions per unit of energy since energy loss occurs at each trophic level (Godfray et al., 2018).

The current projections above may be subject to various factors that can vary, including changes in the socio-economic conditions, the impacts of climate, and advancements in productivity across different geographic regions. A study by Leiserowitz et al. (2020) found that the current state of the climate has increased environmental concern among individuals all across the world. According to the report, there is growing awareness of how climate change affects ecosystems, communities, and human health, raising concerns about the problem. This awareness also leads to widespread environmental knowledge, which can be defined as the ability to comprehend and evaluate the effects of human consumption and behavior on the environment, whether they are positive or negative (Haron et al., 2005). Thus, it is essential to examine whether people could be encouraged to change their eating habits and adopt more environmentally friendly diets by cutting meats and by stimulating their environmental knowledge and environmental concern.

This research aims to investigate the relationship between the perceived environmental knowledge and environmental concern that people might have with their purchase intention and willingness to try plant-based meats. In order to predict these outcomes, the motivation, opportunity, and ability (from now on referred to as MOA) of consumers of trying and purchasing plant-based meats can be useful indicators. In fact, environmental concern and knowledge could increase the MOA of people. Thus, the ultimate goal of the study is to examine whether fostering environmental knowledge and making people aware of the risks and consequences of meat consumption could boost their motivation, opportunity, and ability to adopt plant-based meats, ultimately leading to increasing purchases of said products.

Considering the daunting environmental prospects, reducing meat consumption in our diets is essential, attempting to switch to a diet that relies more on plant-based alternatives. A trend is the creation of goods that mimic meat, or "meat analogs," to offer an alluring substitute for meat. The most significant issue for food producers is frequently creating meat substitutes with a texture and flavor that consumers will tolerate. Current meat substitutes' distinctive qualities, such as texture, flavor, color, etc., depend on the ingredients employed (Kyriakopoulou et al., 2019). However, a sense of skepticism toward plant-based products and vegetarian/vegan diets is still widely present (Wrenn, 2017). Many individuals view veganism as an "extreme" lifestyle choice, and the prevailing belief that meat-based diets are the norm is deeply ingrained. A vegan diet involves the avoidance of all animal-derived products, including meat, fish, seafood, poultry, eggs, and dairy. On the other hand, a vegetarian diet does not include meat, poultry, fish, and seafood but may include eggs and dairy.

Since 2018, the media has predicted that one of the main trends in the food market will be veganism. Moreover, according to recent surveys, veganism is no longer just a little subculture of Western cuisine but is instead expanding to become a widely accepted lifestyle choice on a global scale. Between 2012 and 2016, more consumers worldwide purchased meat alternatives and veggie spreads (Saari et al., 2020). Thanks to this trend, the food business is taking notice of the growing popularity of veganism and plant-based diets as modifications in food-related behaviors also lead to new market segmentation and faster product turnover cycles. That is because the food business is taking notice of the growing popularity of veganism and plant-based diets. As a result, businesses now need to be ready to quickly introduce fresh items in response to shifting consumer expectations. Due to this, businesses in the food industry have had to produce novel goods based on market research, as well as marketing skills (Saari et al., 2020). Also, national health research institutes are advocating a plant-based diet in several European nations to assist people live better lives and to aid in reducing the effects of climate change. For instance, in Italy, where the Mediterranean plant-based diet has historically been the predominant diet, animal food production has expanded enormously over the past few decades. The Italian Association of Human Nutrition released a report in 2017 that suggested that health groups and governmental bodies should encourage Italians to adopt a vegetarian diet (Agnoli et al., 2017).

1.1. Research question and theoretical background

The context of environmental urgency and widespread veganism makes it societally relevant to further investigate the perception of potential consumers towards plant-based meat by considering three different aspects of the MOA model (Ölander & Thøgersen, 1995), namely motivation, opportunity, and ability, which could be analyzed as drivers for people's willingness to try out these products to adopt more environmentally conscious behavior. In particular, this research will focus on the Italian population and their perceptions of plant-based meat, given the question of whether Italian consumers will be willing to adopt novel protein sources due to their main patterns of consumption and dietary preferences.

With this in mind, the following research question that will lead this study has been formulated:

RQ: "Is the positive effect of environmental knowledge and concern on consumers' willingness to try and purchase patterns of plant-based products mediated by their motivation, opportunity, and ability to purchase such products?"

It is in fact important to investigate the Italian population due to its general approach to veganism and plant-based products. According to research by the Ceuta Group (2020), veganism is rising across Europe. For instance, the Netherlands had the highest volume of veganism-related searches, up 645% since 2014. In 2018, consumers in the Netherlands spent €97 million on meat substitutes, 17% of the population there self-identifies as vegetarian or vegan, and 25% claim they have cut back on their total meat consumption (Ceuta, 2020). Opposing this trend, only two European nations have seen a fall in interest in veganism since 2014: Italy, together with Bulgaria, is in fact at the bottom of the list. Only 10% of Italians report not eating meat, and since dairy and eggs are common ingredients in many Italian dishes, veganism is even less widespread.

Because meat is a significant component of Italian traditional cuisine and culinary culture, it is crucial to understand how Italian consumers view novel proteins. Valuable native cattle breeds are raised and renowned meat products are made in Italy. Since Italian cuisine influences foodies and gourmets in Europe and around the world, studying Italian consumers can help us forecast the development of local cuisines in other nations, particularly in those where meat is an essential component of daily diets (Mancini & Antonioli, 2022). Also, considering the sizeable meat consumption in Italy, it would be interesting to study how alternative sources of protein might replace traditional meat in the future. In 2021, the average annual meat consumption in Italy was 59 kg per person, including both fresh and processed meat as well as meat substitutes, the latter of which accounted for a relatively insignificant 0.1 kg and included all kinds of meat-like products that mimicked the physical appearance or chemical properties of particular meats (Mancini & Antonioli, 2022). A modest rise in meat consumption over the next few years is anticipated in the Italian market, according to Statista (n.d.), as a result of two opposing dynamics: a rising trend in the consumption of fresh meat and meat substitutes, and additionally a declining trend in the consumption of processed meat.

A growing body of literature is being developed in different fields, such as environmental studies, attempting to understand people's perception of plant-based diets (Silva Souza et al., 2020). In their study, Silva Souza et al. (2020) showed that respondents indicated a variety of obstacles to being vegan, including personal preferences and food preferences, practical obstacles like a lack of time and vegan food accessibility, and societal obstacles like prejudice and hostility targeted at vegans. However, most of the studies concentrate on a small number of distinct variables, such as the impact of gender on the adoption of a vegan diet (Thomas, 2016; Modlinska et al., 2020). According to Modlinska et al. (2020), men and women have different preferences for plant-based foods and viewpoints

on eating meat, and their motivations for beginning and/or maintaining a vegan or vegetarian diet vary as well. Moreover, they highlighted that communities may differ in their opinions about plant-based diets and the reasons why they choose to eat vegetarian according to cultural variables. Even though the prevalent model in the West continues to link meat intake to wealth, high social standing, and dominance, variables such as nation, a person's socioeconomic condition, or age, may also vary in terms of importance.

In terms of the use of the MOA model, few studies look at the antecedents and effects of individuals' motivation, opportunity, and ability (Guenzi & Nijssen, 2020). Previous research has often highlighted the positive relationship between the MOA model and purchase intention in different fields regarding sustainability, such as energy-saving practices and sustainable clothing (Bigné et al., 2010; Hasbullah et al., 2022; Li et al., 2019). However, in terms of sustainable eating practices and plant-based diets and products, the model has not been taken into account yet to analyze the topic and the role it could play in it.

There is thus a gap in understanding what factors can influence people's behavior and intentions about plant-based meat by analyzing it through the lenses of the MOA model. To respond to the aforementioned research question, a quantitative research design will be created. The hypotheses that will be provided in the following chapter can be tested by conducting a survey. People with Italian nationality will be the target demographic of this study. A number of analyses will be carried out using the program IBM SPSS in order to respond to the research question and address the existing knowledge gap in academia. The Theoretical Framework (Chapter 2) will give a review of the body of literature and earlier hypotheses at the outset, laying the groundwork for this investigation. Twelve hypotheses are developed once the basic concepts of this study, namely the MOA model, environmental knowledge, environmental concern, and pro-environmental purchase intention, have been defined. The conceptual model shows the hypotheses in visual form at the end of Chapter 2. By outlining the research concept, procedures, sampling technique, measurements, and a summary of the final sample, Chapter 3 provides further detail on methodological choices. The findings are then presented in Chapter 4, by identifying the significant effects that were discovered in the analysis. The last chapter (Chapter 5) analyzes the theoretical and practical consequences, constraints, and recommendations for future research after providing an answer to the research question.

2. Theoretical Framework

The purpose of this study is to investigate how environmental concern and knowledge can impact the willingness to try and purchase intention of plant-based meats, considering the mediator role of motivation, opportunity, and ability. The theoretical framework does this by summarizing the body of research on the key ideas covered in the study. This chapter begins with the definition of the MOA model and how it has been used in previous studies to predict pro-environmental behaviors (section 2.1.). We will then talk about the concepts of environmental knowledge and environmental concern and their impact on environmental choices and behaviors, a demarcation leading up to the first ten hypotheses (section 2.2.). Pro-environmental purchase intention and willingness to try and how they have been tackled in the past literature will be discussed thereafter, and the final six hypotheses will be introduced (section 2.3.). Finally, the presentation of the comprehensive model of this research, which encompasses all sixteen hypotheses, will be examined (section 2.4.).

2.1. The MOA model

The MOA (Motivation-Opportunity-Ability) model was first introduced by Ölander and Thøgersen (1995), and they defined it as a theoretical framework that seeks to explain the variables that affect people's behavior in relation to their initiatives in terms of action. The paradigm contends that people must be motivated, given the chance, and provided with the information to engage in pro-environmental action. In their study, Ölander and Thøgersen (1995) highlighted the increases in predictive power that might be achieved concerning consumer action by including the concepts of “motivation”, “opportunity”, and “ability” to perform a specific behavior. Thus, the MOA framework's central tenet is that a new behavior or change in behavior is more likely to be carried out if a consumer believes it will advance their interests and is aware of the repercussions of not acting (motivation), has the options and accessibility to encourage the behavior (opportunity), and has the knowledge and abilities to carry it out (ability) (Soma et al., 2021).

Since motivation is what propels behavior change, it is undoubtedly a crucial component of the MOA framework. Preparation, willingness, interest, and a wish to engage in a specific behavior are all parts of *motivation*. Individual autonomy, self-esteem, and overall well-being are all seen as being influenced by both inner motivation and external regulating elements (Hasbullah et al., 2022). According to Sanchez-Sabate and Sabaté (2019), environmental motives are already enticing a sizable part of Western meat eaters to embrace

specific meat reduction techniques like meat-free days, meaning that environmental knowledge and environmental concern can influence the motivation of people to adopt a sustainable diet.

In this study, two types of motivation have been considered jointly, namely *intrinsic* motivation and *external* motivation. Intrinsic motivation can be defined as when someone acts because they find something intriguing or delightful (Ryan & Deci, 2000). This indicates that the person is motivated to participate in the activity for their reason rather than because of pressure or rewards from outside sources. On the other hand, extrinsic motivation refers to acting in a way that results in a different outcome (Ryan & Deci, 2000), meaning that the person is motivated by outside considerations rather than the inherent fun or fulfillment of the activity itself, such as monetary advantages, recognition from others, or averting punishment. In this sense, in terms of pro-environmental behaviors, extrinsic motivation achieves the aim through status consciousness, public self-consciousness, and a search for the newest trends. In contrast, intrinsic motivation drives purchase intention through environmental factors and social awareness (Hasbullah et al., 2022).

Motivation by itself, however, is insufficient to alter behaviors. Consumers need the chance to adjust their behavior. This entails providing options and accessibility to support the practice, such as the availability of plant-based meats in supermarkets and marketing campaigns and commercials that can increase awareness and give customers a reason to think about switching to plant-based products. In fact, consumers might only be able to implement the changes they want to with these possibilities. Soma et al. (2021) define *opportunity* as the existence of elements that support or promote a behavior. This comprises external aspects of options that support the desired behavior, such as accessibility, price, and convenience. In a study conducted by Gazzola et al. (2020), it was presented that opportunity may be converted into availability, which indicates convenience and obstacles to purchasing sustainable goods. Major hindrances that impede consumers from purchasing environmentally friendly products include structures that discourage sustainable behavior, as well as deeply rooted societal and cultural standards that implicitly shape behavior (Hasbullah et al., 2022). Moreover, according to Notaro and Paletto (2021), cost became a significant factor in purchasing environmentally friendly goods. This finding demonstrates how price can act as a deterrent to more sustainable consumer behavior. The cost at which these products will be sold will, therefore, probably define the size of the potential future market for the eco-friendly sector (Notaro & Paletto, 2021) because it can play a deterrent role in terms of opportunities for consumers who want to approach a sustainable market such as plant-based meat.

Lastly, consumers must also have the capacity to engage in the behavior. To do this, one must have the necessary knowledge and abilities. Some examples of the personal resources necessary include knowledge, skills, and self-efficacy. For instance, knowing the cooking methods and having access to recipes involving plant-based meats can enable consumers to make informed decisions and adopt these products in their diets. In fact, motivation and opportunity alone might not be sufficient to alter behavior if one lacks the capacity to carry out the new behavior. A person's capacity to act is thus referred to as their *ability*. According to McNeill and Moore (2015), a recurring barrier to ethical or sustainable production is a lack of knowledge about it. Undoubtedly, consumers' ignorance can act as a roadblock to promoting the ability to adopt a favorable attitude toward the purchase of sustainable items. According to a study conducted by Notaro and Paletto (2021), many consumers are motivated to purchase sustainable products to reduce adverse effects on human health as well as on the environment. The study found that consumers are increasingly willing to use their knowledge of sustainable consumption to take action and address existing problems, meaning that they had more ability to carry out these behaviors. These findings align with a previous sustainability study by Munerah et al. (2021), which showed that individuals who better understand the environmental harm caused by non-sustainable products are more likely to be interested in purchasing sustainable products, hence their ability increased. Thus, when consumers are aware of environmental knowledge and concern can play as predictors of the ability of consumers.

Several scholars have used the MOA model theory to investigate the pro-environmental behaviors of consumers in different sectors (Hasbullah et al., 2022; Li et al., 2019; Nguyen & Vo, 2023). For instance, Hasbullah et al. (2022) studied sustainable garment purchasing in Malaysia among Millennials. Their analysis' findings showed a strong correlation between the intention to purchase sustainable clothing and the factors of motivation, opportunity, and ability. Additionally, the connections between the three factors and purchase intention were moderated by fashion consciousness. Similarly, Li et al. (2019) considered energy-saving behaviors in the American workplace, and the main findings of the study reveal that opportunity has the most impact on energy-saving practices, succeeded by motivation and ability. Additionally, motivation mediates the impact of opportunity and ability. Finally, concerning the MOA model, Nguyen and Vo (2023), when studying the organic food purchase behaviors among Gen Z in Vietnam, supported the idea that factors such as attitude, intention, societal norms, and personal norms (motivation) are more

significant determinants of buying behavior than factors such as perceived price and perceived restrictions (opportunity).

To conclude, motivation, opportunity, and abilities are key indicators and factors that need to be taken into account when studying consumers' pro-environmental behaviors and their drivers. Their role within the conceptual models of the literature considered is extensive. However, by looking at the mediating role of the MOA model, this research can pinpoint specific locations where interventions or marketing efforts could be focused to increase consumers' intentions to buy plant-based meats. For instance, the perceived opportunity and ability for consumers to try these goods may grow with marketing efforts that emphasize the taste and practicality of plant-based meats. At the same time, the capacity for customers to prepare them at home may improve with cooking lessons or tutorials. Additionally, as highlighted in the literature review, other factors come into play when exploring purchase intention. It is particularly essential to consider the environmental knowledge and the environmental concern that consumers might have in order to understand how these intertwine with the MOA of consumers.

2.2. Environmental knowledge and environmental concern

From the standpoint of the consumer, *environmental knowledge* can be defined as the capacity to understand and assess problems relating to human consumption activities and behaviors that may have a good or negative impact on the environment (Haron et al., 2005). Schahn and Holzer (1990) distinguished between abstract and concrete knowledge when investigating environmental activity. The first is understanding environmental issues, their causes, their solutions, and so forth. The latter is concerned with usable and actionable behavioral knowledge. In contrast to earlier studies (Polonsky et al., 2012), in this research, environmental knowledge will be measured using *perceived* rather than *actual* environmental knowledge. Since even specialists disagree on a product's impact on the environment, Rolston and Di Benedetto (1994) cautioned researchers against evaluating factual consumer awareness about environmental issues. For instance, many customers are familiar with the phrase "recyclable", but many are less knowledgeable about what it means and how it affects buying choices.

According to earlier research (Choi & Johnson, 2019; Mohd Suki, 2013), consumer views and attitudes about environmentally friendly items are positively influenced by general environmental awareness. Consumers with a pro-environmental mindset are thus more likely to look for and buy products with low environmental impact as well as alter their lifestyles to

have a lower environmental footprint. Along the same lines, Fielding and Head (2012) have highlighted the fact that people who have a greater understanding of the environment also exhibit higher levels of pro-environmental behavior, for instance, eating meat less frequently, using public transportation regularly, and making purchases preferring more sustainable packaging (Fielding & Head, 2012). However, awareness of environmental issues does not always translate into pro-environmental conduct. Other elements that affect conduct include cultural norms, peer pressure, and personal values. Nevertheless, environmental awareness can help people make well-informed choices and can motivate them to look for ways to behave in a more environmentally friendly way.

According to de Koning et al. (2015), the desire to lead healthy lives and safeguard the environment for the next generations is relatively strong. Increased environmental awareness and the availability and accessibility of knowledge (ability) are necessary to enable more sustainable lives. Moreover, more motivated buyers will also be more likely to learn the information because they are more willing to put forth the effort necessary to comprehend sustainability information and use it when making decisions (Grunert et al., 2014). They are accustomed to drawing focus on details concerning the origin and production of the food. However, as Gkargkavouzi et al. (2019) discovered, environmental knowledge indirectly influences the desire to engage in pro-environmental activities, suggesting that it may be included in abstract models that accurately predict the intention to engage in environmental behavior. Knowledge, in particular, influenced motives favorably. These findings suggest that knowledge may serve as a motivating factor for pro-environmental intents and efforts, while ignorance may become a behavioral constraint.

According to Statista (2022), the people of Italy appear to be quite conscious of environmental issues. More than one-third of Italians who participated in a survey conducted in 2017 said they were highly concerned about environmental hazards such as pollution, the ozone hole, and threat to the planet. In addition, 43% of those surveyed said they were very concerned about these issues. Often seen as one is a consequence of the other, *environmental concern* has traditionally been viewed as an assessment of the facts (e.g., becoming more aware of scientific research or data about the impact of certain practices on the environment), an attitude toward someone's behavior (such as choosing to reduce their carbon footprint by using public transportation or cycling), or the actions of others that have an impact on the environment, for instance by advocating for stricter regulations or support organizations that work to protect the environment

Higher degrees of environmental awareness and knowledge seem to dramatically increase pro-environmental behaviors and decrease the detrimental environmental behaviors displayed by individuals (Fielding & Head, 2012). Moreover, environmental concern is one of the critical determinants in influencing customers' behavior toward pro-environmental consumption, as claimed by Cerri et al. (2018). Still, in contrast with these previous findings, Dong et al. (2022) claim that food safety concerns positively impact the consumption of green foods but not environmental concerns. As we previously indicated, positive views or intentions among consumers may translate into something other than actual activity. Therefore, the attitude that precedes behavior still needs to include consumption. This means that in order to influence actual behavior, the attitude should include both the act of consuming or purchasing products that support environmental sustainability as well as concerns about the environment, which in our case are plant-based meats. Moreover, Pham et al.'s research (2019) found that there was no connection between environmental concerns and people's attitudes toward organic food in Vietnam. However, the study conducted by Nguyen and Vo (2023) has produced a different result that indicates a positive relationship between the two factors, and this difference can be attributed to the better understanding and sense of responsibility of Generation Z regarding environmental issues.

In the Italian context, a study by Aprile and Fiorillo (2017) has been conducted about the pro-environmental behaviors of Italians in the matter of water conservation and environmental concerns. The study demonstrates that the likelihood of conserving water at home has been linked to broader environmental concerns. People more concerned about pollution and resource depletion are more likely to conserve water. The findings of this study appear to support the notion that individuals who perceive environmental challenges as threats to both their personal well-being and the well-being of their respective groups tend to engage in water-saving behaviors. On the contrary, people are inclined to consume water when they believe other group members would do so as well (Aprile & Fiorillo, 2017).

Along with research analyzed in the previous sections, a positive relationship between environmental knowledge and concern and the variables in the MOA model is expected, as well as with willingness to try and purchase intention. Thus, the following hypotheses can be formulated:

H1: Environmental knowledge is a predictor of **motivation** for purchasing plant-based meats.

H2: Environmental knowledge is a predictor of **opportunity** for purchasing plant-based meats.

- H3: **Environmental knowledge** is a predictor of **ability** for purchasing plant-based meats.
- H4: **Environmental knowledge** is a predictor of **willingness to try** plant-based meats.
- H5: **Environmental knowledge** is a predictor of **purchase intention** of plant-based meats.
- H6: **Environmental concern** is a predictor of **motivation** for purchasing plant-based meats.
- H7: **Environmental concern** is a predictor of **opportunity** for purchasing plant-based meats.
- H8: **Environmental concern** is a predictor of **ability** for purchasing plant-based meats.
- H9: **Environmental concern** is a predictor of **willingness to try** plant-based meats.
- H10: **Environmental concern** is a predictor of **purchase intention** of plant-based meats.

Newton et al. (2015) conclude that environmental concern does not directly impact purchase intentions but rather aids consumers in understanding the environmental effects of a product's purchase. They emphasized the need to include another variable that connected environmental concern to consumption that was tied to the environment and that environmental concern itself was too broad to forecast a specific behavior. Alwitt and Pitts (1996) claim that certain attitudes against particular behaviors were connected to general environmental concerns and that it was this particular perspective that influenced purchase intention. Consequently, environmental concern needs to be examined with additional characteristics related to buying green items in order to best predict behavior. Thus, in this research, it will be considered in combination with the other predictors discussed in the sections above.

2.3. Willingness to try and pro-environmental purchase intention

The widespread focus on environmental and sustainability issues in society is inspiring academics and professionals to research the motivations behind the adoption of sustainable food items (De Canio et al., 2021). Since this study will consider the food sector, *willingness to try* will be examined as an outcome variable. Like other omnivores, humans are both interested in and reluctant to try new meals. Food neophobia, meaning the fear of new foods, is the unwillingness to try unusual foods or hate for the flavor of unknown foods (Pelchat & Pliner, 1995). New food products brought to the market also encounter resistance from customers. The food industry strategy is distinguished by the sparing growth of innovations. Much innovation is built on less risky brand extensions of existing product lines. The rate of change in consumers' eating choices and routines could also be faster. Additionally, they frequently reject overly innovative food, creating formidable obstacles to true innovation (de Barcellos et al., 2009). This may be influenced by cultural customs, sociodemographic

behavior, lifestyle, or the stage of life a person is in. According to current research (Szenderák et al., 2022), people's willingness to try plant-based meats is higher than other substitutes, such as insect-based alternatives. However, few people in the population regularly eat meat substitutes. Moreover, another study revealed that consumers believed plant-based meat alternatives helped address global food security and environmental challenges, which had a favorable impact on their desire to try the products (Circus & Robison, 2019). Along the same line, Rombach et al. (2022) claim that the inability to sample, purchase, and pay a higher price for cultured meat was found to be inhibited by food neophobia, food allergies, locavorism (the commitment to consuming food produced or farmed in local neighborhoods or areas), and concerns about food technology. At the same time, consumers' perceptions of cultured meat as a practical substitute for ordinary meat and their interest in food were revealed to be significant factors that favorably affected their desire to try, buy, and pay more. In a study conducted in Italy, Mancini and Antonioli (2019) found that over half of the respondents said they would be open to trying cultured meat. Consumers agreed more with assertions about the benefits of cultured meat's externalities (such as environmental impact and animal welfare) than its intrinsic qualities (safety, tastiness, and nutritional values). Young, highly educated, slightly acquainted with cultured meat, omnivores, and wanting to cut back on meat intake were the characteristics of a possible buyer of cultured meat in this study.

For this research, we can define the concept of *pro-environmental purchase intention* as the desire to purchase goods or services that are sustainable, ecologically friendly, or otherwise suitable for the environment. Previous research has often considered the positive relationship between the MOA model and purchase intention (Hasbullah et al., 2022; Li et al., 2019). A consumer must have a solid motivation to buy a good, be aware of the possibility of buying the product, and have the required financial or physical means to purchase before they can say they intend to buy it. For instance, a consumer will not have the intention to buy if they are strongly motivated to buy environmentally friendly goods but are unaware of any options to do so. In contrast, a consumer's desire to buy will be hampered if they have high motivation and are aware of chances but need more financial means to make a purchase. Thus, it is necessary for consumers to resolve a conflict between the attention on the proximal event of a possible purchasing activity and the ecologically desirable aims, which are perceived as distant, in a typical case involving the purchase of an environmentally friendly product (Shabnam et al., 2021).

Additionally, the study conducted by Kumar et al. (2021) indicates that people are in favor of buying eco-friendly goods using the available resources, including time, money, and

likeability. The most crucial factor in choosing to buy sustainable clothing is its availability. Previous research has also widely analyzed the relationship between ecological purchase intention and environmental concern (Arisal & Atalar, 2016; Koenig-Lewis et al., 2014). According to the research by Arisal and Atalar (2016), the key finding is ecological buying intention and environmental concern are directly related. This could result from consumers favoring certain items over others because of how those products affect the environment. They might also be excited about spending more money on more environmentally friendly things.

Drawing from the findings of previous research, the following hypotheses are formulated:

H11: **Motivation** is a positive predictor of **willingness to try** plant-based meat.

H12: **Opportunity** is a positive predictor of **willingness to try** plant-based meat.

H13: **Ability** is a positive predictor of **willingness to try** plant-based meat.

H14: **Motivation** is a positive predictor of **purchase intention** of plant-based meat.

H15: **Opportunity** is a positive predictor of **purchase intention** of plant-based meat.

H16: **Ability** is a positive predictor of **purchase intention** of plant-based meat.

To summarize, this master's thesis will consider the role of environmental knowledge and environmental concern in predicting the motivation, opportunity, and ability of consumers to purchase plant-based meats. In turn, the effect of motivation, opportunity, and ability on purchase intention and willingness to try plant-based meats will also be measured. The MOA model will thus play the role of mediator in this research. In the following chapter, an overview of the methodology will be provided.

2.4. Conceptual model

Building up further on the study conducted by Hasbullah et al. (2022), the conceptual model (*Figure 2.1*) of this research paper was created by including all sixteen hypotheses. The first three arrows will measure the effects of environmental knowledge (H1, H2, and H3) on all three aspects of the MOA model: motivation, opportunity, and ability. Then, the effect of the independent variable, namely environmental knowledge (respectively H4 and H5) on the dependent variables willingness to try and purchase intention will be measured. The following five hypotheses revolve around expected effects of environmental concern (H6, H7, and H8) on motivation, opportunity, and ability, and on the dependent variables willingness to try and

purchase intention (H9 and H10). Finally, motivation, opportunity, and ability will also be taken into account to predict consumers' willingness to try (H11; H12; H13) and purchase intention (H14; H15; H16) of plant-based meats.

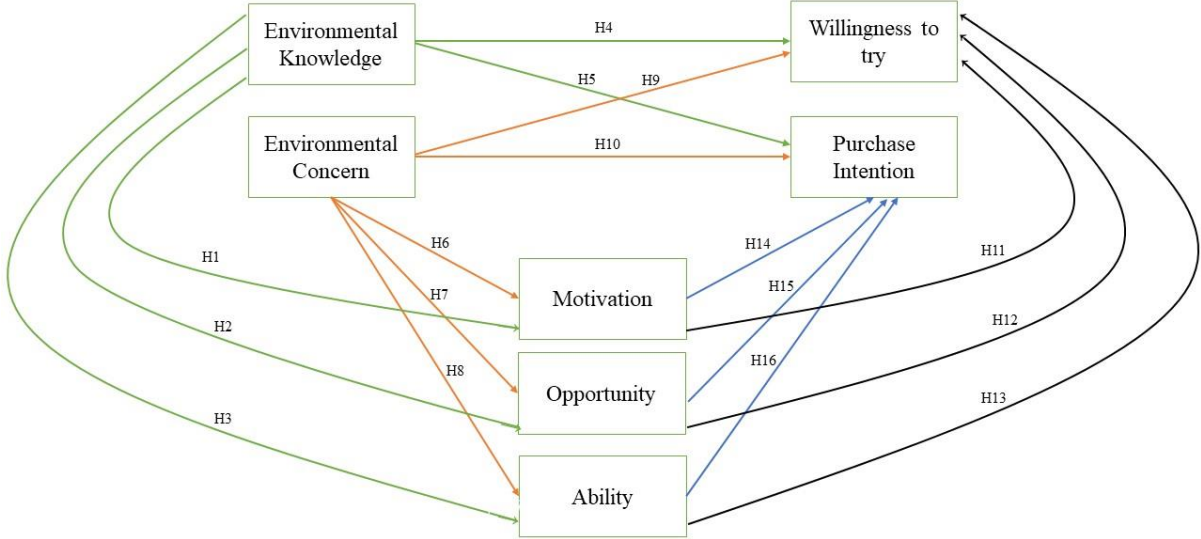


Figure 2.1: Conceptual Model of the Research

3. Methodology

This chapter addresses the methodological decisions that were made to connect the research issue and its solutions. The research design will be provided at the outset (section 3.1.). Following that, we will provide a comprehensive explanation of the procedures (section 3.2.). An overview of the sample's descriptive statistics follows this (section 3.3.). The operationalization of the crucial variables is then covered in detail (section 3.4.).

3.1. Research design

Looking back at the research question at the beginning of this study, it was intended to ascertain whether the positive effect of environmental knowledge and concern on consumers' willingness to try and purchase patterns of plant-based products was mediated by their motivation, opportunity, and ability to purchase such products. To attempt to answer this question, the research adopted a quantitative approach. Quantitative research aims to produce knowledge and foster comprehension of the social world. Social scientists, including communication scholars, employ quantitative research to investigate phenomena or events that have an impact on people (Burrell & Gross, 2017). In fact, in this study, the researcher's aim was to discover the effects of different predictor variables (i.e., environmental knowledge and environmental concern) on different outcome variables (i.e., willingness to try and purchase intention), as well as their mediated effect through the variables from the MOA model, and their outcome on a specific population, namely the Italian one. Quantitative research is in fact employed to verify or validate hypotheses and assumptions. A topic's generalizable facts can be established through this kind of study and the findings provide an explanation for what influences or is significant to a given population. In particular, a survey was conducted. Surveys can be used to collect people's thoughts, beliefs, attitudes, knowledge, and experiences (Matthews & Ross, 2010). Since one of the goals was to investigate people's attitudes towards and consumption of plant-based meat, as well as their knowledge about environmental issues, a survey appeared to be a suitable method to conduct and support the purpose of this study.

3.2. Procedures

An online survey (see Appendix A for the English version and Appendix B for the Italian version) was released between April 7 and May 4, 2023, to gather data for this quantitative study. Qualtrics, a platform offered by Erasmus University Rotterdam, was

utilized to build the survey and gather the results. The initiative included a mobile-optimized version for smartphones, but participants may engage using any computer or device with an active Internet connection. In this manner, participation was not restricted to a particular location or time. The survey took between 10 and 15 minutes to complete and had 20 questions, the majority of which were matrix tables. The consent form was the first item to show up when the link was opened, followed by all the legal information required for research conducted at Dutch universities. It included an explanation of the purpose of the study, namely the examination of perceptions and consumption of plant-based meats in the Italian population. Moreover, the confidentiality of data and voluntary participation in the study was mentioned, ensuring that the research data would remain confidential and anonymous and that participants were free to cease their cooperation at any point in the survey. Finally, a call to action to an email address created for this study was included if further information was needed. It also offered an email address in case there were any additional questions or comments. Participants had to satisfy three requirements in order to be able to participate in the study. The first one was the acceptance of the consent form; the second one was that participants had to be at least 18 years old and legally able to give consent themselves; the third one was that they had to have Italian nationality. Participants who did not meet these criteria were immediately directed to the end of the survey. The survey's main part began after these procedures were completed.

After providing a definition of plant-based meats (*“products that are made to mimic properties found within natural meats and are considered to be meat substitutes. They are made using plant and other non-animal products to look, taste, and feel like meat products. Some examples of plant-based meats include veggie burgers, veggie sausages, veggie hot dogs, Beyond Meat burgers, Future Farm, and others.”*) the first three questions of the survey covered the dietary preferences and dietary habits of the participants. They were asked about their diet (i.e., whether they would consider themselves omnivores, flexitarian, vegetarian, or vegan), and how often they consume meat and plant-based meats per week on average. The following question measured their willingness to try plant-based meats, and after that, a scale measuring their purchase intention was presented. The dependent variables were measured prior to the independent variables and mediators so that participants would not be primed, because by assessing their environmental knowledge and concern at the beginning, participants could have been more prone to how heightened willingness to try and purchase intention based on their previous answers. The purpose was to minimize the survey effect. Followingly, the scales for the mediator were measured: the scale for *motivation* was divided

into two blocks, with one measuring intrinsic motivation, and the other one external motivation. Then followed the *opportunity* scale, and lastly the *ability* scale, all measured through matrix tables. The last two scales that were taken into consideration in the survey were respectively *perceived environmental knowledge* and *environmental concern* of the participants. The last section of the survey included demographic information, namely gender and the highest level of education they followed. At the conclusion of the survey, there was an open text area where respondents could leave comments or ask questions. This section sparked some contentious comments from some participants, who showed their resistance and disapproval of the products at the core of this research. Some examples of these comments are “I follow the carnivore diet and consider bland based meat pure cancer”, “Today rare steak, which unfortunately cannot be compared to the vegetable”, or still “I am a bit skeptical in consuming vegetables that resemble the taste and texture of something completely different”. The final page had a thank you note and a statement indicating that the window might now be closed.

The survey was initially developed in English, and it was then translated into Italian in order to facilitate the understanding and dissemination of the survey among Italian native speakers. However, participants were also allowed to complete the survey in English, if preferred. In total, 128 people completed the questionnaire in Italian, while 29 people completed the questionnaire in English. Three Italian acquaintances pre-tested the online questionnaire to see whether the language level was doable and to see if there were any sentences or points that did not make sense. The survey was then released after incorporating their feedback about minor changes concerning the translation from English to Italian.

3.3. Sampling strategy and sample description

The target population for this study was people who have Italian nationality of age 18 or above. There were no other restrictions in terms of demographic characteristics, such as race, gender, religion, education, sexual orientation, and so on, as well as dietary preferences. The current location of the participants did not matter in the research as there were no questions related to a particular location.

A non-probability sampling method was used, meaning that the procedure was based on targeting, where not everyone will have the same chance of being recruited, due to the use of a subjective, namely non-random, method of data collection. The two main sampling strategies which were used were convenience sampling and snowball sampling. In convenience sampling, the units of analysis were chosen for the sample based on their

accessibility to the researcher. This may be a result of proximity geographically, availability at a specific moment, or willingness to take part in the study (Etikan et al., 2016). The survey was thus spread through social media pages, such as Facebook groups of different cities around Italy and different locations around Europe, for instance, “Italiani in Olanda” and “Italiani a Ginevra”. Moreover, the survey was also posted in Facebook groups where students can fill out each other's university thesis surveys. Participants were also recruited via Instagram, to ensure that the survey will reach people of different age groups and with different backgrounds. From then on, a snowball sampling strategy was adopted, by asking participants to spread the survey to other people they know and that would be willing to fill in the survey (Etikan et al., 2015). A downside of these strategies is that possible issues in the matter of generalizability and representativeness could be encountered (Sarstedt et al., 2018). A minimum number of 150 respondents had to be collected before moving forward with the analysis of the data. A total of 199 people opened the survey and finished it in full or in part. Of those, 3 participants were excluded because they did not agree with the consent form, 2 were underage, and 4 did not select “Italy” as their nationality. After data cleaning, 157 participants were included for further analysis. In the final sample, 69.4% were female ($n = 109$), 28.7% were male ($n = 45$), and 1.9% identified as non-binary/third gender or preferred not to say ($n = 3$). Participants of the sample were between 18 and 81 years old. The mean age was 34.27 years ($SD = 14.49$). The majority of participants, 42.7% ($n = 67$) had a bachelor's degree, with the average education level being moderately high. The second most represented educational level was graduate or professional degree (i.e., MA, MS, MBA, Ph.D., JD, MD, DDS), which accounted for 36.3% ($n = 57$). Finally, 12.1% ($n = 19$) of participants had an educational level of vocational school or lower. Concerning their diets, 73.2% of the participants claimed to be omnivorous ($n = 115$), 17.8% identified as flexitarian ($n = 28$), 6.4% were vegetarian ($n = 10$), and lastly, 2.5% ($n = 4$) claimed to be vegan.

3.4. Measures and operationalization of the questionnaire

Pre-existing scales were incorporated into the survey to operationalize the concepts. Willingness to try, purchase intention, the mediators (motivation, opportunity, and ability), perceived environmental knowledge, and environmental concern were all assessed on a 7-point Likert scale. For each scale, some examples of items are included in the text below, while the full scales can be found in the Appendix. The survey also included control variables. Age, nationality, and diet were added at the beginning of the survey to filter out participants and disclose their eating behaviors, while gender and educational level were

added at the end of the survey, so people feel more comfortable sharing after getting familiar with the survey set-up. The Cronbach's α was measured for each scale in order to determine the reliability of the scale. The higher the Cronbach's α , the more reliable the scale. Scales with a Cronbach's α below 0.6 are considered poor or unacceptable (Gliem & Gliem, 2003).

3.4.1. Perceived environmental knowledge

The scale for perceived environmental knowledge was developed by Mostafa (2007) and included five items. Among others, Das and Ramalingam (2019) used this scale to examine how perceived environmental knowledge affects ecologically conscious consumer behavior. Participants answered on a 7-point Likert scale and indicated to what extent they agree with the statements from 1 (*strongly disagree*) to 7 (*strongly agree*). The items included statements such as "I know how to select products and packages that reduce the amount of waste ending up in landfills" and "I am very knowledgeable about environmental issues". The reliability resulted in a Cronbach's α of .80 and a mean of 4.59 ($SD = 0.97$), meaning the perceived environmental knowledge of participants is moderate. The observed range included 1.67 as the minimum and 7.00 as the maximum.

3.4.2. Environmental concern

Environmental concern was measured by using the scale in the study by Shen and Chen (2020), which was based on the previous studies and scales conducted by Dunlap (2008) and Paul et al. (2016). In their study, Shen and Chen (2020) investigate the impact of customer attitudes on their propensity to purchase veggie burgers from the perspective of environmental concern. This scale consisted of thirteen items in total. The items included statements like "I think I am extremely concerned about the environment" and "I think if the current situation continues, we will soon experience a major ecological disaster". Participants answered the statements based on a 7-point Likert scale from 1 (*strongly disagree*) to 7 (*strongly agree*). The reliability resulted in a Cronbach's α of .81 and a mean of 5.35 ($SD = 0.75$), meaning that the level of environmental concern of participants is somewhat high. The observed range included 1.92 as the minimum and 6.77 as the maximum.

3.4.3. Motivation

As far as it concerns the measurement of motivation was achieved by including a scale used by Hasbullah et al. (2022), which in turn was derived from Pelletier et al. (1998). The measurement of motivation (intrinsic, integrated, identified, introjected, and external)

included twenty items. However, for practical reasons in order not to further extend the time of the survey, only the items related to intrinsic and external motivation were included in this research. Thus, a total of eight items were presented in the survey. Since the items of the scale referred to the practice of sustainable clothing, this concept was replaced with the consumption of plant-based meats. Four items related to intrinsic motivation, and consisted of statements like “I am glad to contribute to the environment through the consumption of plant-based meats” and “I am glad to learn new ways to help in preserving the environment through the consumption of plant-based meats”. The other four items addressed external motivation and included statements such as “Other people would be mad if I do not consume plant-based meats” and “To avoid being criticized, I consume plant-based meats”. All the items were measured on a 7-point Likert scale from 1 (*strongly disagree*) to 7 (*strongly agree*). The reliability resulted in a Cronbach’s α of .81 and a mean of 3.37 ($SD = 1.04$), which translates into a rather low motivation from participants. The observed range was 1.00 as the minimum and 5.50 as the maximum.

3.4.4. Opportunity

To measure opportunity, a scale by Hasbullah et al. (2022), which was previously adapted from Tanner and Kast (2003) and Barbarossa (2016), was considered. The scale originally included 8 items; however, Hasbullah et al. (2022) only included five items in their research, and thus the same items were considered in this survey. Again, since the original items of the scale referred to the practice of sustainable clothing, this concept was replaced with the consumption of plant-based meats. The items included statements like “I would spend my time going to specialized stores to purchase plant-based meats” and “I could afford to pay more to purchase plant-based meats” and were measured on a 7-point Likert scale from 1 (*strongly disagree*) to 7 (*strongly agree*). The reliability resulted in a Cronbach’s α of .605 and a mean of 3.28 ($SD = 1.05$), meaning that participants do not consider having high opportunity to find and buy plant-based meats. The Cronbach’s α for this scale could not be improved by leaving out one of the items. This means that the results pertaining to this variable should be interpreted with caution, as its reliability is limited. The observed range included 1.00 as the minimum and 5.60 as the maximum.

3.4.5. Ability

Ability was assessed by using a scale by Hasbullah et al. (2022), which was previously adapted from La Trobe and Acott (2000). The scale was composed of five items and was

graded on a 7-point Likert scale from 1 (*strongly disagree*) to 7 (*strongly agree*). The items included statements such as “Everyone should balance their lives with the natural environment.” and “It is necessary to change some basic attitudes to solve environmental problems”. The reliability resulted in a Cronbach’s α of .80 and a mean of 5.96 ($SD = 0.98$), meaning that participants scored quite high on ability. The observed range included 1.00 as the minimum and 7.00 as the maximum.

3.4.6. *Willingness to try*

Participants were asked to agree or disagree with the following statement “I would be willing to try plant-based meats” in order to assess their willingness to try. Participants graded the statement on a 7-point Likert scale from 1 (*strongly disagree*) to 7 (*strongly agree*) to indicate their level of agreement. The mean for this item was 5.17 ($SD = 1.94$), meaning that participants were moderately willing to try plant-based meats. The observed range was 1.00 as the minimum and 7.00 as the maximum.

3.4.7. *Purchase intention*

To measure the purchase intention, a scale by Shen and Chen (2020) based on the previous scales in the studies by Chen (2007), Han et al. (2010), and Liang and Lim (2011), was used. Shen and Chen (2020) used this scale in their study in order to specifically examine consumers’ purchase intention of artificial meat. The scale included five items concerning specifically plant-based meat and were measured on a 7-point Likert scale from 1 (*strongly disagree*) to 7 (*strongly agree*). The items included statements such as “Even if I had another choice, I would still buy plant-based meats” and “I consider myself a loyal customer of plant-based meats”. The reliability resulted in a Cronbach’s α of .94 and a mean of 3.59 ($SD = 1.66$), meaning that purchase intention is quite low. The observed range was 1.00 as the minimum and 7.00 as the maximum.

3.4.8. *Control variables*

It is essential to maintain other predictors constant when analyzing the link between the previously listed variables (Freedman et al., 2007). Adding control variables enables us to achieve this. Seven control variables in total were compiled. Demographic factors including gender and educational level were added at the conclusion of the survey. Gender was included as a dummy variable, where males were assigned the value 0 and females the value 1, while the educational level was measured as a continuous variable. The initial section of the survey

contained the other five variables, which included filter questions as well as more specialized elements that could affect how the hypotheses were measured.

One question investigated what kind of diet the participant was following, whether it be omnivores (“I eat food of both plant and animal origin”), flexitarian (“I primarily follow a vegetarian diet, but occasionally eat meat or fish”), vegetarian (“I do not eat meat or fish”), or vegan (“I do not eat any food derived from animals”). This variable was included because people who follow a vegetarian or vegan diet tend to reveal an increased variety of commitments to environmental concerns (Fox & Ward, 2008). This could indicate that vegetarians and vegans could show a higher degree of environmental knowledge and concern, leading to more willingness to taste and purchase plant-based meats. Because certain groups were quite small, we created a dummy variable, where omnivores were assigned a value of 0 ($n = 115$), while flexitarians, vegetarians, and vegans were assigned a value of 1 ($n = 42$). Additionally, participants were asked about their weekly consumption of meat and meat substitutes, which enables us to understand how their eating patterns could affect their perceptions and intentions. The scale for these two variables ranged on a 5-point scale from 1 (*Rarely/Never*) to 5 (*Every day*). The scale for weekly consumption of meat had a mean of 2.36 ($SD = 1.00$), with a range of observed values from 1.00 to 5.00. Concerning the weekly consumption of meat substitutes, the scale presented a mean of 1.83 ($SD = 0.95$) and a range of observed values from 1.00 to 5.00.

4. Results

In this chapter, a comprehensive summary of the outcomes will be given by evaluating all five hypotheses outlined in the Theoretical Framework (see Chapter 2). We will first present how the analysis was conducted in the data analysis (section 4.1.), and then the correlations among variables will be discussed (section 4.2.). Each hypothesis is analyzed utilizing IBM SPSS version 27 software. Multiple linear regression analyses are performed to investigate the causal connections between independent and dependent variables. The findings of each regression with a different dependent variable will be presented in a different section (sections 4.3.; 4.4.; 4.5.; 4.6.; 4.7.), and to conclude, additional PROCESS analysis will be presented to test the significance of the indirect paths that are found (section 4.8.).

4.1. Data analysis

In order to test the sixteen hypotheses previously formulated, a total of five regression models were run in SPSS, each focusing on a different dependent variable. Linear regression is used when the independent variables are either continuous or dummy variables, and the dependent variable is a continuous variable (Shobha & Rangaswamy, 2018). In particular, multiple linear regression was used, since multiple continuous independent variables were entered simultaneously. Firstly, a linear regression with *willingness to try* as a dependent variable and a total of five independent variables, namely *environmental knowledge* (H4), *environmental concern* (H9), *motivation* (H11), *opportunity* (H12), and *ability* (H13), was conducted. Secondly, *purchase intention* was considered as a dependent variable, and the same independent variables mentioned above were used to test H5, H10, H14, H15, and H16 respectively. Thirdly, linear regression with *motivation* as a dependent variable and *environmental knowledge* (H1) and *environmental concern* (H6) as independent variables were run. The final two linear regressions used *opportunity* and *ability* as dependent variables and again used *environmental knowledge* (H2 for opportunity and H3 for ability) and *environmental concern* (H7 for opportunity and H8 for ability) as independent variables. Every linear regression also included control factors as independent variables to see if they had any impact on the connections being studied. For each model, it is necessary to assess the impact of the independent variables by considering their significance, directionality (positive or negative), and strength. When evaluating the strength, it is advisable to interpret the beta value in accordance with established guidelines for correlations (Wahyuni & Purwanto, 2020). Additionally, only significant effects of control variables will be mentioned in the text.

Table 4.1: Correlations for Main Variables and Control Variables

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|--------------------------------|--------|--------|---------|--------|--------|--------|---------|---------|-----|---------|------|----|
| 1. Environmental Knowledge | - | | | | | | | | | | | |
| 2. Environmental Concern | .38*** | - | | | | | | | | | | |
| 3. Motivation | .23** | .37*** | - | | | | | | | | | |
| 4. Opportunity | -.16* | -.05 | .03 | - | | | | | | | | |
| 5. Ability | .32*** | .59*** | .25** | -.05 | - | | | | | | | |
| 6. Willingness to try | .13 | .33*** | .65*** | -.02 | .30*** | - | | | | | | |
| 7. Purchase Intention | .25** | .30*** | .74*** | -.09 | .28*** | .73*** | - | | | | | |
| 8. Diet | .19** | .16* | .46*** | -.23** | .27*** | .34*** | .57*** | - | | | | |
| 9. Educational level | < .01 | -.02 | -.10 | .10 | .12 | -.04 | -.14* | -.02 | - | | | |
| 10. Gender | .08 | .12 | .05 | -.13 | .12 | .12 | .12 | .13 | .01 | - | | |
| 11. Frequency Meat | -.22** | -.23** | -.38*** | .24** | -.25** | -.28** | -.47*** | -.64*** | .11 | -.30*** | - | |
| 12. Frequency Meat Substitutes | .14* | .13* | .31* | -.09 | .01 | .22 | .41*** | .26** | .02 | -.12 | -.10 | - |

* $p < .05$ (1-tailed), ** $p < .01$ (1-tailed), *** $p < .001$ (1-tailed)

4.2. Correlations

In this section, the Pearson's correlation coefficient was determined for each combination of variables, and the values are reported in table 4.1. Only the highest values will be discussed for feasibility reasons. Values greater than 0.60 are considered strong correlations, values between 0.40 and 0.59 are considered moderate, and lastly, values between 0 and 0.39 are considered weak correlations (Wahyuni & Purwanto, 2020). As shown in Table 4.1, there was a strong and positive correlation between willingness to try and motivation ($r = .65, p = .000$) and a strong and positive correlation between purchase intention and motivation ($r = .74, p = .000$). This supports H11 and H14. There is also a strong, positive correlation between purchase intention and willingness to try ($r = .73, p = .000$). Moreover, there was a positive, moderate correlation between ability and environmental concern ($r = .59, p = .000$), which supports H8. In terms of control variables, there was a moderate and positive correlation between diet and purchase intention ($r = .57, p = .000$), and also a strong, negative correlation between the frequency of eating meat substitutes and diet ($r = -.64, p = .000$). Overall, the Pearson's correlation coefficient among variables appears to be rather weak for the main variables, with a range between .02 and .38 (excluding the values mentioned above).

4.3. Regression for Willingness to try as a dependent variable

When checking the effect of environmental knowledge, environmental concern, motivation, opportunity, and ability as predictors on willingness to try in a multiple regression model, a significant resultant model can be observed with $F(10, 138) = 11.79, p < .001, R^2 = .461$. Thus, 46.1% of the variance of willingness to try can be explained by environmental knowledge, environmental concern, motivation, opportunity, and ability. Within the model, *motivation* was found to be a predictor of willingness to try ($\beta = .59, B = 1.08, SE = .14, p < .001$), as well as the effect of *ability* ($\beta = .16, B = .31, SE = .16, p = .054, one-tailed p-value = .027$). As can be derived from Table 4.2, environmental knowledge, environmental concern, and opportunity were not found to be significant predictors. As a result, only motivation and ability turned out to be predictors of willingness to try, and therefore H11 and H13 can be accepted, while H4, H9, and H12 have to be rejected.

Table 4.2: Results of regression analysis for Willingness to try

| Predictors | B | β | <i>p</i> |
|------------------------------|------|---------|----------|
| Environmental Knowledge (H4) | -.59 | -.09 | .194 |
| Environmental Concern (H9) | .06 | .02 | .787 |
| Motivation (H11) | 1.08 | .59 | < .001 |
| Opportunity (H12) | -.03 | -.02 | .811 |
| Ability (H13) | .31 | .16 | .054 |
| Educational level | -.03 | -.02 | .767 |
| Gender | .41 | .10 | .147 |
| Diet | .33 | .08 | .404 |
| Frequency Meat | .09 | .05 | .608 |
| Frequency Meat Substitutes | .06 | .03 | .661 |

4.4. Regression for Purchase Intention as a dependent variable

The effect of environmental knowledge, environmental concern, motivation, opportunity, and ability as predictors of purchase intention in a multiple regression model was investigated, and a significant resultant model can be observed with $F(10, 138) = 28.46, p < .001, R^2 = .673$. Thus, 67.3% of the variance in purchase intention can be explained by environmental knowledge, environmental concern, motivation, opportunity, and ability. Within the model, only *motivation* was found to be a predictor of purchase intention though ($\beta = .52, B = .83, SE = .10, p < .001$). As can be derived from Table 4.3, environmental knowledge, environmental concern, opportunity, and ability were not found to be significant predictors. Concerning the control variables, the variables *diet* ($\beta = .23, B = .87, SE = .27, p = .002$) and *frequency meat substitutes* ($\beta = .20, B = .83, SE = .10, p = .000$) were also found to be significant. As a result, only motivation turned out to be a predictor of purchase intention, and therefore H14 can be accepted, while H5, H10, H15, and H16 have to be rejected.

Table 4.3: *Results of regression analysis for Purchase Intention*

| Predictors | B | β | <i>p</i> |
|------------------------------|------|---------|----------|
| Environmental Knowledge (H5) | .05 | .03 | .613 |
| Environmental Concern (H10) | -.13 | -.06 | .369 |
| Motivation (H14) | .83 | .52 | .000 |
| Opportunity (H15) | .00 | .00 | .969 |
| Ability (H16) | .18 | .10 | .109 |
| Educational level | -.13 | -.09 | .066 |
| Gender | .30 | .08 | .118 |
| Diet | .87 | .23 | .002 |
| Frequency Meat | -.11 | -.07 | .352 |
| Frequency Meat Substitutes | .35 | .20 | .000 |

4.5. Regression for Motivation as a dependent variable

We analyzed the effect of environmental knowledge and environmental concern as predictors of motivation in a multiple regression model, and a significant resultant model can be observed with $F(7, 141) = 10.56, p < .001, R^2 = .344$. Thus, 34.4% of the variance in motivation can be explained by environmental knowledge and environmental concern. Within the model, only *environmental concern* was found to be a predictor of motivation ($\beta = .26, B = .37, SE = .11, p = .001$). As shown in Table 4.4, environmental knowledge was not found to be a significant predictor. As for control variables, the variables *diet* ($\beta = .29, B = .70, SE = .22, p = .002$) and *frequency meat substitutes* ($\beta = .20, B = .22, SE = .08, p = .008$) were also found to be significant. Only environmental concern turned out to be a predictor of motivation, and therefore H6 can be accepted, while H1 has to be rejected.

Table 4.4: *Results of regression analysis for Motivation*

| Predictors | B | β | <i>p</i> |
|------------------------------|------|---------|----------|
| Environmental Knowledge (H1) | .02 | .26 | .848 |
| Environmental Concern (H6) | .37 | .01 | .001 |
| Educational level | -.07 | -.08 | .277 |
| Gender | -.04 | -.02 | .795 |
| Diet | .70 | .29 | .002 |
| Frequency Meat | -.12 | -.11 | .254 |
| Frequency Meat Substitutes | .22 | .20 | .008 |

4.6. Regression for Opportunity as a dependent variable

When examining the effect of environmental knowledge and environmental concern as predictors of opportunity in a multiple regression model, a significant resultant model can be observed with $F(7, 144) = 2.23, p = .035, R^2 = .098$. Thus, 9.8% of the variance of opportunity can be explained by environmental knowledge and environmental concern. Within the model, none of the variables turned out to be significant. In other words, as can be derived from Table 4.5, environmental knowledge and environmental concern are not predictors of opportunity. As a result, none of the variables considered turned out to be predictors of opportunity, and therefore H2 and H7 have to be rejected.

Table 4.5: Results of regression analysis for Opportunity

| Predictors | B | β | <i>p</i> |
|------------------------------|------|---------|----------|
| Environmental Knowledge (H2) | -.13 | -.12 | .183 |
| Environmental Concern (H7) | .10 | .07 | .401 |
| Educational level | .07 | .80 | .322 |
| Gender | -.20 | -.08 | .325 |
| Diet | -.24 | -.10 | .340 |
| Frequency Meat | .14 | .13 | .235 |
| Frequency Meats Substitutes | -.09 | -.08 | .368 |

4.7. Regression for Ability as a dependent variable

When checking the effect of environmental knowledge and environmental concern as predictors on ability in a multiple regression model, a significant resultant model can be observed with $F(7, 144) = 13.82, p < .001, R^2 = .402$. Thus, 40.2% of the variance of ability can be explained by environmental knowledge and environmental concern. Still, within the model, only *environmental concern* was found to be a predictor of ability ($\beta = .53, B = .67, SE = .09, p = .000$). As can be derived from Table 4.6, environmental knowledge was not found to be a significant predictor. Concerning the control variables, the variables *educational level* ($\beta = .15, B = .12, SE = .05, p = .027$), *diet* ($\beta = .18, B = .39, SE = .19, p = .042$), and *frequency meat substitutes* ($\beta = -.14, B = -.14, SE = .07, p = .047$) were also found to be significant. As a result, only environmental concern turned out to be a predictor of ability, and therefore H8 can be accepted, while H3 has to be rejected.

Table 4.6: *Results of regression analysis for Ability*

| Predictors | B | β | <i>p</i> |
|------------------------------|------|---------|----------|
| Environmental Knowledge (H3) | .09 | .10 | .184 |
| Environmental Concern (H8) | .67 | .53 | .000 |
| Educational level | .12 | .15 | .027 |
| Gender | -.03 | -.02 | .829 |
| Diet | .40 | .18 | .042 |
| Frequency Meat | -.03 | -.03 | .726 |
| Frequency Meat Substitutes | -.14 | -.14 | .047 |

4.8. Summary of results and additional PROCESS analyses

In conclusion, this chapter tested the hypotheses that were presented in the Theoretical framework in Chapter 2. Figure 4.7 contains a graphical overview of the findings, with confirmed hypotheses being presented by green arrows, and declined hypotheses by red arrows. Five out of the sixteen hypotheses formulated were found to be significant and were therefore accepted:

Environment concern predicts motivation (H6) and ability (H8), and in turn, motivation predicts both willingness to try (H11) and purchase intention (H14), and ability predicts willingness to try (H13). As can be derived from Figure 4.7, there are 3 potential indirect effects (i.e., one combining H6 and H11, one combining H6 and H14, and one combining H8 and H11). We used Hayes' PROCESS extension in SPSS to obtain the results of the mediation analysis and confirm whether the indirect paths as a whole were significant. The estimated indirect effects and the lower and upper bound values for each mediation are presented in the section below.

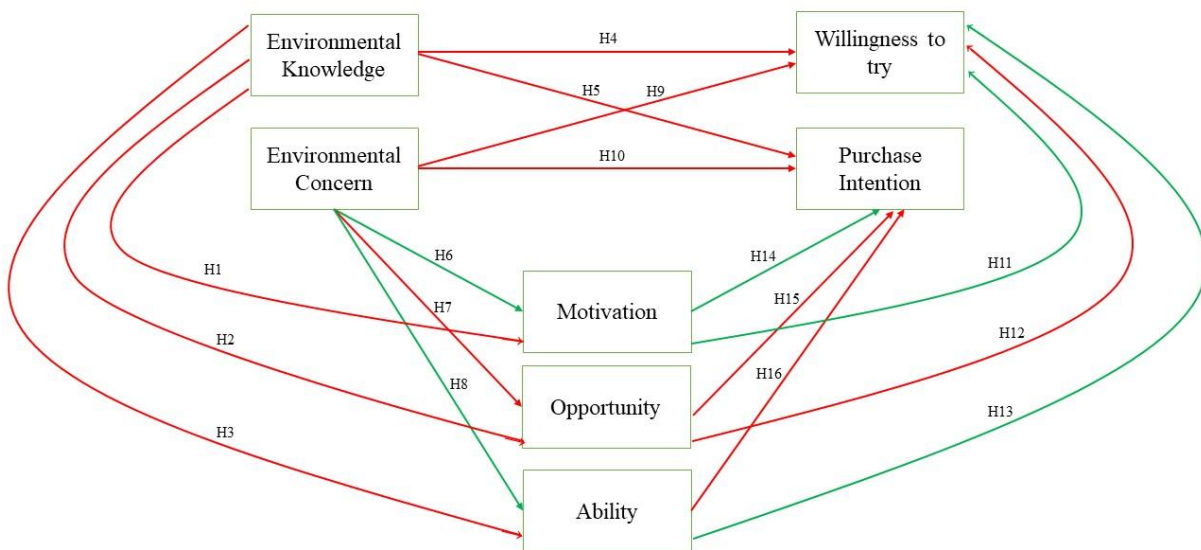


Figure 4.1: Confirmed and rejected hypothesis within the Conceptual Model

4.8.1 Mediation analyses

The analysis assessed the mediating role of motivation in the relationship between environmental concern and willingness to try. The estimated effect is 0.57 and there is a 95% chance of the true effect to fall between 0.29 and 0.87. Therefore, the indirect effect is considered moderate. Since both the lower bound value and the upper bound value are positive and 0 is not included in the interval, the indirect effect is significant from zero. Hence, motivation mediates the relationship between environmental concern and willingness to try.

The second examination investigated how ability acts as a mediator in the connection between environmental concern and willingness to try. The calculated impact amounts to 0.26, but there is a 95% probability that the actual effect lies between -0.04 and 0.57. This suggests a relatively weak effect. As the lower boundary is negative, the upper boundary is positive, and the interval includes zero, it can be concluded that the indirect effect is not statistically significant. Consequently, there is no definitive evidence supporting the role of ability as a mediator between environmental concern and willingness to try.

Lastly, in the final analysis, the role of motivation as a mediator between environmental concern and purchase intention was examined. The estimated impact stands at 0.59, and there is a 95% probability that the true effect lies between 0.31 and 0.88. This indicates a robust indirect effect. Given that both the lower and upper boundary values are positive and zero is not encompassed within the interval, it can be concluded that the indirect effect is statistically

significant. Therefore, it can be affirmed that motivation serves as a mediator in the relationship between environmental concern and purchase intention.

5. Conclusion and Discussion

This last chapter thoroughly examines the findings reported in the earlier. To give a clear overview of the primary conclusions, the research question given at the beginning of this thesis is first addressed (section 5.1.). The findings are then examined and related to the theory and earlier research (section 5.2.). The limitations, advantages, and recommendations for further study follow next (section 5.3.). The final describes several scientific and societal consequences of the current study (section 5.4.).

5.1. Answer to RQ

The aim of this thesis was to research the consumption and perceptions of Italians about plant-based meats. The goal was to assess whether a higher level of environmental knowledge and concern among the Italian population would lead to a higher willingness to try and purchase intention of plant-based meats. Additionally, motivation, opportunity, and ability were included as potential mediators in the model to investigate their indirect effect on the other variables. This could help researchers and marketers to implement targeted and effective intervention strategies that can address the key factors to increase the population's capacity to encourage the desired behavior, as well as obtain a comprehensive understanding of the complex nature of consumers' behaviors in Italy to encourage the consumption of plant-based meats. Therefore, the central research question of this paper was: *"Is the positive effect of environmental knowledge and concern on consumers' willingness to try and purchase patterns of plant-based products mediated by their motivation, opportunity, and ability to purchase such products?"*.

The different multiple regression analyses revealed that environmental knowledge and environmental concern are not direct predictors of willingness to try and purchase intentions of plant-based meats. This means that although Italians have a high degree of perceived knowledge about the environment and are highly concerned about the current environmental situation, these attitudes will not be directly translated into embracing an increased consumption of plant-based meats. However, environmental concern was found to predict motivation and ability, while both motivation and ability were significant predictors of willingness to try and purchase intention. In other words, people concerned about the current environmental situation will have more motivation and ability to perform sustainable behaviors. In turn, these two factors will result in an increased willingness to try and buy plant-based meats.

5.2. Discussion of the findings

This section discusses the findings in relation to the prior literature and the research methodology. The discussion follows the order of the hypothesis. Subsequently, it addresses the findings related to environmental knowledge and environmental concern (section 5.2.1.), the MOA model (section 5.2.2.), and lastly, willingness to try and purchase intention of plant-based meats (section 5.2.3.).

5.2.1 Environmental knowledge and environmental concern

The first variable that was taken into account in this study was environmental knowledge and how this concept could influence pro-environmental consumer behavior. The analysis in this research showed no correlation between a person's environmental knowledge and their willingness to try and purchase intention of plant-based meats, nor their motivation, opportunity, and ability to implement such behaviors. These findings contrast with previous literature, as according to Fielding and Head (2012), people with a firmer grasp of the environment also have higher levels of pro-environmental behavior, such as eating meat less frequently. Still, participants in this study did not show a higher interest in trying and purchasing plant-based meats in relation to their perceived environmental knowledge. Additionally, according to Gkargkavouzi et al. (2019), environmental knowledge indirectly influences the desire to engage in pro-environmental actions. It raised the possibility that it might be incorporated into abstract models that successfully predict the intention to engage in environmental behavior. Motivations were positively influenced by knowledge. However, also this finding has been disproved by this study since knowledge did not play a role in predicting any of the elements of the MOA model. Thus, it does not predict the motivations, opportunities, and abilities of consumers.

This discrepancies with previous research might be due to the fact that Gkargkavouzi et al. (2019) used a different scale to measure environmental knowledge and the target population of the study consisted of Greeks. Similarly, the study by Fielding and Head (2012) was conducted in Australia. As it has been previously highlighted, dietary patterns, preferences, and habits can vary highly among different cultures (Nguyen & Vo, 2023; Hasbullah et al., 2022). Moreover, the target population in the study of Fielding and Head (2012) consisted of young people between 12 and 24 years old, which could translate into a higher level of knowledge about the environment since younger generations are more likely to be interested and concerned about these issues (Nguyen & Vo, 2023).

This research showed that environmental concern, however, did play a crucial role in predicting the motivation and ability of consumers, making it a significant variable to incorporate

into the research. Still, environmental concern was insignificant in predicting the outcome variables of willingness to try and purchase intention of plant-based meats directly. These findings are in line with the research conducted by Newton et al. (2015). In their study, they come to the conclusion that environmental concern helps consumers comprehend the environmental impacts of purchasing a product rather than directly influencing buying intentions. They stressed the importance of incorporating a further variable that linked environmental concern to consumption related to the environment and that environmental concern itself was too general to predict a particular behavior. Motivation and ability were the variables that influenced the outcome variables. Thus, it can be deduced that people with a higher level of environmental concern have an increased motivation and ability to implement sustainable behaviors like buying plant-based meats, which will subsequently translate into a higher purchase intention and willingness to try these products. In fact, as claimed by Cerri et al. (2018), environmental concern is one of the critical determinants in influencing customers' behavior and their ability toward pro-environmental consumption.

5.2.2 The MOA model

In this study, motivation, opportunity, and ability have been considered as mediators between environmental knowledge and concern and willingness to try and purchase intention. The main findings concerning this model are that only motivation and ability were found to be significant in relation to environmental concern and the two outcome variables, corroborating the results of Nguyen and Vo (2023), which provided support for the notion that factors such as attitude, intention, societal norms, and personal norms (motivation) have a more significant influence on buying behavior compared to factors like perceived price and perceived restrictions (opportunity).

Interestingly, opportunity turned out to be not significant in relation to both the predictor and outcome variables. This finding is in contrast with the study of Li et al. (2019), where they identified opportunity as one of the major driving forces for consumers to implement pro-environmental behaviors in energy-saving practices. This discrepancy in findings suggests that the importance of opportunity may vary depending on the specific context and population being studied. In fact, energy-saving practices such as turning off the lights or unplug devices when they are not being charged are less demanding and easier to adopt rather than changing one's dietary patterns and habits. The opportunities that are open to people are significantly shaped by context. The opportunity related to plant-based consumption can in fact be facilitated or hampered to differing degrees by various settings, environments, and circumstances.

Additionally, the relevance of opportunity may vary depending on the demographic being researched. Different social, cultural, or demographic factors may affect how much freedom people have to implement certain behavior. For instance, a population's degree of income or social support might affect the accessibility to resources and sustainable alternatives, which in turn affects how opportunity plays a part in determining behavior.

5.2.3 Willingness to try and purchase intention

In the current study environmental knowledge and concern did not have a direct significant effect on willingness to try and purchase intention. This means that even though people perceive themselves as knowledgeable about environmental topics and are aware of the urgency of the current climate and environmental situation, generally, they will not be more willing to try plant-based meats or to purchase those products. In particular, the non-existing direct effect between environmental concern and purchase intention is in contrast with the research by Arisal and Atalar (2016), where environmental concern and ecological buying intention are closely associated since consumers select particular goods over others due to how those goods affect the environment. However, in our present study, despite them scoring relatively high on environmental concern ($M = 5.35$), participants generally did not show a higher degree of purchase intention for plant-based meats. This discrepancy could be due to the fact that in Arisal and Atalar's 2016 study, the ecological purchase intention was addressed broadly and not to a specific product or sector.

Moreover, regarding willingness to try plant-based meats, this study corroborates what has been highlighted by Rombach et al. (2022) when they claim that the inability to sample, purchase, and pay a higher price for cultured meat was found to be inhibited by food neophobia, food allergies, locavorism, and concerns about food technology. In fact, in the section where participants were able to leave further comments or remarks in the survey, many people expressed their concern about the safety of these products, which were defined as possible sources of harm to human beings and raised skepticism among participants.

Lastly, an additional contradicting finding with previous research concerns the target population that would be more willing to try and purchase plant-based meats. In a study conducted in Italy, Mancini and Antonioli (2019) emphasized that young, highly educated, slightly acquainted with cultured meat, omnivores, and wanting to cut back on meat intake were the characteristics of a possible buyer of cultured meat. However, in our current research, despite age and educational level being considered as part of the control variables, they did not play a significant role in the analysis. Only diet and frequency of consumption of plant-based meats were found to be significant in the purchase intention patterns of participants, meaning that people who are

flexitarians/vegetarians/vegans and already have a relatively high consumption of meats substitutes will be more willing to purchase these products. In fact, in their research, Mancini and Antonioli (2019) targeted young people willing to reduce meat consumption – which obviously affected their conclusions -, while our study did not have such criteria.

5.3. Limitations, strengths, and suggestions for future research

This thesis aimed to add to the existing body of knowledge on consumers' perceptions and habits of plant-based products, including their influencing factors and the resulting sustainable behaviors. Although this goal has been achieved, it is essential to recognize the limitations of the research and areas that can be improved. Firstly, I will discuss the limitations and strengths of this study. Then, I will provide some suggestions for future research that researchers could use as starting points.

The primary limitation of this research is the use of a non-probability convenience sampling method first and snowball sampling later, which may reduce the representativeness of the sample and the generalizability of the results to the target population (Acharya et al., 2013). This is because the survey was distributed primarily through the researcher's network, potentially resulting in a biased sample of responses. To address this limitation, efforts were made to reach a broader audience by posting the survey in Facebook groups where the researcher was not a member and encouraging others in the researcher's network to share the survey with their social circles. However, despite these attempts to mitigate the limitations in the sampling method, the final sample still displayed partial homogeneity. The majority of respondents were female (69.4%), young (i.e., mostly in their 20s or 30s) (73,9%) and had a bachelor's degree (42.7%). Nevertheless, gender and age were carefully controlled, and no significant relationships were found between these control variables and the measured concepts. At the same time, the educational level was only significant for ability ($p = .027$). Thus, it can be concluded that the demographic homogeneity of the sample did not substantially impact the relationships under investigation.

Another limitation of the study was the measurement of the variable *perceived environmental knowledge*. Despite the scale by Mostafa (2007) resulting in a Cronbach's α of .80 in the current study, and thus being reliable, three items out of the five total items of the scale had a strong focus on packages of products and their environmental impact, which is quite a limiting factor within the knowledge that people have for the environment. In fact, not surprisingly, participants scored relatively moderately on this scale ($M = 4.59$), and none of the expected effects of this variable on other factors were found to be significant in the analysis. This reinforces the necessity for the development of a more comprehensive measurement in order to effectively assess

people's perceived environment knowledge, which is not merely limited to packaging but should encompass a broader range of factors, such as energy and water efficiency, activism, recycling, and other practices.

The scale used to measure *opportunity*, developed by Hasbullah et al. (2022), turned out to be barely acceptable in terms of reliability, with a Cronbach's α of .61, which indicates that the quality of the scale could be considered questionable. All the effects related to this variable turned out to be non-significant, and therefore, opportunity was not found to be a mediator or predictor of willingness to try or purchase intention. Also, in this case, it is necessary to develop further and improve the measurement of opportunity in order to better investigate this variable in the matter of sustainable consumer behavior. Therefore, no definite conclusions regarding opportunity can be drawn because it is unknown whether the lack of effects should be attributed to the effects being absent in real life or to the unsatisfactory measurement.

Importantly, this study also exhibits notable strengths concerning both the research topic and the study design. Firstly, it distinguishes itself as one of the pioneering pieces of research that investigates the perceptions and purchase behaviors among the Italian population. As previously emphasized, Italy generally tends to display skepticism and distrust toward plant-based products and diets. Therefore, this thesis serves as a groundbreaking contribution to the existing body of knowledge and fills a significant void in the literature, offering new insights into the attitudes and behaviors of Italians regarding plant-based choices. The sample in this study highlighted an overview of the dietary patterns in Italy, with 73.2% of the participants claiming to be omnivorous ($n = 115$), 17.8% identifying as flexitarian ($n = 28$), 6.4% as vegetarian ($n = 10$), and lastly, only 2.5% ($n = 4$) claiming to be vegan.

Another strength of the study lies in the design of its methodology. Notably, the survey employed in this research was developed in both English and Italian. This approach allowed participants to select the language they felt more comfortable with, attracting a broader and more representative sample. By providing the survey in the participants' native language, those who do not speak English fluently could share their views and opinions more comfortably. In total, 128 people decided to fill in the questionnaire in Italian, while 29 people completed it in English. This consideration enhanced inclusivity and ensured that a broader range of perspectives and experiences were captured, resulting in a more comprehensive understanding of the perceptions and purchase behaviors of the Italian population. The decision to offer the survey in multiple languages demonstrates the researcher's commitment to overcoming potential language barriers and creating an environment that encourages open and honest responses. This thoughtful approach increases the validity and reliability of the study findings by minimizing potential biases that may arise due to

language proficiency issues. It also eliminates potential misunderstandings or inaccuracies that might occur when participants are required to respond in a language they are not fully proficient in.

There are several areas where future research can build upon the findings of this study. Firstly, future research could take into account different variables than the one used in this research and turned out to be insignificant, such as environmental knowledge, and replace them with different outcome variables, such as attitudes towards health and nutrition, in order to investigate further what are the driving factors that could influence people to adopt a different and more sustainable diet which includes the consumption of plant-based products. While this study concentrated on these elements, additional pertinent elements might be investigated to learn more about the motivations behind dietary decisions. For instance, researchers could look into how plant-based diets are predicted by health outcomes, social factors, or cultural standards (Cruwys et al., 2020; Dinu et al., 2017). Future research can give a complete picture of the elements influencing people's decision-making processes and general food patterns by taking a more comprehensive range of outcome variables into account.

Additionally, future research could also use this study as a starting point and then expand it to different countries and different cultures. Diets are in fact strongly influenced by the broader cultural context people live in, and it would be thus riveting to compare the perceptions, drivers, and purchase patterns of plant-based meats in different countries with different backgrounds (Nguyen & Vo, 2023; Hasbullah et al., 2022). The adoption of sustainable diets can be seen from a more global perspective by extending the research to many nations and cultures. It can provide insight into the efficacy of initiatives and plans to promote plant-based foods in various cultural contexts. Future studies can help design personalized strategies to promote the adoption of sustainable and plant-based diets across various groups by examining the cultural quirks and contextual factors that affect dietary choices.

Finally, it would be beneficial for scholars in the future to disentangle the effects of intrinsic and external motivation using the framework of the theory of planned behavior (TPB). Intrinsic motivation refers to engaging in a behavior for the inherent enjoyment, interest, or personal satisfaction it provides. External motivation, on the other hand, involves engaging in a behavior to obtain external rewards or avoid punishment. By incorporating the TPB framework, researchers can examine how an individual's attitude, subjective norm, and perceived behavioral control may influence both intrinsic and external motivation. This allows for a more nuanced understanding of the underlying factors that drive individuals to engage in specific sustainable behaviors. It also helps in identifying which motivational factors are more influential in shaping behavioral intentions.

5.4. Academic and societal implications

This thesis contributed to the body of academic literature concerning sustainable and responsible consumer behavior from different perspectives. Firstly, it has provided valuable insights concerning Italy. Although this country has been considered in previous studies (Mancini & Antonioli, 2022; Agnoli et al., 2017), others have mainly used research databases as a method for the studies, using a combination of different methodologies such as reviews and cross-sectional studies, and they did not collect their own data, but only using existing one, while this thesis provides targeted information on the behaviors and perceptions of Italians by adopting a quantitative approach and conducting an ad-hoc survey for the purpose of this research among Italian participants.

Moreover, previous research has frequently emphasized the positive association between the MOA model and purchase intention in various sustainability-related domains, including energy conservation practices and sustainable clothing (Bigné et al., 2010; Hasbullah et al., 2022; Li et al., 2019). However, the application of this model to analyze sustainable eating practices, plant-based diets, and related products had not yet been explored. Thus, this thesis has provided significant information in understanding what factors can influence people's behavior and intentions to try and purchase plant-based meat by analyzing it through the lenses of the MOA model, and it expanded the field of application of the model into a new sector, namely the plant-based meats one.

The societal significance of this research is found in its ability to support environmentally friendly eating habits and sustainable consumption patterns targeting the Italian people. The study provides insights that can guide initiatives and campaigns to encourage a move towards more sustainable and plant-based diets by examining the factors influencing consumers' desire to try and buy plant-based meats. The results obtained emphasize the significance of taking motivation and ability into account as significant factors in consumer behavior in Italy. Marketers and policymakers can use this knowledge to create campaigns and other initiatives that effectively address these factors. Campaigns should, for instance, emphasize the advantages of plant-based alternatives, such as lower environmental impact and ethical considerations related to animal welfare, while simultaneously highlighting the adverse effects of the meat production industry on the environment, as well as the practicality and accessibility of these products. Ability was in fact described as the capacity to engage in the behavior and includes elements such as knowledge, financial resources, skills, and in particular, accessibility to information. Therefore, marketing should offer information and tools to enable people to select plant-based alternatives after making informed decisions. Any potential obstacles, such as cost or a lack of understanding, must be addressed and solutions provided to get around them.

Realizing that environmental knowledge does not directly influence consumer behavior offers insightful information for marketing strategies. Marketers could create focused educational programs that close the knowledge-to-action gap by dispelling myths and educating consumers about plant-based meats' advantages, flavor, and adaptability. However, these measures have to be taken with caution, because as emerged from the comments of the survey, a general sense of mistrust and misconceptions regarding plant-based meats still exists among the Italian population, meaning that Italy could not be considered a primary market and fertile land to introduce and expand these ranges of products.

6. References

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7. Appendix A: Survey in English

Start of Block: Welcome

Intro

Dear respondent,

Welcome and thank you for your interest in this research. I am inviting you to fill in a questionnaire for my Master's thesis study at Erasmus University Rotterdam. The purpose of this study is to examine perceptions and consumption of plant-based meats in the Italian population.

The questionnaire will take approximately **10-12 minutes** to fill in. Please answer each question carefully and honestly, I am sincerely interested in your personal opinions. There are no right or wrong answers. It is also possible to complete the survey **in English** by toggling the language on top of your screen,

CONFIDENTIALITY OF DATA

All research data remain completely confidential and are collected in anonymous form. We will not be able to identify you. There are no foreseeable risks or discomforts associated with participating in this research.

VOLUNTARY

If you now decide not to participate in this research, this will not affect you. If you decide to cease your cooperation while filling in the questionnaire, this will in no way affect you either. You can cease your cooperation without giving reasons.

FURTHER INFORMATION

If you have questions about this research, in advance or afterward, you can contact the responsible researcher, Valentina, email: plantbasedthesis@gmail.com

Consent If you understand the information above and freely consent to participate in this study, click on the "I agree" button below to start the questionnaire.

I agree (1)

I do not agree (2)

Skip To: End of Survey If you understand the information above and freely consent to participate in this study, click on... = I do not agree

Start of Block: Filter questions

Q1 First of all, a couple of questions about yourself. This is to ensure that you fit in the target group for the purpose of this research.

Q2 How old are you? (type your answer in numbers, for example: 32)

Skip To: End of Survey If Condition: How old are you? (type your... Is Less Than 18. Skip To: End of Survey.



Q3 What is your nationality?

▼ Afghanistan (1) ... Zimbabwe (1357)

Skip To: End of Survey If What is your nationality? != Italy

Start of Block: Block 2

Q4 For this questionnaire, the term **plant-based meats** refers to products that are made to mimic properties found within natural meats and are considered to be meat substitutes. They are made using plant and other non-animal products to look, taste, and feel like meat products.

Some examples of plant-based meats include veggie burgers, veggie sausages, veggie hot dogs, Beyond Meat burgers, Future Farm, and others.

Start of Block: Dietary preferences

Q5 Let's start easy! Please answer the following questions about your diet and your dietary preferences.

Q6 What is your diet?

- Omnivorous (I eat food of both plant and animal origin) (1)
 - Flexitarian (I primarily follow a vegetarian diet, but occasionally eat meat or fish) (2)
 - Vegetarian (I don't eat meat or fish) (3)
 - Vegan (I don't eat any food derived from animals) (4)
-

Q7 On average, how often do you eat meat throughout the week?

- Rarely/Never (1)
 - 1-2 times per week (2)
 - 3-4 times per week (3)
 - 5-6 times per week (4)
 - Every day (5)
-

Q8 On average, how often do you eat meat substitutes throughout the week?

- Rarely/Never (1)
 - 1-2 times per week (2)
 - 3-4 times per week (3)
 - 5-6 times per week (4)
 - Every day (5)
-

Start of Block: Willingness to try

Q9 The next sections contain a couple of statements about your willingness to try and buy plant-based meats. To what extent do you agree with the following statements?

Q10 I would be willing to try plant-based meats.

- Strongly disagree (1)
 - Disagree (2)
 - Somewhat disagree (3)
 - Neither agree nor disagree (4)
 - Somewhat agree (5)
 - Agree (6)
 - Strongly agree (7)
-

Start of Block: Purchase intention

Q11 To what extent do you agree with the following statements when considering buying plant-based meats?

| | Strongly disagree (1) | Disagree (2) | Somewhat disagree (3) | Neither agree nor disagree (4) | Somewhat agree (5) | Agree (6) | Strongly agree (7) |
|--|-----------------------|-----------------------|-----------------------|--------------------------------|-----------------------|-----------------------|-----------------------|
| If plant-based meats are available, I will try to buy plant-based meats. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Even if I had another choice, I would still buy plant-based meats. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I consider myself a loyal customer of plant-based meats. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I will recommend plant-based meats to my relatives and friends. (4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Even if plant-based meat is expensive, I will still buy it. (5) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Start of Block: Motivation

Q12 To what extent do you agree with the following statements about your motivations to consume plant-based meats?

| | Strongly disagree (1) | Disagree (2) | Somewhat disagree (3) | Neither agree nor disagree (4) | Somewhat agree (5) | Agree (6) | Strongly agree (7) |
|--|-----------------------|-----------------------|-----------------------|--------------------------------|-----------------------|-----------------------|-----------------------|
| I am glad to learn new ways to help in preserving the environment through the consumption of plant-based meats. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I am glad to help in improving the quality of the environment through the consumption of plant-based meats. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I love the feeling I get when I do some things for the environment through the consumption of plant-based meats. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I am glad to contribute to the environment through the consumption of plant-based meats. (4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q13 To what extent do you agree with the following statements about your motivations to consume plant-based meats?

| | Strongly disagree (1) | Disagree (2) | Somewhat disagree (3) | Neither agree nor disagree (4) | Somewhat agree (5) | Agree (6) | Strongly agree (7) |
|---|-----------------------|-----------------------|-----------------------|--------------------------------|-----------------------|-----------------------|-----------------------|
| Other people would be mad if I do not try to consume plant-based meats. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I consume plant-based meats to receive recognition from other people. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| My friends encourage me to consume plant-based meats. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| To avoid being criticized, I consume plant-based meats. (4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Start of Block: Opportunity

Q14 To what extent do you agree with the following statements about the opportunities of considering plant-based meats when shopping?

| | Strongly disagree (1) | Disagree (2) | Somewhat disagree (3) | Neither agree nor disagree (4) | Somewhat agree (5) | Agree (6) | Strongly agree (7) |
|--|-----------------------|-----------------------|-----------------------|--------------------------------|-----------------------|-----------------------|-----------------------|
| I could afford to pay more to purchase plant-based meats. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I would spend my time going to specialized stores to purchase plant-based meats. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I can differentiate plant-based meats from ordinary meats while shopping. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I need more time to find plant-based meats in the stores. (4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I am confident about the credibility of plant-based labels and certification. (5) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Start of Block: Ability

Q15 In this section, you will answer some questions about your perceptions of your abilities to perform sustainable behavior.

To what extent do you agree with the following statements about your perceptions of the environment?

| | Strongly disagree (1) | Disagree (2) | Somewhat disagree (3) | Neither agree nor disagree (4) | Somewhat agree (5) | Agree (6) | Strongly agree (7) |
|--|-----------------------|-----------------------|-----------------------|--------------------------------|-----------------------|-----------------------|-----------------------|
| It is necessary to change some basic attitudes to solve environmental problems. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Everyone should balance their lives with the natural environment. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| The exploitation of nature often results in disastrous effects. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Nowadays, many people have taken excessive interventions toward the natural environment. (4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Everyone should feel empathy and be more concerned about the environment. (5) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Start of Block: Perceived environmental knowledge

Q16 To what extent do you agree with the following statements about the products you buy and their impact on the environment?

| | Strongly disagree (1) | Disagree (2) | Somewhat disagree (3) | Neither agree nor disagree (4) | Somewhat agree (5) | Agree (6) | Strongly agree (7) |
|--|-----------------------|-----------------------|-----------------------|--------------------------------|-----------------------|-----------------------|-----------------------|
| I know that I buy products and packages that are environmentally safe. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I know more about recycling than the average person. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I know how to select products and packages that reduce the amount of waste ending up in landfills. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I understand the environmental phrases and symbols on product packages. (4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I am very knowledgeable about environmental issues. (5) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I am confident that I know how to sort my recyclables properly. (6) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Start of Block: Environmental concern

Q17 To what extent do you agree with the following statements about environmental concerns?

| | Strongly disagree (1) | Disagree (2) | Somewhat disagree (3) | Neither agree nor disagree (4) | Somewhat agree (5) | Agree (6) | Strongly agree (7) |
|--|-----------------------|-----------------------|-----------------------|--------------------------------|-----------------------|-----------------------|-----------------------|
| I think the discussion on the ecological environment is extremely important. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I think we should be more concerned about the ecological environment. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I think I am extremely concerned about the environment. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I think protecting the environment requires major changes. (4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q18 To what extent do you agree with the following statements about environmental concerns?

| | Strongly disagree (1) | Disagree (2) | Somewhat disagree (3) | Neither agree nor disagree (4) | Somewhat agree (5) | Agree (6) | Strongly agree (7) |
|---|-----------------------|-----------------------|-----------------------|--------------------------------|-----------------------|-----------------------|-----------------------|
| I think human beings are approaching the upper limit of the earth's carrying capacity. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I think human beings have the right to change the natural environment according to their needs. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I think when humans interfere with nature, disastrous consequences are inevitable. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q16 To what extent do you agree with the following statements about environmental concerns?

| | Strongly disagree (1) | Disagree (2) | Somewhat disagree (3) | Neither agree nor disagree (4) | Somewhat agree (5) | Agree (6) | Strongly agree (7) |
|--|-----------------------|-----------------------|-----------------------|--------------------------------|-----------------------|-----------------------|-----------------------|
| I think humans are seriously abusing the environment. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I think that we will have more natural resources as long as we learn how to develop natural resources. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I think animals and plants have the same rights as humans. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I think nature can be balanced in modern industrial countries. (4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I think the space and resources of the Earth are very limited. (5) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I think if the current situation continues, we will soon experience a major ecological disaster. (6) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Start of Block: Demographics

Q17 You now reached the last part of this survey. Just a couple of questions left!

Q18 What is your gender?

- Male (1)
 - Female (2)
 - Non-binary/third gender (3)
 - Prefer not to say (4)
-

Q19 What is the highest level of education you have followed?

- Some Primary Education (1)
 - Completed Primary (2)
 - Some Secondary Education (3)
 - Completed Secondary (4)
 - Vocational or Similar (5)
 - Some university but no degree (6)
 - University Bachelors' degree (7)
 - Graduate or professional degree (MA, MS, MBA, Ph.D., JD, MD, DDS) (8)
 - Prefer not to say (9)
-

Start of Block: Final remarks

Q20 You have now reached the end of the questionnaire, thank you for completing it! Do you have any comments or remarks about the survey?

8. Appendix B: Survey in Italian

Start of Block: Welcome

Intro

Caro partecipante,

Benvenuto e grazie per il tuo interesse in questa ricerca. Ti invito a compilare questo questionario per la mia tesi di Master presso l'Università Erasmus di Rotterdam. Lo scopo di questo studio è esaminare le percezioni e il consumo di carni di origine vegetale nella popolazione italiana.

La compilazione del questionario richiederà circa **10-12 minuti**. Per favore, rispondi a ogni domanda con attenzione e onestà, in quanto sono sinceramente interessata alle tue opinioni personali. Non ci sono risposte giuste o sbagliate.

È possibile compilare il questionario anche **in inglese**, selezionando la lingua in alto sullo schermo.

RISERVATEZZA DEI DATI

Tutti i dati della ricerca rimangono completamente riservati e sono raccolti in forma anonima. Non saremo in grado di identificarti. Non ci sono rischi o disagi prevedibili associati alla partecipazione a questa ricerca.

VOLONTARIO

Se ora decidi di non partecipare a questa ricerca, ciò non ti riguarderà. Se decidi di interrompere la tua collaborazione durante la compilazione del questionario, ciò non avrà alcun effetto su di te. Puoi interrompere la tua collaborazione senza fornire motivazioni.

ULTERIORI INFORMAZIONI

Se hai domande su questa ricerca, in anticipo o in seguito, puoi contattare la ricercatrice responsabile, Valentina, email: plantbasedthesis@gmail.com

Consent Se comprendi le informazioni di cui sopra e acconsenti liberamente a partecipare a questo studio, fai clic sul pulsante "Accetto" di seguito per avviare il questionario.

- Sono d'accordo (1)
- Non sono d'accordo (2)

Skip To: End of Survey If If you understand the information above and freely consent to participate in this study, click on... = I do not agree

Start of Block: Filter questions

Q1 Prima di tutto, un paio di domande su di te. Questo per assicurarci che rientri nel gruppo target di questa ricerca.

Q2 Quanti anni hai? (digitare la risposta in numeri, ad esempio: 32)

Skip To: End of Survey If Condition: How old are you? (type your... Is Less Than 18. Skip To: End of Survey.



Q3 Qual è la tua nazionalità?

▼ Afghanistan (1) ... Zimbabwe (1357)

Skip To: End of Survey If What is your nationality? != Italy

Q4 Per questo questionario, il termine **carni di origine vegetale** si riferisce a prodotti realizzati per imitare le proprietà presenti nelle carni naturali e sono considerati sostituti della carne. Sono realizzati utilizzando piante e altri prodotti non animali per sembrare, avere il sapore e consistenza paragonabile ai prodotti a base di carne.

Alcuni esempi di carni a base vegetale includono hamburger vegetariani, salsicce vegetariane, hot dog vegetariani, hamburger Beyond Meat, Future Farm e altri.

Start of Block: Dietary preferences

Q5 Iniziamo con semplicità! Per favore rispondi alle seguenti domande sulla tua dieta e sulle tue preferenze alimentari.

Q6 Qual è la tua dieta?

- Onnivoro (mangio cibo sia di origine vegetale che animale) (1)
 - Flexitariano (seguo principalmente una dieta vegetariana, ma occasionalmente mangio carne o pesce) (2)
 - Vegetariano (non mangio né carne né pesce) (3)
 - Vegano (non mangio nessun cibo derivato da animali) (4)
-

Q7 In media, quante volte mangi carne durante la settimana?

- Raramente/Mai (1)
 - 1-2 volte a settimana (2)
 - 3-4 volte a settimana (3)
 - 5-6 volte a settimana (4)
 - Ogni giorno (5)
-

Q8 In media, quante volte mangi sostituti della carne durante la settimana?

- Raramente/Mai (1)
 - 1-2 volte a settimana (2)
 - 3-4 volte a settimana (3)
 - 5-6 volte a settimana (4)
 - Ogni giorno (5)
-

Start of Block: Willingness to try

Q9 Le sezioni successive contengono alcune affermazioni sulla tua disponibilità a provare e ad acquistare carni a base vegetale. In che misura sei d'accordo con le seguenti affermazioni?

Q10 Sarei disposto a provare carni a base vegetale.

- Fortemente in disaccordo (1)
 - Disaccordo (2)
 - Un po' in disaccordo (3)
 - Nè d'accordo né in disaccordo (4)
 - Abbastanza d'accordo (5)
 - D'accordo (6)
 - Pienamente d'accordo (7)
-

Start of Block: Purchase intention

Q11 In che misura sei d'accordo con le seguenti affermazioni quando consideri l'acquisto di carni a base vegetale?

| | Fortemente in disaccordo (1) | Disaccordo (2) | Un po' in disaccordo (3) | Nè d'accordo né in disaccordo (4) | Abbastanza d'accordo (5) | D'accordo (6) | Pienamente d'accordo (7) |
|--|------------------------------------|-----------------------|--------------------------------|--|-----------------------------|-----------------------|-----------------------------|
| Se sono disponibili carni a base vegetale, cercherò di acquistare carni a base vegetale. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Anche se avessi un'altra scelta, comprerei comunque carni a base vegetale. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Mi considero un fedele cliente di carni vegetali. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Consiglierò le carni vegetali ai miei parenti e amici. (4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Anche se la carne vegetale è più costosa, la comprerò comunque. (5) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Start of Block: Motivation

Q12 In che misura sei d'accordo con le seguenti affermazioni sulle tue motivazioni a consumare carni di origine vegetale?

| | Fortemente in disaccordo (1) | Disaccordo (2) | Un po' in disaccordo (3) | Nè d'accordo né in disaccordo (4) | Abbastanza d'accordo (5) | D'accordo (6) | Pienamente d'accordo (7) |
|--|------------------------------------|-----------------------|--------------------------------|--|-----------------------------|-----------------------|--------------------------------|
| Sono felice di imparare nuovi modi per aiutare a preservare l'ambiente attraverso il consumo di carni vegetali. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Sono felice di contribuire a migliorare la qualità dell'ambiente attraverso il consumo di carni di origine vegetale. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Adoro la sensazione che provo quando faccio cose per l'ambiente attraverso il consumo di carni vegetali. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Sono felice di contribuire all'ambiente attraverso il consumo di carni vegetali. (4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q13 In che misura sei d'accordo con le seguenti affermazioni sulle tue motivazioni a consumare carni di origine vegetale?

| | Fortemente in disaccordo (1) | Disaccordo (2) | Un po' in disaccordo (3) | Nè d'accordo né in disaccordo (4) | Abbastanza d'accordo (5) | D'accordo (6) | Pienamente d'accordo (7) |
|---|---------------------------------------|-----------------------|--------------------------------|--|-----------------------------|-----------------------|-----------------------------|
| Altre persone si arrabbierebbero se non provassi a consumare carni a base vegetale. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Consumo carni di origine vegetale per ricevere riconoscimenti da altre persone. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I miei amici mi incoraggiano a consumare carni a base vegetale. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Per evitare di essere criticato, consumo carni a base vegetale. (4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q14 In che misura sei d'accordo con le seguenti affermazioni sulla tua percezione delle carni di origine vegetale quando fai la spesa?

| | Fortemente in disaccordo (1) | Non d'accordo (2) | Un po' in disaccordo (3) | Nè d'accordo né in disaccordo (4) | Abbastanza d'accordo (5) | D'accordo (6) | Pienamente d'accordo (7) |
|--|------------------------------------|-----------------------|--------------------------------|--|-----------------------------|-----------------------|-----------------------------|
| Potrei permettermi di pagare di più per acquistare carni a base vegetale. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Vorrei spendere il mio tempo frequentando negozi specializzati per acquistare carni di origine vegetale. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Sarei in grado di differenziare le carni a base vegetale dalle carni ordinarie mentre faccio la spesa. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Ho bisogno di più tempo per trovare carni vegetali nei negozi. (4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Sono sicuro della credibilità delle etichette e delle certificazioni a base vegetale. (5) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Start of Block: Ability

Q15 In questa sezione, risponderai ad alcune domande sulla tua percezione delle tue capacità di praticare un comportamento sostenibile.

In che misura sei d'accordo con le seguenti affermazioni sulla tua percezione dell'ambiente?

| | Fortemente in disaccordo (1) | Disaccordo (2) | Un po' in disaccordo (3) | Nè d'accordo né in disaccordo (4) | Abbastanza d'accordo (5) | D'accordo (6) | Pienamente d'accordo (7) |
|---|------------------------------------|-----------------------|--------------------------------|--|-----------------------------|-----------------------|-----------------------------|
| È necessario cambiare alcuni atteggiamenti di base per risolvere i problemi ambientali. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Tutti dovrebbero bilanciare la propria vita con l'ambiente naturale. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Lo sfruttamento della natura ha spesso effetti disastrosi. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Al giorno d'oggi, molte persone hanno intrapreso interventi eccessivi nei confronti dell'ambiente naturale. (4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Tutti dovrebbero provare empatia ed essere più preoccupati per l'ambiente. (5) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Start of Block: Perceived environmental knowledge

Q16 In che misura sei d'accordo con le seguenti affermazioni sui prodotti che acquisti e sul loro impatto sull'ambiente?

| | Fortemente in disaccordo (1) | Disaccordo (2) | Un po' in disaccordo (3) | Nè d'accordo né in disaccordo (4) | Abbastanza d'accordo (5) | D'accordo (6) | Pienamente d'accordo (7) |
|--|------------------------------------|-----------------------|--------------------------------|--|-----------------------------|-----------------------|-----------------------------|
| So di acquistare prodotti e confezioni sicuri per l'ambiente. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Ne so di più sul riciclaggio rispetto alla persona media. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| So selezionare prodotti e confezioni che riducono la quantità di rifiuti che finiscono in discarica. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Comprendo le frasi e i simboli ambientali sulle confezioni dei prodotti. (4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Sono molto informato sulle questioni ambientali. (5) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Sono fiducioso di sapere come differenziare correttamente i materiali riciclabili. (6) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Start of Block: Environmental concern

Q17 In che misura sei d'accordo con le seguenti affermazioni sulle preoccupazioni ambientali?

| | Fortemente in disaccordo (1) | Disaccordo (2) | Un po' in disaccordo (3) | Nè d'accordo né in disaccordo (4) | Abbastanza d'accordo (5) | D'accordo (6) | Pienamente d'accordo (7) |
|---|------------------------------------|-----------------------|--------------------------------|--|-----------------------------|-----------------------|-----------------------------|
| Penso che la discussione sull'ambiente ecologico sia estremamente importante. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Penso che dovremmo essere più preoccupati per l'ambiente ecologico. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Penso di essere estremamente preoccupato per l'ambiente. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Penso che proteggere l'ambiente richieda grandi cambiamenti. (4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q18 In che misura sei d'accordo con le seguenti affermazioni sulle preoccupazioni ambientali?

| | Fortemente in disaccordo (1) | Disaccordo (2) | Un po' in disaccordo (3) | Nè d'accordo né in disaccordo (4) | Abbastanza d'accordo (5) | D'accordo (6) | Pienamente d'accordo (7) |
|---|------------------------------------|-----------------------|--------------------------------|--|-----------------------------|-----------------------|-----------------------------|
| Penso che gli esseri umani si stiano avvicinando al limite massimo della capacità di carico della terra. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Penso che gli esseri umani abbiano il diritto di modificare l'ambiente naturale in base alle proprie esigenze. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Penso che quando gli esseri umani interferiscono con la natura, le conseguenze disastrose siano inevitabili. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q16 In che misura sei d'accordo con le seguenti affermazioni sulle preoccupazioni ambientali?

| | Fortemente in disaccordo (1) | Disaccordo (2) | Un po' in disaccordo (3) | Nè d'accordo né in disaccordo (4) | Abbastanza d'accordo (5) | D'accordo (6) | Pienamente d'accordo (7) |
|---|---------------------------------------|-----------------------|--------------------------------|---|-----------------------------|-----------------------|-----------------------------|
| Penso che gli umani stiano seriamente abusando dell'ambiente. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Penso che avremo più risorse naturali solo se impareremo a sviluppare queste risorse naturali. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Penso che gli animali e le piante abbiano gli stessi diritti degli esseri umani. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Penso che la natura possa essere bilanciata nei paesi industriali moderni. (4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Penso che lo spazio e le risorse della terra siano molto limitati. (5) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Penso che se la situazione attuale continua, sperimeremo presto un grave disastro ecologico. (6) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Start of Block: Demographics

Q17 Sei ora giunto all'ultima parte di questo sondaggio. Restano solo un paio di domande!

Q18 Qual è il tuo genere?

- Maschio (1)
 - Femmina (2)
 - Non binario/terzo genere (3)
 - Preferisco non dirlo (4)
-

Q19 Qual è il più elevato grado di istruzione che hai completato?

- Qualche anno di istruzione primaria (1)
 - Ho completato l'istruzione primaria (2)
 - Qualche anno di istruzione secondaria (3)
 - Ho completato l'istruzione secondaria (4)
 - Professionale o simile (5)
 - Qualche anno di università ma senza laurea (6)
 - Laurea universitaria di primo livello (7)
 - Diploma di specializzazione o professionale (MA, MS, MBA, PhD, JD, MD, DDS) (8)
 - Preferisco non dirlo (9)
-

Start of Block: Final remarks

Q20 Sei arrivato alla fine del questionario, grazie per averlo completato! Hai commenti o osservazioni aggiuntive sul sondaggio?
