Exploring the Nexus Between Sustainable Consumption Behavior and Organic Food Purchase: A Comprehensive Review

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Abstract

Recently, a remarkable increase in organic food consumption can be seen in both developed and developing countries. This research aims to identify the role of sustainable consumption behavior in purchasing organic food. The research problem has been formulated with several questions, most notably: Does sustainable consumption behavior has a role in purchasing organic food? The relationship between sustainable consumption behavior and organic food has received a lot of attention in the literature. However, take a comprehensive approach to examine how sustainable consumption behavior might affect purchasing organic food? In order to examine the role of sustainable consumption behavior in buying organic food, this article proposes a framework that adopts a comprehensive approach. The author conducted a qualitative synthesis of the literature (Systematic Literature Review (PRISMA), including 43 articles, revealing several findings. One of them, is that sustainable consumption behavior positively and directly impacts buying organic food due to the health, environmental cognition, high quality, trust, and food safety. The second finding is that complex factors influence organic food buying behavior. For example, price is always likely to be an important factor for most customers. Moreover, the lack of knowledge about organic food is another factor affecting customers’ buying organic food.

Keywords: Sustainable consumer behavior, sustainable consumption, sustainable consumption behavior, food consumption, organic food, and PRISMA.
1- Introduction

Growing evidence of the negative effects that food production and consumption have on the environment has generated the growth of product categories differentiated by sustainability, particularly organic food. Understanding customer concerns and behavior is essential to encouraging sustainable consumption. Nevertheless, most of the technological improvements in agriculture over the 20th century left their mark on the rural people and terrain. Utilizing resources on and off the farm is essential to the technological revolution that continues to be the predominant way of food production. According to Steffen et al. (2015), current consumption levels and patterns, particularly those of societies in the world, push the limits of the globe with their use of natural resources. They outline the earth system's environmental bounds, within which people can live securely, and societal welfare can be guaranteed. As a result, one of the 17 goals included in the Agenda 2030 for Sustainable Development is to promote sustainable consumption (United Nations, 2020). Additionally, it is thought that people seek for sustainable goods because they consider them to be organic and healthful, superior in quality, and environmentally friendly (Govender and Govender, 2016). In order to fully understand sustainability, one topic that is still being explored in depth is sustainable consumer behavior (Kumar and Polonsky, 2017, 14). The phrase is inherently multi-disciplinary in nature, encompassing topics like psychology, marketing, and environmental concerns. Consumers' growing concern over how their consumption affects the environment has changed their attitudes toward greener lifestyles. Due to this increasing awareness, a long list of issues fall under the umbrella of environmental responsibility. Sustainable consumption is one of the ideas put up to address environmental issues by enlisting consumer engagement. As the primary purchasers and end users, consumers are said to substantially influence sustainable development through their decisions and actions. However, they require assistance in developing their consumption habits and behaviors (Rizkalla, 2018). Organic farming is one method advocated for increasing the sustainability of food consumption, the environmental effect of diets based on organic food has been proven to be much lower than that of diets based on conventionally produced food (Müller et al., 2017). In order to meet the demands of the present and the aspirations of future generations, sustainable consumption behavior refers to "the pattern of reduced consumption of natural resources, altering lifestyle, and consumption of environment-
friendly products" (Rizkalla, 2018). Additionally, eating organic food has been demonstrated to have some favorable impacts on human health, particularly because organic farming uses fewer pesticides and antibiotics (Mie et al., 2017). Thus, customers' desire to purchase organic food is mostly driven by the anticipated health benefits (Federal Office for Agriculture and Food, 2020; Rana & Paul, 2020).

Based on this idea, the primary goal of this study is to critically examine a number of research themes related to sustainable consumption behavior and buying organic food. As one of the previous study's suggestion is the need for additional research in the domain of organic food consumption and production, and their relationship with sustainable consumption behavior.

The study will review recently published but representative material about sustainable consumption behavior in purchasing organic food. This will be accomplished by using a (PRISMA) diagram. Therefore, the main objective of this study is to explore the relationship between sustainable consumption behavior and purchasing organic food. The research question is: Does sustainable consumption behavior has a role in purchasing organic food?

The role of sustainable consumption behavior in purchasing organic food has driven us to investigate how sustainable consumption behavior affects the buyer decision-making process for organic food. Using the Page and colleagues (2020) method for conducting a literature review, we investigate this through a qualitative synthesis of the literature. As a consequence, we examined 43 papers from different academic journals from the Scopus database. In order to examine the relationship between sustainable consumption behavior and purchasing organic food, we create a framework figure 4 based on the current literature.
2. Research Process and Method

This article adopts a qualitative research synthesis by Page et al, (2020). The researcher use a three-step procedure to gather the research that is most related to our research goals.

2.1. Identification:

Theoretically, to see if earlier systematic reviews on the subject have been done, The researcher run a search using our key factors (Sustainability, sustainable consumption behavior, consumer decision-making buying behavior, and organic food.). According to Page et al, (2020), authors can spend less time getting acquainted with the literature by using this method. It also enables the writers to understand the justification for conducting the literature review, such as whether the subject needs updating, whether a fresh theory may be established, or whether the prior literature study contained methodological problems. The stage of the data collection process was carried out from the online library of the University of Debrecen from the Scopus database. First, the query

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TITLE-ABS-KEY
(sustainab* AND consumption AND behavior OR purchasing AND organic)
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has been used to address the study question. This step aimed to gather a huge descriptive group of original research that might make it possible for this study to get an important conclusion due to the fact that hundreds of article results were pulled from the Scopus database based on the Advanced Document Search. A total of 499 articles were found during the initial phase of the search to have pertinent data on the area of sustainable consumption behavior and purchasing organic goods. Due to the substantial quantity of prior research that may be reviewed and the depth of their literature, the already-identified inclusion criteria were applied. There were a number of articles that have been excluded, which was 94 articles because the search was made by choosing the year 2015-2023, and the sample of publications that were chosen was reduced to 405 articles. This period has been selected because the concept of sustainable consumption behavior has been around for countries, but it has gained more attention in recent years. There are lots of articles about it but mostly are updated once.
2.2. Screening

An essential first step in addressing the research question and framing the current study in the context of the extensive body of research in the field was the selection of data from a thorough search of prior research on sustainable consumer behavior and purchasing organic food. Searching through Scopus databases was the first step in finding past studies. This database was chosen because they include a considerable amount of information that is pertinent to addressing the research question under consideration, including published publication. Additionally, the majority of the papers published in these publications are original studies with quantitative or qualitative research methods. The researcher identified the keyword searches for the various sub-areas of sustainable consumption behavior in relation to organic goods. The keywords linked with sustainable consumption behavior and purchasing organic foods are particular to that region. They are crucial in ensuring that all relevant elements are investigated, and the analysis's main issues are thoroughly covered. Nevertheless, after the first stage, which is (Identification,) the search was sorted by subject area (Environmental Science, Business Management and Accounting, Economics, Econometrics and Finance, Art and Humanities, Health Professions) has been chosen because there are more relative to the research topic. The total number of documents found based on the subject area that has been mentioned above was 274. The number of the research was
reduced to 251 articles because the search was done based on the Documents type, which both Article and Review Articles were chosen because they already existing knowledge can be nicely recognized.

<table>
<thead>
<tr>
<th>Document type</th>
<th>Documents</th>
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<tbody>
<tr>
<td>Article</td>
<td>189</td>
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<td>Review</td>
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Figure 2, Documents by Type, Source: Scopus, 2023.

2.3. Included

Finally, in the third stage of the PRISMA method, which is (Included), the search was based on the keywords selection, there are some important keywords that are related to the research topic have been selected, which are (Sustainability, Consumption Behavior, Organic Food, Sustainable Development, Sustainable Consumption, Consumer Behavior, and Article) we can see that 195 articles were chosen based on those keywords. Only journals from the source type were elected, and 195 articles were published in journals. Finally, written papers in English were chosen, and the number of articles was 193, then they were exported to RefWorks database manager, it makes researcher to make bibliographic references easily and saving time. The last inclusion criterion was the highest number of citation papers with the most relevant to the research topic, which reduced the sample to 43 articles. Figure 4, a (PRISMA) flow diagram below, shows the sampling procedure and how the number of articles was reduced from 499 to 43 articles.
Figure 3, Documents by Subject Area, Source: Scopus, 2023.
Figure 4 The Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) by Page et al., (2020).

Identification of studies via databases and registers

- Searching Databases
  - Scopus
    - (N= 499) articles

- Records from (2015-2023)
  - (N = 405 articles)

- Records removed before screening:
  - (N = 94) articles

- Records excluded
  - (N = 131) articles

- Recorded by Subject Area
  - (N = 274)

- Records excluded:
  - (N=56)
    - Reason 1 (Selected some key word)
    - Reason2 (Only articles from Journals)
    - Reason3 (Only within written in English)

- Recorded by Documents Type
  - (N=251)

- Reports not retrieved
  - (N=23) articles

- The final included=193
  - Selected the (43) the most relevant articles with highest citation
3. Results and Discussions

The analysis of the chosen paper conceded a result based on the article, author, and the year of publication; methods and results. This research finds the following Findings:

3.1 Environmental cognitions have a significant impact on purchasing organic food.

Consumers who exhibit biospheric values that show concern for the environment and animal well-being are more likely to purchase organic food. This is supported by the findings of Van Doorn and Verhoef (2015) and Laureti & Benedetti (2019), who found that those who care about deforestation, soil contamination, and animal welfare are more likely to purchase organic products regularly. The study by Rahnama & Rajabpour (2017) also highlights that environmental value and epistemic value are the primary determinants of customer decision behavior for green products. Food suppliers have recognized the importance of addressing climate change and have included environmental goals in their policy statements; retailers also urge customers to buy seasonal, local, and organic foods and reduce food waste, Tjärnemo & Södahl. (2015).

Moser (2016) emphasized that the advantages of buying organic goods must be appreciated and understood by consumers. Self-interest and environmental concerns are both potent motivators that present marketing opportunities. Chu et al. (2018) found that consumers' intentions to purchase organic goods will be further reinforced by a more positive attitude toward them. However, they also found that there was no discernible effect of marketing pricing or communication on customers' attitudes toward organic foods. Maaya et al. (2018) reported that environmental and charitable sentiments have a considerable impact on willingness to pay for both organic and fair trade coffee labels. Overall, understanding the motivations and values of consumers can help companies to target their marketing strategies more effectively to keep their customers and attract new ones to buy their organic food.

3.2 Health, quality, and food safety have a significant impact on purchasing organic food.

According to several studies, quality and health concerns are the primary drivers of organic product purchasing. Nguyen et al. (2019) found that customers' attitudes toward buying organic beef were greatly influenced by their concerns about their health, the safety of their food, and their understanding of organic food. Oroian et al. (2017) identified weight issues, sensory appeal, sustainable consumption, and health concerns as the primary justifications for consuming organic
food products. Tobi et al. (2019) reported that organic labeling was the most desired quality, and the majority of consumers view food labeling programs that emphasize environmental and social responsibility favorably. Liu et al. (2019) also found that consumers' willingness to pay for organic products is highest for those with traceability, organic, graded, ecologically friendly, and fair-trade certificates. Consumers' purchasing decisions are influenced by various factors, including functional and emotional values. According to von Meyer-Höfer et al. (2015) sustainable consumers, who are more likely to be women, are particularly interested in food quality and exhibit a higher willingness to promote sustainability through their consumption patterns. Mauracher et al. (2019) believe that individual purchasing choices have an impact on the sustainability of society as a whole; younger customers have a more favorable perception of wine with sustainable qualities and are willing to pay a higher price for it. Eating sustainably produced food is not only good for the environment but also for our health, according to Petrescu et al. (2017). Quality plays a crucial role in establishing and upholding trust among producers and retailers, which in turn influences consumer trust. The use of emotional appeals, such as the health argument made by an expert or the authenticity argument delivered by a producers' union, can foster trust among consumers. In terms of environmental concerns, social value has the most significant impact on consumer attitudes toward green products, according to Mohd Suki (2015). Therefore, it is essential for producers and retailers to consider these factors when marketing sustainable and environmentally friendly food products.

3.3 Financial Values have an impact on purchasing organic food.

Research has shown that cost can be a significant obstacle for consumers interested in purchasing organic products. Nguyen et al. (2019) found that high prices for organic meat were a barrier for many consumers. However, Rahnama & Rajabpour (2017) discovered that the functional value-price of green products had a positive impact on consumer choice. Consumers who care about environmental and quality issues are often willing to pay more for high-quality food, as seen in the findings of D'Amico et al. (2016). While price and convenience have a significant impact on customers' purchase intentions, this determinant has a negative impact on those planning to buy organic goods (Basha & Lal, 2019). Financial incentivization has been found to be an effective way of encouraging sustainable consumption, according to Lavelle et al. (2015). Furthermore, research by Gerini et al. (2016) found that the market segment that purchases the most organic
food is willing to pay significantly more for organic eggs, while the majority of consumers who rarely buy organic items aren't willing to pay more for organic eggs than for eggs with improved animal welfare. The analysis by Olson et al. (2017) found that the high price of organic food was a concern for some consumers, who believed that it offered little to no health benefits. Migliore et al. (2020) found that the amount of sulfites, income, and attitudes toward healthy food could also influence consumer preferences. Nevertheless, customers have shown a willingness to pay a premium price for sustainable and organic products, such as sustainable fish and organic extra virgin olive oil, according to Maesano et al. (2020) and Rizzo et al. (2020), respectively. Moser (2015) found that willingness to pay was a significant predictor of environmentally conscious shopping behavior, followed by personal norms. Moser (2016) also discovered that customers' purchase decisions often reflect their environmentally conscious attitudes. Finally, Kamenidou et al. (2020) found that while consumers across all demographic cohorts have favorable attitudes toward organic food, the economic crisis has had an impact on their purchasing behavior. Additionally, Mauracher et al. (2019) found that consumers who prioritize cost when choosing wine are less likely to pay for organic wine, and that those with a lower consumption frequency are more likely to be willing to pay a premium price for it.

3.4 Knowledge has an impact on purchasing organic food.

Several studies have identified key predictors of organic food consumption and purchase intentions. According to Mann et al. (2020), recent consumption changes, health-related attitudes and social norms, perceived behavioral control, environmental values, income, and education level are among the most significant predictors of organic food consumption. Financial and environmental arguments also play a role in non-organic food purchases. Access to knowledge, information, and money, as well as time to prepare meals, are important factors for achieving healthier and more ecologically friendly food consumption. Trust in organic certification, recognition of differences between organic and conventional foods, and perceived obstacles to purchasing organic food may hinder the adoption of organic food consumption (Torres-Ruiz et al., 2018). Roh et al. (2022) found that consumer attitudes and subjective norms have a positive impact on purchase intentions, while trust in the product decreases purchase intention. Knowledge about organics also positively influences attitudes and trust. Testa & Sarti (2018) noted that subjective norms have a detrimental impact on actual purchase behavior, while purchase intentions are
positively influenced by customer knowledge about organics. Nosi et al. (2020) discovered that political values have a negative impact on consumer attitudes toward purchasing organic quinoa-based meals, while ecological welfare and retailer CSR reputation have a positive impact. Consumer attitudes are a key indicator of behavioral intention.

**Conclusion:**

The purpose of this study was to examine the relationship between sustainable consumption behavior and purchasing organic food. The role of sustainable consumption in purchasing organic food has received little attention, so the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) by Page et al., (2020) was essential in gathering data that is likely to have an impact on the research topic. The findings provided an answer to the research question, dose sustainable consumption behavior affect buying organic food? Purchasing organic food is positively correlated with sustainable consumption behavior. Firstly, various factors influence consumers' decisions to purchase sustainable products, particularly organic goods. These factors include environmental values, epistemic values, animal welfare, and emotional and functional values. Positive attitudes toward sustainable products, including food labeling programs and combination labeling, reinforce consumers' intentions to purchase them. Sustainable consumers tend to be women and have a higher willingness to promote sustainability through their consumption patterns. Additionally, younger customers have a more favorable perception of sustainable products, and eating sustainably produced food is linked to better health. Quality is essential for establishing and maintaining trust among producers and retailers. Moreover, an emotional form of appeal is found to be most effective in fostering trust, with social value having the greatest impact on consumer environmental concerns about sustainable products. Secondly, the cost of organic products has been found to be a significant obstacle for some consumers interested in purchasing such items. However, factors such as functional value-price, willingness to pay for quality food, and financial value have been shown to encourage sustainable consumption. Consumers' attitudes towards organic and sustainable products are often reflected in their purchasing decisions, as are personal norms and environmental consciousness. While the economic crisis has had an impact on the frequency of organic purchases, consumers across all demographic cohorts have generally favorable attitudes toward organic food. Nevertheless, the WTP for organic products can be influenced by various factors, including the level of consumption
frequency and the importance given to price when making purchasing decisions. Finally, the findings suggest that knowledge is one of the key factors that affect the purchase of organic food, along with other factors such as attitudes, subjective norms, and personal and social norms. The paragraph also highlights the importance of access to information and money in achieving more ecologically friendly and healthier food consumption. The limitation of this study was that there were no moderated or mediated variable between dependent and independent variables to know how sustainable consumption behavior directly or indirectly affect purchasing organic food. A future study may investigate how environmental, financial, culture, knowledge … etc. factors impact consumers’ purchase of organic food.

References:


Mauracher C, Procidano I, Valentini M. How product attributes and consumer characteristics influence the WTP, resulting in a higher price premium for organic wine. Sustainability (Switzerland). 2019;11 doi: 10.3390/su11051428.


