Marmara University Journal of Economic and Administrative Sciences • Special Issue: 2024, ISSN: 2587-2672, pp. e74-92
DOI: 10.14780/muiibd.1462023

ARAŞTIRMA MAKALESİ / RESEARCH ARTICLE

SUSTAINABLE FOOD CONSUMPTION WITHIN THE SCOPE OF THE GREEN ECONOMY: A STUDY ON CONSUMER PERSPECTIVES

YEŞİL EKONOMİ KAPSAMINDA SÜRDÜRÜLEBİLİR GIDA TÜKETİMİ: TÜKETİCİ PERSPEKTİFLERİNE YÖNELİK BİR ÇALIŞMA

Şirin Gizem KÖSE*

Abstract

Sustainable production and consumption are one of the significant issues in the food industry, as in every field. The food industry, which is so important for the survival of humanity, is also under the spotlight in terms of its effects on the environment. In this regard, this study aims to address sustainable food consumption from the perspectives of the consumer, one of the most important actors in the food consumption system. For this purpose, data was obtained using the in-depth interview technique. Research results show that barriers to sustainable food consumption are perceived expensiveness, lack of information, perceived greenwashing, low availability, perceived effort, and living conditions, whereas drivers for sustainable food consumption are health and environmental consciousness, subjective norms, social media, and food involvement.

Keywords: Sustainable Food Consumption, Sustainable Consumption, Consumer Behavior
JEL Classification: M30, M31

Öz

Sürdürülebilir üretim ve tüketim, her alanda olduğu gibi gıda sektöründe de önemli konulardan biridir. İnsanlığın yaşama devam etmesi için elzem olan gıda sektörü, çevreye etkileri bakımından da mercek altındadır. Bu bağlamda bu çalışmanın amacı sürdürülebilir gıda tüketimini gıda tüketim sisteminin en önemli aktörlerinden biri olan tüketici perspektiflerinden ele almaktır. Bu amaçla derinlemesine görüşme tekniği kullanılarak veriler elde edilmiştir. Araştırma sonuçları, sürdürülebilir gıda tüketiminin önündeki engellerin algılanan pahalılık, bilgi eksikliği, algılanan yeşil yıkama, düşük bulunabilirlik, algılanan çaba ve yaşam koşulları olduğunu, sürdürülebilir gıda tüketiminin itici güçlerinin ise sağlık ve çevre bilinci, subjektif norm, sosyal medya ve gıda ilgilenimi olduğunu göstermektedir.

Anahtar Kelimeler: Sürdürülebilir Gıda Tüketimi, Sürdürülebilir Tüketim, Tüketici Davranışı
JEL Sınıflandırması: M30, M31

* Asst. Prof., MEF University, Department of Business Administration, İstanbul. E-Mail: koseg@mef.edu.tr, ORCID ID: 0000-0003-4075-7166

How to cite this article: Köse, Ş. G. (2024). Sustainable Food Consumption Within The Scope Of The Green Economy: a Study On Consumer Perspectives. Marmara Üniversitesi İktisadi ve İdari Bilimler Dergisi, Sustainability and Green Economics Özel Sayısı, e74-92. DOI: 10.14780/muiibd.1462023

Makale Gönderim Tarihi: 30.03.2024
Yayına Kabul Tarihi: 02.05.2024
Benzerlik Oranı: %10

1. Introduction

Food consumption is of great importance to humanity, but also represents an important sector that contributes significantly to environmental impact (Azzurra et al., 2019). While food is essential for humanity's survival, household food consumption can have negative effects on the environment (Chu et al., 2023; Phan, 2024). The impact of traditional agricultural production on ecosystems and the position of consumers in preserving environmental sustainability highlight the importance of investigating the consumer side of sustainable food consumption (Han & Hansen, 2012). Sustainable food refers to food that is safe, healthy, and nutritious for all consumers, provides a livable livelihood for its workers, does not harm the environment in its production and processing, reduces energy consumption, respects animal health and welfare standards, encourages local products, especially those that minimize food miles, and supports rural economies and rural cultural diversity (UK Sustainable Development Commission, 2009). Based on this definition, sustainable food consumption is a general term that covers the consumption of such foods.

Since food consumption is a basic activity for humans and is influenced by socio-cultural factors, changing food preferences is not easy and food consumption is more than a functional choice (Vermeir et al., 2020; Szalonka et al., 2021). Consumers' food preferences do not only focus on benefits sought but are also affected by psychological factors (Güneş & Karakaş, 2022). Therefore, researching sustainable food consumption from consumers' perspectives is important in terms of understanding their food preferences and determining appropriate marketing strategies.

In sustainable consumption, positive attitudes do not always result in purchase behavior, which is expressed as an attitude-behavior gap in the sustainability literature (Joshi & Rahman, 2015; Yamoah & Acquaye). This phenomenon is also evident in the context of food consumption (Vermeir & Verbeke, 2006; Vermeir et al., 2020). While consumers may have favorable attitudes toward the consumption of sustainable food products, the translation of these attitudes into actual behavior can be hindered by several factors. To investigate the reason for this gap, the qualitative research method, which is useful for revealing the thoughts in the minds of consumers, is useful. With in-depth interviews, individuals' inner worlds and thoughts, as well as previously undiscovered behaviors, can be revealed (Uslu & Demir, 2023).

Understanding food consumption is crucial for sustainability in the food field, as consumption affects both the supply chain and production systems. Exploring the demand side will help create policies for sustainable initiatives. In this regard, the objective of this study is to investigate sustainable food consumption within the scope of the green economy and to understand the perception of consumers, one of the most important actors of the system, on the subject. Drivers and barriers to sustainable food consumption are also examined. For this purpose, firstly, the green economy and sustainable food consumption were explained, and consumer attitudes were revealed through in-depth interviews.

2. Literature Review

2.1. Green Economy

The importance of green economy and green growth concepts for sustainable development is increasing day by day. One of the main goals of this economic model is to minimize damage to nature while ensuring sustainable growth.

The green economy is one of the main themes of the United Nations' Sustainable Development Conference in 2012 and has consistently remained one of the primary focal points in sustainable development (Bina, 2013; Caprotti & Bailey, 2014). The green economy is characterized by increasing human well-being, promoting social equity, and at the same time reducing environmental risks (UNEP, 2024). While ecological problems are important for environmental sustainability; economic, social, and environmental development should be considered together. In this context, a shift to a green economy is recommended as a possible alternative model (Yerlikaya, 2022). Goals in the green economy include increasing income and employment, decreasing environmental pollution and carbon emissions, improving the efficiency of resources, and protecting and enriching biodiversity (Özçağ & Hotunluoğlu, 2015).

Modern systems where economic activities are conducted in a way that creates negative effects on the environment have increased the importance of the notion of the green economy. This has led to the growth of many policies and initiatives aimed at developing the green economy. The main drivers of the green economy are the development of international commitments and initiatives aimed at minimizing and controlling waste, using resources wisely, reducing pollution, and countering the effects of climate change (Dogaru, 2021).

The broad notion of the "green economy" encompasses risk mitigation, prosperity, growth, and efficient use of natural resources. A bibliometric study by Louseau et al (2016) found that most of the keywords related to the green economy are associated with the environmental and economic part of the green economy; this shows that less importance is given to the social aspect. These findings provide evidence of the strong relationship between the green economy and sustainability. Through its economic, social, and environmental elements, the green economy fosters sustainable development, which aims to improve human well-being, advance social justice, and lessen environmental dangers (Chaaben et al., 2022).

2.2. Sustainable Food Consumption

Sustainable consumption refers to consuming products that meet fundamental needs and enhance the quality of life, while at the same time reducing the use of natural resources, minimizing the use of harmful materials, and reducing waste (Oslo Roundtable on Sustainable Production and Consumption, 1994). Sustainable consumption is explained as follows: customers in a certain area neither use more resources than the area can sustainably create nor do they generate more trash or emissions than the area can handle. As so, the ecological footprint of consumption does not exceed

the corresponding biocapacity. As a result, environmentally conscious consumerism respects limits (Fischer et al., 2023). In light of these approaches, sustainable food consumption refers to making choices that consider the environmental, social, and economic consequences of food production and consumption (Vermeir & Verbeke, 2006).

Sustainability covers economic (profit), ecological (planet), and social (people) factors. Fair prices for both agricultural workers and customers are related to the economic dimension while protecting the natural environment and ensuring the well-being of people. The social aspect, on the other hand, refers to the alignment of production processes with societal priorities and citizen needs (Vermeir & Verbeke, 2008). Mensah et al. (2024) revealed that the definitions of sustainable food in the literature include dietary suggestions, environmental issues, and economic elements in their study focusing on sustainable food definitions.

In a sustainable food system, all people should have access to sufficient food within the constraints of scarce natural resources (Aschemann-Witzel et al., 2021). Food security and nutrition are made possible for everyone by taking into account economic, social, and environmental considerations in sustainable food systems (Kadıoğlu & Kaya, 2022). The unsustainable situation in current food systems is mainly due to the industrialization and globalization of food, the change in consumption patterns towards consuming more animal protein, and the appearance of a modern food system with more processed foods. All these factors are linked to the policies, values , and habits of consumers and the actions of companies (Reisch et al., 2013). Using less water in food production is one of the most important agenda items (Kadıoğlu & Kaya, 2022). Water management should be considered together with soil and forestry management in sustainable agriculture and food systems. Sustainable business models such as integrated resource management, smart agriculture, food villages, food centers, and clustering are important elements used in ensuring sustainability in food (Güneş & Karakaş, 2022). In this context, the food sector actively undertakes measures to ensure sustainability similar to all other sectors.

Growing organic food is seen as one of the more sustainable methods of food production (Feil et al., 2020). Food and agriculture industries are interrelated; therefore, for the food obtained to be evaluated within the scope of the green economy, agricultural systems must be compatible with green practices. In this context, organic farming systems designed according to green economy principles can be considered for sustainable food production (Güneş et al., 2014). Azzura et al.'s (2019) study also revealed that when organic food consumption intensity is high, consumers' sustainability concerns are also higher and they tend to have a more environmentally friendly lifestyle. Along with organic food, foods with certificates of origin, fair trade products, and local products are also included in the sustainable food category (Vassallo et al., 2016).

People perform many food-related tasks in daily life, such as purchasing, planning, preparing, eating, storing, or throwing away (Jaiswal & Aagja, 2023). Increasing the sustainability of these processes can enable consumers to make a significant contribution to the food chain.

Sustainable food behaviors can be categorized into two dimensions; choosing food products according to the method they are produced (organic, unconfined, fair-trade foods) and following sustainable eating styles that include reducing the food consumed (Verain et al., 2015). Reducing meat and dairy consumption, choosing organic fruits and vegetables, and avoiding eating food products that are transported via air can be effective ways to lessen the negative effects of food on the environment (Reisch et al., 2013). Research shows that sustainable food consumption includes reuse, intention to minimize waste, shopping habits, and planning habits dimensions. It also includes health-oriented sustainable food consumption and environmentally friendly sustainable food consumption (Bulut et al., 2019).

Phan (2024) classified consumers' sustainable food behaviors by focusing on three phases: the acquisition phase (purchasing ingredients), the usage phase (cooking, eating, sharing leftover food), and the disposal phase (food waste). According to another systematic analysis, most studies in the field of sustainable food have focused on dietary behavior and food waste (Aguirre Sánchez et al., 2021).

There are several studies in the literature on factors related to intention to consume sustainable food and sustainable food consumption. Korkmaz and Sertoğlu (2013) revealed that attitude, social norms, and perceived consumer effectiveness are related to behavioral intention. Consumers' health awareness and healthy lifestyles are related to their attitudes toward sustainable and healthy food consumption (Gürler & Nart, 2019). Vermeir and Verbeke (2008) researched sustainable dairy products and proved that personal attitudes, perceived social influences, consumer effectiveness availability, and intention to consume such products are interrelated. Social norm, perceived value, perceived consumer effectiveness, and attitude are revealed as predictors of intention to consume sustainable food while perceived availability, perceived consumer effectiveness, and intention are related to actual behavior (Alam et al., 2020). According to another study, in addition to behavioral attitude, subjective norms, and perceived behavioral control variables, perceived quality also affects the intention to purchase sustainable food (Chu et al., 2023).

Some studies focused on actual behavior. Research presented personal and subjective norm, and attitude as the most powerful antecedents of sustainable food purchasing (Han & Hansen, 2012). Sustainable food purchasing is explained by personal fear of missing out (FOMO) in another study (Singh & Banerjee, 2024). A study approached the concept from a moral perspective and revealed that non-moral factors significantly outweigh moral ones when it comes to the motivations behind sustainable food consumption (Panatsa & Malandrakis, 2024). Problem awareness is also related to sustainable food consumption. Furthermore, value-based, emotional, and rational factors are all predictors of sustainable food consumption (Betzler et al., 2021). The results of a study conducted in England demonstrate that sustainable food purchasing behaviors are negatively affected by price and positively affected by sustainable product availability and past purchase behavior of sustainable food products (Yamoah & Acquaye, 2019)

3. Methodology

In-depth interview, a qualitative research method, was used as the data collection method in the research. The validity of the data obtained by asking consistent questions is strengthened, and quality and strong data can be included in the research with in depth-interview (Uslu & Demir, 2023). Interviewing is defined as a process in which the interviewer and the participant take part together, focusing on questions prepared for the area being researched (deMarrais, 2004). It is a mutual and interactive communication process based on asking and answering questions (Stewart & Cash, 2003). The main objective of interviews is to understand the unobserved, such as experiences, attitudes, thoughts, intentions, interpretations, and mental perceptions and reactions (Yıldırım & Şimşek, 2011).

In-depth interviews were held with a total of 20 people, 10 women, and 10 men, throughout March 2024 to examine consumer opinions on sustainable food. Criterion sampling which refers to working with samples that met the determined criteria was used in the research (Yıldırım & Şimşek, 2011). Interviews were held with individuals who follow news about food consumption and sustainable food, about companies in the food sector, shop for food, and participate in decision-making in household food consumption.

Table 1. Characteristics of the Participants

Code	Gender	Occupation	Age
P1	Female	Research Assistant	28
P2	Female	Student	21
P3	Male	Director	40
P4	Female	Lawyer	25
P5	Male	General Manager	50
P6	Female	Private Secretary	36
P7	Male	Student	22
P8	Female	Teacher	32
P9	Male	Sales assistant	30
P10	Female	Chef	28
P11	Female	Waiter	29
P12	Male	Restaurant manager	42
P13	Male	Photographer	33
P14	Male	Chef	35
P15	Female	Dietitian	26
P16	Male	Food engineer	28
P17	Female	Housewife	38
P18	Male	Assistant Professor	36
P19	Female	Brand manager	45
P20	Male	Doctor	38

The research questions are as follows:

RQ1: How do consumers perceive sustainable food?

RQ2: What are consumers' perceived sustainable food behaviors?

RQ3: What are the barriers that consumers perceive in purchasing sustainable food?

RQ4: What are the factors that drive consumers to buy sustainable food?

To find answers to these research questions, interview questions were prepared by the researcher with the support of literature. The questions start with general questions about the perception of sustainable food and sustainable food behaviors and are then detailed to examine the obstacles and drivers of sustainable food consumption. The interviews were transferred to the Maxqda qualitative analysis program, coded, and analyzed. As a result of the analysis of the interviews, themes of sustainable food perception, sustainable food behaviors, drivers, and barriers to sustainable food consumption were determined. barriers were sub-categorized into perceived expensiveness, lack of information, perceived greenwashing, low availability, perceived effort, and living conditions whereas drivers were sub-categorized into health consciousness, subjective norm, environmental consciousness, and food involvement. These are covered in the sections that follow.

4. Findings

4.1. Sustainable Food Perception

Firstly, how the participants perceived sustainable food was examined to understand how they viewed sustainable food. Participants associated sustainable food with environmental sustainability approached sustainable food from a holistic perspective, and stated that they generally viewed sustainable foods as "harmless foods". Participants also associate sustainable food with organic food and agriculture.

"It is a concept that includes foods that take into account not only today but also the future. It does not harm nature and living things, does not disrupt the functioning of our ecosystem." (P3)

"In my opinion, sustainable or green food is food that does not harm the environment as much as possible, does not pollute natural resources, and does not harm the health of living beings, from the first stage until it reaches our table, and even afterward, when it is in the form of waste." (P13)

"I know sustainable food as organic food and this is how we integrate sustainable food into our lives. It's definitely a concept that needs to be considered." (P9)

"Foods that may cause less harm to the earth. I think it's more about agriculture." (P8)

"Foods that do not harm the nature in their production, where employees are employed ethically, and whose transportation is done ethically and without harming the environment." (P16)

4.2. Sustainable Food Behavior

To gain information about the sustainable food behaviors of the participants, it researched which behaviors they considered sustainable food and which sustainable food behaviors they performed. Participants consider consuming local, fresh products as sustainable food behavior. In addition, cooking their food, growing vegetables and fruits, shopping from nearby places, paying attention to food packaging, and reducing meat consumption are also stated as sustainable food behaviors.

"I try not to bring imported foods into the kitchen. I prepare our meals myself with healthy ingredients that I buy in healthy packages." (P6)

"I have a greengrocer whom I have known for a long time. I buy vegetables and fruits from there, and when I buy them from there, I prefer fresh, fresh and in-season fruits." (P14)

"We had our own walnut grove in our village. I have my own garden where I live and I grow vegetables and fruits both in the greenhouse and in the open field. I can my own canned tomatoes from the tomatoes I plant. We make tomato paste and roasted eggplant in advance. Everything in my closet is from my own garden. I also have chickens and roosters." (P5)

"I think I am a conscious consumer of sustainable food. I go to nearby farms to buy natural cheese. When I retire in the future, I want to grow all my own food." (P19)

"Cattle, in particular, deplete the ozone layer because they cause the release of nitrogen gas. The carbon footprint becomes larger. I mostly don't eat red meat because I don't think it's a sustainable choice for the environment." (P18)

4.3. Barriers to Consume Sustainable Food

4.3.1. Perceived Expensiveness

Price is a determining factor in consumers' ability to transform their interest in sustainable food consumption into purchasing behavior (Vermeir & Verbeke, 2008). Premium price negatively affects sustainable food purchasing behavior (Yamoah & Acquaye, 2019). Even if the participants want to consume more sustainable food, the fact that they think that sustainable food products are more expensive in the market is seen as an obstacle to this intention.

"I do not find the prices of sustainable foods sustainable. I think they appeal to a very limited income group." (P11)

"The fresh, healthy, and organic fruits that my greengrocer reserves for me taste good, but they are costly" (P14)

"I make sustainable choices as much as I can and within my financial means. Only expensive markets sell these products; especially organic agricultural products. They are really expensive." (P7)

"Unfortunately, such products are expensive." (P18)

"If I have to choose between two products, I would prefer the sustainable one, but the price should also be reasonable. However, these products are generally expensive" (P4).

4.3.2. Lack of Information

Knowledge is an important factor in understanding sustainable food preferences (Verain et al., 2015). Ran et al. (2022) found that information can be an effective instrument when it is customized to a customer's entire shopping experience. Participants state that sustainable food requires knowledge due to its complex structure and that they think there is a lack of knowledge on this subject. The difficulty of distinguishing between environmentally friendly and non-environmentally friendly products in the market has been revealed as an important barrier.

"It is a very comprehensive subject; healthy products may sometimes not be environmentally friendly and sustainable I don't think I'm good at distinguishing it." (P1)

"At some point, I think sustainability is definitely important because the environment is one of the biggest factors affecting our health, but I am not very careful about this issue because I often cannot distinguish between food purchases that are harmful to the environment or not." (P13)

"I don't know much about sustainability. But I try to buy food from places I know. Apart from that, I prefer famous food chains, I think they are at least sensitive about ensuring that the materials you buy there are not harmful to health before expiry." (P6)

"I don't feel knowledgeable, because food production has many stages." (P7)

4.3.3. Perceived Greenwashing

Green skepticism refers to customers' tendency to question a green-labeled product's environmental impact or advantages (Leonidou & Skarmeas, 2017) This skepticism is often a result of greenwashing which is a term used to describe falsely portraying products as being ecologically safe or friendly using deceptive methods (Aji & Sutikno, 2015). When participants suspect that some foods sold as sustainable are not sustainable, this has a negative impact on their attitudes.

"Not every green packaged food with happy animals on it is sustainable. I suspect that they use this situation sometimes." (P9)

"I am suspicious of where and under what conditions the products are actually made, especially those sold as home-made, natural, and sustainable in unregulated places and I sometimes see mass-produced products sold in this way." (P20)

"Sometimes they even write it wrong on the label to make it look green. Maybe they are not sustainable, but they sell them that way to raise the price." (P8)

"Frankly, I have the perception that everything is just an illusion. Maybe that's why I can't focus much." (P4)

4.3.4. Low Availability

Past research suggests that product availability affects sustainable food purchase behavior (Yamoah & 2019). Low perceived availability is one of the factors that clarifies the low level of intention to buy (Vermeir & Verbeke, 2006). Participants indicated that they find it hard to find sustainable products in the market due to low availability.

"I prefer chain markets and dairies where I can choose food by checking and touching. I would like to buy these foods by seeing them, so I can't always buy them." (P17)

"Such products are not available everywhere." (P3)

"There is no sustainable and green food in the places where I do my daily food shopping." (P11)

"There are very few places that sell food products that I can say are absolutely sustainable." (P1)

4.3.5. Perceived Effort

People may avoid making efforts to protect their resources because the effort is costly (Dreijerink et al., 2022). Most eco-friendly and green activities require a substantial amount of effort so the effort can have a negative impact on sustainable behaviors (Gathen & Praxmarer-Carus, 2020). Participants underline that obtaining sustainable food is a demanding and tiring process.

"Growing your food is nice but very tiring. I love animals and the garden, but they all require effort. I have to go at noon and feed the chickens and hoe the garden." (P5)

"Consuming seasonal vegetables requires keeping track of which product is in which season and spending time canning. It's always a struggle to figure out where to find real sustainable food." (P18)

"You live dependent on your thermos and your lunch box. I think it's nice too, but it takes effort until you get used to it. Also, I need to plan my meals in advance so there is no waste." (P2)

4.3.6. Living Conditions

Participants state that their living conditions, especially living in the city, hinder the behavior of growing their own food, which they consider sustainable. In addition to physical obstacles, air pollution is also seen as an obstacle to growing their own food. Also, where they live affects their food consumption and preparation habits.

"I wish I had the opportunity to grow more of my own food. This is a little difficult in city life." (P19)

"I find it healthier and more sustainable for people to grow their own food in a natural environment. However, I do not believe that the food grown in cities is very healthy due to reasons such as air pollution." (P16)

"I am a student and I live in a dormitory; such actions challenge me." (P7)

"For a while, I thought about going vegan and living more sustainably, but I live with my family and have to eat whatever is cooked at home." (P4)

4.4. Drivers to Consume Sustainable Food

4.4.1. Health Consciousness

The level of integration of health issues into an individual's daily activities is known as health consciousness (Akhondan et al., 2015). Health-conscious people engage in health-related behaviors in their daily lives, they are careful about their health status, they look for health-related information and they the motivation to stay healthy (Hong, 2009). This interest and motivation lead to making healthy choices. Participants stated that healthy product choices also apply to food products and that paying attention to their and their family's health is one of their main motivations for sustainable food consumption.

"I think home-cooked meals are healthy. We can say that sustainable food and home-cooked food are kind of the same thing. I think I eat healthy and maintain my routine in this regard." (P17)

"I prefer environmentally friendly and healthy products. Whenever possible, I use organic and natural ingredients at home. Refillable products and items packaged in glass are also preferred choices in my shopping. Healthiness is more important to me." (P15)

"The food I buy should be fresh and healthy. As the years pass, I pay more attention to my health. The contribution of the food I consume to my health is very important." (P12)

"Growing your own food is definitely healthier. I go and buy my own seeds; I know the fertilizer I put into the soil. I plant it myself; I water it myself. I don't use any medication, everything is natural. I don't try to make food look beautiful. We enjoy eating products that we know where they come from." (P5)

"There is a newborn baby at home, we pay more attention to what we eat for his health." (P10)

"I am really sensitive when it comes to food purchasing, because what we eat directly affects our health" (P20)

4.4.2. Subjective Norm

Subjective norm is a concept that shows the effects of the social environment on people's behavioral intention, and according to the theory of planned behavior, it is one of the factors that determine behavioral intention (Ajzen, 1991). Studies show that subjective norm is an important antecedent

of intention to purchase sustainable food (Vermeir & Verbeke, 2006; Chu et al., 2023). This study revealed that opinions of other people have a positive effect on the intention to purchase sustainable food. Furthermore, participants stated that they tend to take advice from people who belong to the same social group as they do.

"I always welcome suggestions from my friends. If the consumers around me are satisfied, I will try it. I feel like I'm missing something. When they tell me about it, I want to buy it." (P9)

"My wife is also sensitive about such issues and it is better to do it together, and she guides me. We prepare canned seasonal vegetables from summer to winter." (P3)

"There is a widespread belief in my circle that every concept with green is beautiful."(P15)

"My mother directs me to consume sustainably. We have been making yogurt at home since I was little. Now she took some seeds and started growing them. The product you grow yourself is more valuable, there is effort involved." (P2)

"If I'm going to try a new product, I research its contents, benefits, and potential drawbacks on the internet. I may be influenced by my family and friends during this process." (P6)

4.4.3. Social Media

Some of the people the participants are affected by are influencers, to whom they are constantly exposed through social media. Studies have shown in the literature that social media influencers have an impact on sustainable consumption (Vilkaite-Vaitone, 2024) and specifically, sustainable food purchase intention (Wu et al., 2023). Participants are also affected by the shared information they see on the internet.

"I follow social media accounts that examine the content of the foods we consume and their effects on nature and try to stay informed." (P1)

"Awareness about sustainability has increased a lot on social media. I am also impressed by what I see." (P8)

"Food bloggers and social media accounts that share food recipes share great information about food. I can say that I am impressed by this information." (P13)

"I am influenced by social media in my food shopping as well as in every purchase I make. I see the post and it is engraved in the back of my mind." (P4)

4.4.4. Environmental Concern

Environmental concern reflects an individual's sensitivity to environmental issues, their interest in concepts about reducing environmental problems, and their efforts to support environmental conservation (Moser, 2016). Consumers who have a high level of environmental concern often have

positive attitudes toward sustainable food products (Nguyen et al., 2021). Individuals with a high level of awareness about environmental conservation tend to make more environmentally sensitive choices (Gürler & Nart, 2019). Özkaya et al.'s (2021) study points out that the most important aspect of sustainable food is environmental aspect for the experts. Participants emphasized their sensitivity towards the environment and expressed their concern for the environment. They indicated that they want to contribute more by consuming sustainably.

"I have always been sensitive about water usage and decreasing plastic consumption. Therefore, I also want to make my food choices as sustainable as I can." (P12)

"I generally use public transportation. I take care to dispose of wastes that cause serious harm to the environment, such as batteries and oil, in their own waste bins. I am careful in environmental choices." (P10)

"I make sure to dispose of environmentally harmful waste such as batteries and oil in their designated waste bins. I am careful in my choices regarding the environment." (P20)

"Since my childhood, I have been so influenced by environmental activities that I see myself as someone who makes green choices. Even if the quality is poor, I use recycled paper. I try my best not to produce waste. I even try to make vegetable broth from onion roots. I believe we owe something to nature." (P2)

4.4.5. Food Involvement

Food involvement can be defined as the degree to which food is significant in an individual's life (Bell & Marshall, 2013) and shows the bond between consumer and food (Castellini et al., 2023). Consumers with high food involvement may be more aware of the foods they eat and how they are prepared, cooked, and acquired throughout the whole process (Bell & Marshall, 2013). It is observed that when participants' interest in food is high, they are willing to learn more about sustainable food, think more about how they will use food, and shape their preferences in this direction.

"My passion for cooking started by cooking for myself and then for my roommates. You can utilize every part of the food if you know a lot about the food. When made at home, you can make a lot of things from limited ingredients" (P2)

"*I read cookbooks both because they interest me and to learn what food can be made from which products. I can cook maybe three dishes from one carrot." (P7)*

"The food products we buy come from nearby places. I know where the products come from, what I can do with them, and I am curious and research these details" (P10)

"I cook our food. I don't consume outside unless I must. I don't buy take away food either." (P17)

5. Conclusion

The rapid increase in environmental problems in the world has led many countries to prioritize environmental protection actions. Food consumption is also under the spotlight for its impact on environmental sustainability. The fact that food consumption is one of the most basic needs increases the importance of the issue even more. However, the fact that food consumption motivations consist of rational, emotional, and social factors also shows the complex structure of food consumption. In this regard, this study focuses on sustainable food consumption by considering food consumption within the framework of green economy. There are many actors in the food industry. In this study, sustainable food consumption is investigated from the perspective of the consumer, whose demands play an important role in the sector.

To increase consumers' sustainable food choices, it is important to first understand the barriers. According to the data obtained from the participants, obstacles to sustainable food consumption were found to be perceived expensiveness, lack of information, perceived greenwashing, availability, perceived effort, and living conditions.

Research results show that consumers do not have much information to distinguish sustainable food, even if they want to buy it. Lack of information also leads to low awareness, and the importance of the issue is not adequately understood. Another important barrier is the perception that sustainable products are more expensive. This perception may also lead to the idea that sustainable product consumption is exclusive to high-income consumers. As with all sustainable products, perceived greenwashing is seen as a significant obstacle in sustainable food products. Greenwashing also reduces consumers' trust and negatively affects their purchasing decisions. The negative effect of greenwashing is also seen in other studies (Akturan, 2018; Zhang et al., 2018; Sun & Shi, 2022) and supports the result of the study. Another obstacle to sustainable food consumption is that consumers have difficulty finding sustainable food products. The scarcity of places selling and serving sustainable food directs consumers to other alternatives. Another factor that makes sustainable food consumption difficult for consumers is the perception that consuming these products requires additional effort. In today's conditions, consumers may not have the time required for this. In addition, living in a city or rural area and the type of place you live in are among the factors that limit access to such foods.

Understanding the factors that direct consumers to sustainable food consumption is also important in terms of encouraging these factors and identifying consumers who tend to consume more sustainable food. It was revealed that the factors that facilitate the participants' sustainable product consumption are health consciousness, subjective norm, environmental concern, and food involvement.

Findings demonstrate that participants are influenced by the views of the people around them regarding sustainable foods and sustainable food consumption. It seems that what the participants hear from others is effective in purchasing sustainable products. It is known that e-wom moderates the relationship between personal norm and green product purchase intention in purchasing green products (Jaini et al., 2020). People who are influenced by consumers can be family, friend groups, or influencers on social media. In addition, as a result of the research, it was revealed that consumers

with high environmental sensitivity and consumers with high health sensitivity are potential buyers for sustainable food consumption. Literature also suggests that the various types and quantities of food that people eat have a significant impact on both environmental sustainability and human health (Huang et al., 2022). Furthermore, findings reveal that food involvement increases the tendency to choose sustainable food products as also supported by literature (Bell & Marshall, 2013). Consumers who have high food involvement, and consumers who have a high level of interest in food can also be a crucial segment for sustainable food products.

6. Managerial Implications

These findings provide significant opportunities for brands and policymakers. First of all, understanding the barriers is the first step to creating different plans to encourage the consumption of sustainable food products. Giving consumers more information on the label and educating consumers can increase the level of knowledge of consumers on this subject. Price-related suggestions may include reviewing the production process in order to produce at lower prices, cooperating with policymakers, and increasing product diversity by marketing lower-priced versions of high-priced products. Being transparent and communicating correctly with consumers at all times is one of the most important ways to build trust and reduce the perception of greenwashing. Besides, there could be enacting laws to stop greenwashing. To increase the availability of sustainable food products, redesigning the supply chain practices could be effective, as well as utilizing more online channels would also help consumers to purchase through the internet.

Additionally, the research revealed consumer segments with a high tendency to consume sustainable food. Those consumer segments are health-conscious and environmentally-conscious consumers. Brand managers can increase sustainable food consumption by developing marketing strategies targeting these consumer segments. Experiences that will create pleasure in food purchases can be created for these consumers. Past research shows that past rewarding purchasing experience is the strongest motivation for purchasing sustainable food products (Vassallo et al., 2016). Another research also found that past purchase positively affects future purchase behavior for sustainable food products (Yamoah & Acquaye, 2019). It may also be useful to share nutritious information on the labels of sustainable food products. QR code applications can be used for this. Telling the story of the products and the recipes that can be made with the products can also attract the attention of consumers with high food interest.

7. Limitations & Suggestions for Future Research

This research examined sustainable food in general and did not focus on a specific food group. Future studies could focus on one type of food and examine how consumer reactions vary by food category. In addition, future studies may focus on specific consumer groups, such as employees, pregnant women, and consumers with a history of illness. Since this study aims to look at sustainable food consumption from the consumer perspective, the research was conducted on consumers. Future studies may focus on factors such as supply chain and retailers, which are other elements in the

sustainable food chain. Finally, this study does not aim to generalize due to the nature of qualitative research. The themes revealed in this study can also be tested with a quantitative study.

REFERENCES

Ajzen, I. (1991). The theory of planned behavior. Organizational behavior and human decision processes, 50(2), 179-211.

Aji, H. M., & Sutikno, B. (2015). The extended consequence of greenwashing: Perceived consumer skepticism. International Journal of Business and Information, 10(4), 433.

Akhondan, H., Johnson-Carroll, K., & Rabolt, N. (2015). Health consciousness and organic food consumption. Journal of Family & Consumer Sciences, 107(3), 27-32.

Akturan, U. (2018). How does greenwashing affect green branding equity and purchase intention? Empirical research. Marketing Intelligence & Planning, 36(7), 809-824.

Alam, S. S., Ahmad, M., Ho, Y. H., Omar, N. A., & Lin, C. Y. (2020). Applying an extended theory of planned behavior to sustainable food consumption. Sustainability, 12(20), 8394.

Aschemann-Witzel, J., Gantriis, R. F., Fraga, P., & Perez-Cueto, F. J. (2021). Plant-based food and protein trend from a business perspective: Markets, consumers, and the challenges and opportunities in the future. Critical Reviews in Food Science and Nutrition, 61(18), 3119-3128.

Aguirre Sánchez, L., Roa-Diaz, Z. M., Gamba, M., Grisotto, G., Moreno Londoño, A. M., Mantilla-Uribe, B. P., ... & Suggs, L. S. (2021). What influences the sustainable food consumption behaviors of university students? A systematic review. International journal of public health, 66, 1604149.

Azzurra, A., Massimiliano, A., & Angela, M. (2019). Measuring sustainable food consumption: A case study on organic food. Sustainable production and consumption, 17, 95-107.

Bina, O. (2013). The green economy and sustainable development: an uneasy balance? Environment and Planning C: Government and Policy, 31(6), 1023-1047.

Bell, R., & Marshall, D. W. (2003). The construct of food involvement in behavioral research: scale development and validation☆. Appetite, 40(3), 235-244.

Betzler, S., Kempen, R., & Mueller, K. (2022). Predicting sustainable consumption behavior: knowledge-based, value-based, emotional and rational influences on mobile phone, food and fashion consumption. International Journal of Sustainable Development & World Ecology, 29(2), 125-138.

Bulut, Z. A., Özkaya, F. T., Karabulut, A. N., & Atağan, G. (2019). Gida ürünlerinin sürdürülebilir tüketimi bağlaminda tüketici tipolojisi geliştirme çalişmasi. Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 28(3), 73-90.

Caprotti, F., & Bailey, I. (2014). Making sense of the green economy. Geografiska annaler: series B, Human geography, 96(3), 195-200.

Castellini, G., Bryant, E. J., Stewart-Knox, B. J., & Graffigna, G. (2023). Development and validation of the psychological food involvement Scale (PFIS). Food Quality and Preference, 105, 104784.

Chaaben, N., Elleuch, Z., Hamdi, B., & Kahouli, B. (2022). Green economy performance and sustainable development achievement: empirical evidence from Saudi Arabia. Environment, Development and Sustainability, 1-16.

Chu, M., Anders, S., Deng, Q., Contador, C. A., Cisternas, F., Caine, C., ... & Lam, H. M. (2023). The future of sustainable food consumption in China. Food and Energy Security, 12(2), e405.

deMarrais, K. B., & Lapan, S. D. (2003). Qualitative interview studies: Learning through experience. In Foundations for research (pp. 67-84). Routledge.

Dreijerink, L., Handgraaf, M., & Antonides, G. (2022). The impact of personal motivation on perceived effort and performance of pro-environmental behaviors. Frontiers in Psychology, 13, 977471.

Dogaru, L. (2021, January). Green economy and green growth—Opportunities for sustainable development. In Proceedings (Vol. 63, No. 1, p. 70). MDPI.

Feil, A. A., da Silva Cyrne, C. C., Sindelar, F. C. W., Barden, J. E., & Dalmoro, M. (2020). Profiles of sustainable food consumption: Consumer behavior toward organic food in the southern region of Brazil. Journal of Cleaner Production, 258, 120690.

Fischer, M., Foord, D., Frecè, J., Hillebrand, K., Kissling-Näf, I., Meili, R., ... & Stucki, T. (2023). Sustainable consumption. In Sustainable Business: Managing the Challenges of the 21st Century (pp. 105-116). Cham: Springer International Publishing.

Gathen, C., & Praxmarer-Carus, S. (2020). Is effort required by a green behavior always negative? The moderating effect of male gender identification strength. NA—Advances in Consumer Research, 48.

Güneş, E., Keskin, B., & Kıymaz, T. (2014). Gıda Sanayiinde Yeşil Ekonomi ve Uygulamaları. XI. Tarım Ekonomisi Kongre Kitabı, 1528-1532.

Güneş, E., & Karakaş, T. (2022). Tarım ve gıda sistemlerinde sürdürülebilirlik yaklaşımları. Journal of Academic Value Studies, 8(3), 304-316.

Gürler, B., & Nart, S. (2019). Sağlikli Ve Sürdürülebilir Gida Tüketimine Yönelik Bilinç-Tutum İlişkisinde Sağlikli Yaşam Tarzinin Aracilik Rolü. Usak University Journal Of Social Sciences/Uşak Üniversitesi Sosyal Bilimler Dergisi, 12.

Han, Y., & Hansen, H. (2012). Determinants of sustainable food consumption: a meta-analysis using a traditional and a structural equation modeling approach. International Journal of Psychological Studies, 4(1), 22.

Hong, H. (2009). Scale development for measuring health consciousness: Re-conceptualization. that Matters to the Practice, 212.

Huang, Z., Zhu, Y. D., Deng, J., & Wang, C. L. (2022). Marketing healthy diets: the impact of health consciousness on Chinese consumers' food choices. Sustainability, 14(4), 2059.

Jaini, A., Quoquab, F., Mohammad, J., & Hussin, N. (2020). "I buy green products, do you…?" The moderating effect of eWOM on green purchase behavior in Malaysian cosmetics industry. International Journal of Pharmaceutical and Healthcare Marketing, 14(1), 89-112.

Jaiswal, J., & Aagja, J. Influence of scarcity and environmental consciousness on food waste behavior. Journal of Consumer Behaviour.

Joshi, Y., & Rahman, Z. (2015). Factors affecting green purchase behaviour and future research directions. International Strategic management review, 3(1-2), 128-143.

Kadioğlu, S., & Kaya, P. S. (2022). Çevresel Ve Sağlikli Beslenme: Sürdürülebilir Diyetler. Samsun Sağlık Bilimleri Dergisi, 7(1), 29-46.

Korkmaz, S., & Sertoğlu, A. (2013). Genç Tüketicilerin Sürdürülebilir Gida Tüketimi Davranişinin Güven Ve Değerlere Dayanan Planli Davraniş Teorisi Kapsaminda Tartişilmasi. Hacettepe Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 31(1), 127-152.

Leonidou, C. N., & Skarmeas, D. (2017). Gray shades of green: Causes and consequences of green skepticism. Journal of business ethics, 144, 401-415.

Loiseau, E., Saikku, L., Antikainen, R., Droste, N., Hansjürgens, B., Pitkänen, K., ... & Thomsen, M. (2016). Green economy and related concepts: An overview. Journal of Cleaner Production, 139, 361-371.

Mensah, K., Wieck, C., & Rudloff, B. (2024). Sustainable food consumption and Sustainable Development Goal 12: Conceptual challenges for monitoring and implementation. Sustainable Development, 32(1), 1109-1119.

Moser, A. K. (2016). Consumers' purchasing decisions regarding environmentally friendly products: An empirical analysis of German consumers. Journal of Retailing and Consumer Services, 31, 389-397.

Nguyen, H. V., Nguyen, N., Nguyen, B. K., & Greenland, S. (2021). Sustainable food consumption: Investigating organic meat purchase intention by Vietnamese consumers. Sustainability, 13(2), 953.

Oslo Roundtable on Sustainable Production and Consumption (1994). The Imperative of Sustainable Production and Consumption. Available online at: https://enb.iisd.org/consume/oslo004.html 11 Şubat 2024 tarihinde erişildi).

Özçağ, M., & Hotunluoğlu, H. (2015). Kalkınma anlayışında yeni bir boyut: Yeşil ekonomi. Manisa Celal Bayar Üniversitesi Sosyal Bilimler Dergisi, 13(2), 303-324.

Panatsa, V. M., & Malandrakis, G. (2024). Greek primary school students' moral judgments and motives about sustainable food consumption. Cleaner and Responsible Consumption, 12, 100173.

Phan, T. X. D. (2024). Understanding the acquisition, usage, and disposal behaviours in sustainable food consumption: A framework for future studies. Cleaner and Responsible Consumption, 12, 100162.

Ran, Y., Lewis, A. N., Dawkins, E., Grah, R., Vanhuyse, F., Engström, E., & Lambe, F. (2022). Information as an enabler of sustainable food choices: A behavioural approach to understanding consumer decision-making. Sustainable Production and Consumption, 31, 642-656.

Reisch, L., Eberle, U., & Lorek, S. (2013). Sustainable food consumption: an overview of contemporary issues and policies. Sustainability: Science, Practice and Policy, 9(2), 7-25.

Singh, S., & Banerjee, S. (2024). Examining the effects of fear of missing out on sustainable food consumption: a social identity perspective. Asia Pacific Journal of Marketing and Logistics.

Stewart, C.J., & Cash, W.B. Jr. (2003). Interviewing: Principles and practices. New York: McGraw-Hill.

Sun, Y., & Shi, B. (2022). Impact of greenwashing perception on consumers' green purchasing intentions: A moderated mediation model. Sustainability, 14(19), 12119.

Szalonka, K., Stańczyk, E., Gardocka-Jałowiec, A., Waniowski, P., Niemczyk, A., & Gródek-Szostak, Z. (2021). Food choices and their impact on health and environment. Energies, 14(17), 5460.

Sustainable Development Commission (2009). Setting the Table: Advice to Government on Priority Elements of Sustainable Diet. SDC, London. https://www.sd-commission.org.uk/publications.php@id=1033.html.

Özkaya, F.T., Durak, M. G., Doğan, O., Bulut, Z. A., & Haas, R. (2021). Sustainable consumption of food: Framing the concept through Turkish expert opinions. Sustainability, 13(7), 3946.

UNEP. 2011. Pathways to Sustainable Development and Poverty Eradication, https://www.unep.org/explore-topics/green-economy/about-green-economy retrieved 03.03.2024.

Uslu, F., & Demir, E. (2023). Nitel bir veri toplama tekniği: Derinlemesine görüşme. Hacettepe Üniversitesi Edebiyat Fakültesi Dergisi, 40(1), 289-299.

Vassallo, M., Scalvedi, M. L., & Saba, A. (2016). Investigating psychosocial determinants in influencing sustainable food consumption in Italy. International Journal of Consumer Studies, 40(4), 422-434.

Verain, M. C., Dagevos, H., & Antonides, G. (2015). Sustainable food consumption. Product choice or curtailment?. Appetite, 91, 375-384.

Vermeir, I., & Verbeke, W. (2006). Sustainable food consumption: Exploring the consumer "attitude–behavioral intention" gap. Journal of Agricultural and Environmental ethics, 19, 169-194.

Vermeir, I., & Verbeke, W. (2008). Sustainable food consumption among young adults in Belgium: Theory of planned behaviour and the role of confidence and values. Ecological economics, 64(3), 542-553.

Vermeir, I., Weijters, B., De Houwer, J., Geuens, M., Slabbinck, H., Spruyt, A., ... & Verbeke, W. (2020). Environmentally sustainable food consumption: A review and research agenda from a goal-directed perspective. Frontiers in Psychology, 11, 1603.

Vilkaite-Vaitone, N. (2024). From Likes to Sustainability: How Social Media Influencers Are Changing the Way We Consume. Sustainability, 16(4), 1393.

Wu, Y., Yang, S., & Liu, D. (2023). The effect of social media influencer marketing on sustainable food purchase: perspectives from multi-group SEM and ANN analysis. Journal of Cleaner Production, 416, 137890.

Yamoah, F. A., & Acquaye, A. (2019). Unravelling the attitude-behaviour gap paradox for sustainable food consumption: Insight from the UK apple market. Journal of cleaner production, 217, 172-184.

Yerlikaya, B. (2022). Yeşil Ekonomiye Geçiş Kadinlarin İstihdama Katilimi İçin Kriz Mi Firsat Mi?: Toplumsal Cinsiyet Eşitliği Bağlaminda Yeşil İşler. Marmara Üniversitesi İktisadi Ve İdari Bilimler Dergisi, 44(1), 137-161.

Yıldırım, A. & Şimşek, H. (2011). Sosyal bilimlerde nitel araştırma yöntemleri. Ankara: Seçkin Yayıncılık.

Zhang, L., Li, D., Cao, C., & Huang, S. (2018). The influence of greenwashing perception on green purchasing intentions: The mediating role of green word-of-mouth and moderating role of green concern. Journal of Cleaner Production, 187, 740-750.