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FACTORS IMPACTING ON BUYING DECISION OF ORGANIC FOOD IN SYRIA

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Brand Awareness	BC
Environmental Concerns	EC
Food Safety Concerns	FC
Health Concerns	HC
Price Consciousness	PC
Theory of Planned Behaviour	TPB
Purchasing Behaviour	PB
Purchase Intention	PI
Subjective Norms	SNs

DEDICATION

First and foremost, I express my gratitude to God, for His boundless love, mercy, and grace, along with the fortitude and wisdom He bestowed upon me throughout every phase of this journey.

With profound reverence, this dissertation is dedicated to the indelible memory of my departed mother—a beacon of guidance and inspiration in my life. In her absence, I draw upon the enduring legacy of strength, inspiration, and unwavering faith she bestowed upon me. Through the echoes of her influence, I navigate life's intricate journey, overcoming obstacles with resilience and achieving success, honoring the profound impact she continues to have on my scholarly pursuits

My special dedication to my father: As I stand on the threshold of graduation, I am reminded of the countless ways you've shaped my journey. Your unwavering support and wisdom have been my guiding lights, and there is no parenting book in the world that could describe your selfless sacrifice. Thank you for being my constant inspiration; this achievement is as much yours as it is mine.

My heartfelt dedication to my cherished sister Heba: As I witness your daily growth and radiant spirit, I am filled with profound gratitude for the joy and hope you bring into my life. You are the candle that illuminates my days, and your presence is the essence of my existence. In every step you take, I see a future filled with endless possibilities. Thank you for being the shining light in my life; your journey is intertwined with mine, and your dreams are as precious to me as my own.

A genuine homage to my dear friend, Osama: As I reflect on the challenges I've faced, your role as a spiritual guide has been invaluable. You've been my rock in tough times. To your wife and the entire respectful family, I extend my gratitude for the warmth and care you've showered upon me. I'm forever thankful for your love and support.

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ABSTRACT

The global organic food market has been passing through significant growth recently, reflecting a growing consumer preference for healthier and more sustainable food options. The popularity of organic food cultivation and purchasing has recently widened quickly in developing nations. The Syrian organic food market has unique characteristics, where consumers' behaviours are affected by their country's culture. The Syrian organic sector is comparatively young, and only a tiny area is organically managed. Moreover, there is a scarce of related research. Therefore, the current study attempts to identify and understand the antecedents of Syrian consumer purchase intentions for various organic food products for supporting and promoting the adoption of organic food consumption patterns in line with evolving Syrian consumer preferences. To understand how subjective norms (SNs), Health Concerns (HC), Environment Concerns (EC), Price Concerns (PC), Food Safety Concerns (FC), and Brand Awareness (BA), impact the actual Purchase Behaviour (PB), the researcher followed a positivist paradigm with deductive research that collected primary quantitative data by distributing close-ended questionnaires. The researcher collected 229 questionnaires and excluded 18 participants as they do not purchase any organic food. Therefore, 211 cases were qualified for data analysis, demonstrating a satisfactory sample size for multiple regression analysis. The scale measurement and the measurement instrument were designed to follow the best practices so that reliable data were collected. All the measurement instruments have been adopted from the existing literature. Data were analysed on SPSS. A multiple linear regression model was developed to test the hypotheses. Additionally, a cluster analysis was conducted to identify any potential clusters within the data and identify whether specific demographic factors account for cluster membership. Generally, the regression model shows a moderate level of predictive power, with the predictors collectively explaining a significant portion of the variance (17.8%) in PB. However, remarkably there is still a considerable proportion of unexplained variance in PB. ALL the null hypotheses of the study were rejected except the hypothesis associated with FC. Therefore, the research confirms that FC has a significant influence on the purchasing behaviours of organic food in Syria. Then, the results of the demographic clustering analysis suggest that income is the utmost significant factor among the current study’s variables, as it significantly differentiates the identified clusters. Whereas education exhibits borderline significance, gender, age, marital status, and occupation do not appear to play significant roles in differentiating the clusters. The current study's findings introduce valuable insights for marketers, policymakers, and researchers planning to promote and understand sustainable food consumption patterns in Syria. Accordingly, the current study encourages the collaboration with health experts or nutritionists to validate and endorse the safety and health

benefits of organic food, investing in educational campaigns to raise consumer awareness, and designing pricing strategies such as promotions and loyalty programs to cater to price-sensitive consumers.

1 INTRODUCTION

1.1 Context and Relevance

The global organic food market has been experiencing significant growth, reflecting a shift in consumer preferences towards healthier and more sustainable food options. As of 2021, the market value of organic food reached approximately 227.2billion, with projections indicating it could rise to437.4 billion by 2026 (Statista, 2021). This upward trend is attributed to various factors, including increasing consumer health awareness, perceived benefits of organic farming practices, and government support for organic agriculture.

Organic foods are often described using various terms such as pesticide-free, ecological, biological, natural, and eco-friendly (Schifferstein & Oude Ophuis, 1998). They are produced through an organic agricultural system that avoids synthetic chemicals and promotes ecological balance. The USDA defines organic agriculture as an ecological production management system that enhances biodiversity and biological cycles while minimizing off-farm inputs (New England, 2018). Organic foods are characterized by their freshness, nutritional value, and eco-friendliness, and they do not contain additives or industrial solvents (Research & Markets, 2021).

The growth of the organic food market is driven by several interrelated factors. Increasing consumer health awareness has led to a preference for organic foods, which are perceived as healthier alternatives to conventional products. Additionally, rising environmental concerns have prompted consumers to seek sustainable options, as they become more aware of the negative impacts of conventional farming practices. Government support plays a crucial role, with various policies and financial incentives encouraging organic farming, such as the Indian government's National Horticulture Mission (NHM). Furthermore, the Internet has facilitated greater access to information about organic foods, enhancing consumer knowledge and shifting perceptions towards healthier eating. However, the organic food market faces several challenges, including a lack of consumer awareness regarding the unique features and health benefits of organic products, which can lead to confusion between organic and conventional items. Market accessibility is another issue, as organic products may not be as readily available compared to conventional foods, limiting sales opportunities. Price sensitivity also poses a challenge, as organic foods typically have higher price points, which can deter budget-conscious consumers. Lastly, navigating the regulatory landscape for organic certification can

be complex and resource-intensive, particularly for small-scale farmers, creating barriers to entry in the market.

The global organic food market is characterized by diverse trends across different regions. In Western Europe, for instance, organic food consumption has been robust, with countries like Germany leading the way in organic sales. In 2020, German consumers purchased 22% more organic items compared to the previous year, driven by a shift towards home cooking and healthier eating habits during the pandemic (USDA, Research & Markets, 2021).

In the Asia-Pacific region, countries like India are witnessing a surge in organic farming, supported by government initiatives and increasing consumer demand for organic products. The Indian government's NHM program incentivizes organic farming, contributing to the growth of the sector (Grand View Research, 2022).

The future of the organic food market appears promising, with continued growth expected. The global organic food and beverages market is projected to expand at a compound annual growth rate (CAGR) of 13.0% from 2022 to 2030 (Grand et al., 2022). Factors such as increasing health consciousness, environmental sustainability, and government support are likely to drive this growth.

Moreover, as consumers become more educated about the benefits of organic foods, the demand for transparency in food sourcing and production practices is expected to rise. This trend may lead to greater emphasis on certifications and labeling, empowering consumers to make informed choices about the products they purchase (McEvoy, 2019).

In conclusion, the global organic food market is on an upward trajectory, driven by a combination of consumer health awareness, environmental concerns, government support, and increased access to information. While challenges such as consumer awareness, market accessibility, and regulatory complexities remain, the overall outlook for the organic food sector is positive. As consumers continue to prioritize health and sustainability, the demand for organic products is expected to grow, shaping the future of the food industry.

1.2 Research Problem, Questions, and Objectives

The global demand for organic food (Grand View Research, 2022) has attracted attention from governments, researchers, and industry stakeholders (Willer et al., 2018). As consumer preferences shift toward healthier, sustainable choices (Jose & Kuriakose, 2021), understanding factors influencing organic food purchases is vital. Although many studies explore organic food purchase drivers (Khan et al., 2022; Singh & Verma, 2017; Zheng et al., 2021), little research

focuses on the Syrian context. Syria's unique cultural, economic, and social dynamics present an unexplored setting with limited knowledge on purchase drivers influencing organic food behaviors.

Addressing this gap is crucial for policymakers, marketers, and stakeholders to design targeted interventions that resonate with Syrian consumers (Babin & Harris, 2023). This study analyzes the influence of subjective norms, environmental concern, health, price, safety, and brand on Syrian organic food purchase behaviors using a quantitative approach. Data is collected via a questionnaire and analyzed using SPSS for descriptive statistics and multiple regression modeling. The research aims to establish effective strategies for pricing, marketing, and product positioning tailored to the Syrian market.

The study's primary objective is to investigate key drivers of organic food purchase behaviors in Syria. Specifically, it aims to assess the impact of subjective norms (SN), environmental concerns (EC), health concerns (HC), price consciousness (PC), food safety (FC), and brand awareness (BA). By addressing these factors, the research provides actionable insights into consumer preferences and supports the promotion of sustainable consumption practices. The main research question is: *What are the key drivers influencing Syrian consumers' organic food purchase behaviors?*

The objectives of this research are twofold:

1. To identify the specific factors that influence organic food purchasing behaviors in Syria.
2. To provide actionable insights for stakeholders, including policymakers, marketers, and agricultural producers, to enhance organic food consumption through targeted interventions.

By adopting a quantitative research approach, this study employs a structured questionnaire to collect primary data from Syrian consumers. The findings are analyzed to determine the significance of each driver and to uncover patterns in consumer behavior. This approach aims to provide a comprehensive understanding of the factors that shape organic food consumption in Syria, contributing to the broader discourse on sustainable consumption in emerging markets.

In conclusion, this research seeks to bridge a critical gap in the literature by contextualizing the drivers of organic food purchasing behavior within the Syrian market. The findings are expected to offer valuable implications for policy and practice, enabling the development of strategies that promote organic food consumption and support the growth of the organic sector in Syria.

1.3 Study Outlines

The thesis will be structured as follows: Chapter 2 provides a comprehensive review of the existing literature on organic food purchase drivers, and the interrelationships between subjective norms, environment, health, price, safety, and brand significantly impact the purchase behaviours. Chapter 3 outlines the research methodology, including the research design process (research paradigm, research approach, research method), data collection type, sampling design, and sample selection. Chapter 4 presents and analyzes the collected data on SPSS and then discusses the findings of the research questions and hypotheses. Finally, Chapter 5 presents the study's conclusions and practical recommendations for policymakers and industry stakeholders.

2 OBJECTIVES OF THE DISSERTATION

The primary aim of this dissertation is to investigate the factors influencing consumer purchasing behaviors for organic food in Syria, a market characterized by unique cultural, economic, and social dynamics. As global demand for organic food continues to grow due to heightened awareness of health and environmental concerns, understanding consumer behavior in a developing country context like Syria becomes critical. This study seeks to address significant gaps in the existing literature by examining the determinants of organic food purchases and offering actionable recommendations for stakeholders, including policymakers, marketers, and producers.

A central objective of this research is to assess the influence of subjective norms, health concerns, environmental concerns, price consciousness, food safety, and brand awareness on Syrian consumers' purchasing behaviors. The study aims to quantify how these factors interact and contribute to shaping consumer decisions within a socio-cultural context that emphasizes collectivistic norms. Moreover, it explores the role of demographic factors such as income, education, gender, and age in segmenting the market and influencing consumer preferences. Through this analysis, the research seeks to uncover critical insights into the motivations and barriers affecting organic food consumption in Syria.

Another key objective is to analyze the systemic challenges hindering the development of the organic food market in Syria. Economic instability, high production costs, limited marketing frameworks, and low consumer awareness are significant barriers that restrict the sector's growth. By identifying these obstacles, this study aims to provide a nuanced understanding of the factors that limit organic food accessibility and affordability for Syrian households. The research also evaluates the structural and informational constraints that prevent consumers from making informed choices about organic products.

The dissertation is designed to provide a foundation for targeted policy and marketing strategies to promote sustainable food consumption. It seeks to offer evidence-based recommendations for policymakers, focusing on initiatives such as subsidies, certification support, and consumer education programs to enhance the organic food sector's development. Additionally, the study emphasizes the importance of culturally sensitive marketing approaches that leverage social and cultural influencers to bridge the gap between consumer perceptions and the actual benefits of organic products.

A notable aspect of this research is the use of cluster analysis to segment Syrian consumers based on their purchasing behaviors and demographic profiles. This segmentation will allow for the identification of distinct consumer groups and provide insights into their unique characteristics and preferences. Understanding these clusters is crucial for designing targeted interventions that cater to the diverse needs of the market. Furthermore, the dissertation empirically tests the relationships between the identified factors—subjective norms, health concerns, environmental concerns, price consciousness, food safety, and brand awareness—and purchasing behaviors, using robust statistical methods. This empirical validation aims to determine the predictors with the most significant impact on consumer decisions and provides a solid foundation for practical applications.

Comparing the findings with similar studies in other developing countries, this dissertation also seeks to highlight the unique attributes of the Syrian organic food market. By situating the results within a broader global context, it examines the applicability of established theoretical frameworks, such as the Theory of Planned Behavior, to emerging markets. This comparative analysis not only enhances the generalizability of the findings but also underscores the distinctiveness of consumer behavior in Syria, contributing to the broader discourse on sustainable consumption in developing economies.

In conclusion, this dissertation aims to deliver a comprehensive framework for understanding the factors driving organic food consumption in Syria. By addressing the interplay between behavioral, cultural, and economic factors, it provides actionable insights to support the development of the organic food sector in Syria. The study's outcomes are expected to guide policymakers and marketers in fostering sustainable consumption practices and advancing the organic food industry in a way that aligns with the unique needs and aspirations of Syrian consumers.

3 LITERATURE REVIEW

3.1 Introduction

This chapter is dedicated to reviewing the relevant literature. It begins with giving an overview of the current study's variables, including demographic factors, actual purchase behavior (PB), Subjective Norms (SN), Environmental Concerns (EC), health-concern (HC), perceived Price (PC), safety concern (FS), and Brand concern (BC). It then explains the theory of planned behavior (TPB) that represents the theoretical foundation of the current study. The chapter also includes a section for reviewing and criticizing recent related studies to understand more about the academic gaps related to the current topic. The associated studies section is then followed by a team dedicated to the hypothesis's development. At the end, the conclusion section summaries and aggregates the chapter.

This literature review chapter aims to critically analyze and synthesize existing knowledge and research on organic food purchase drivers in Syria. The literature review assists in identifying the gaps in current knowledge and highlights areas where further research is required. It provides the research context and demonstrates the research question's significance and relevance. Moreover, it helps establish the theoretical framework by investigating and criticizing the existing concepts and theories related to the topic. Generally, this chapter represents a foundation for the research and assists in situating the research within the broader scholarly debate.

3.2 Review of Organic Food Purchase Drivers

The tendency to switch consumption behaviors from conventional to ecological food products or organic food has largely been due to the claims that organic crops are grown in eco-friendly and sustainable environments. Businesses try to figure out trends and how purchase behavior is shaped to reach the people most likely to buy their products in the most cost-effective way possible. It is essential to understand the various influences To understand how consumers shape their organic food purchase behavior. This section explores several purchase influencers, including demographic factors (age, gender, education, and income), purchasing behaviours (the dependent variable), subjective norms (SN), environmental concerns (EC), health concerns (HC), Price consciousness (PC), food safety (FS), and brand awareness (BA).

Demographic factors: Demographic factors are "socio-economic characteristics of a population expressed statistically such as age, sex, income level, religion, marital status, occupation, education attainment level, and birth rate." (Holmes et al., 2006, p. 12). Accordingly, these

demographics describe the populations and factors that permit populations to be segmented and observed as exclusively different or similar.

Some researchers found that socio-demographic attributes were influencers not only on behaviours but also on the strength of the attitude-buying behaviours relationship. For example, Dominici et al. (2021) found that socio-demographic attributes, including age, gender, marital status, income, education, and household size, influence online food purchasing behaviours. Sana et al. (2018) opines that organic food customers are often families with small children, highly educated men, wealthy individuals, and healthy people.

Some researchers focused on studying how gender affects purchase behaviours. For example, Lockie et al. (2004) found that more women than men showed a positive attitude toward organic foods. Similarly, Stobbelaar et al. (2007) observed that girls showed more positive towards organic products than boys. On the contrary, Sana et al. (2018) noticed that more men buy organic food than women in Pakistan and attributed this trend to the men's responsibility as household heads and men's higher level of concern for safe food. However, some other scholars found no effects of some of the gender factors. For example, Singh and Verma (2017) found no significant differences between males and females in their buying behaviours toward organic food products. Similarly, Yazar and Burucuoglu (2019) conducted a binary model comparison and found differences in the purchase intentions of females and males toward organic food. This articulation reflects the contradictions among scholars in terms of how gender affects purchase behaviours.

Some other researchers focused on studying how age affects purchase behaviours. Yadav and Pathak (2017) also reported that age was related to organic food purchase intention. Sana et al. (2018) pointed out that the age group 31-40 is inclined to buy with the highest frequency in purchasing organic products, followed by the 41-50 age group and above. This articulation shows the role of age in purchasing organic food and that younger consumers tend to purchase organic food at a higher frequency.

While some other researchers paid more attention to studying the role of income and how it affects the consumer's purchase behaviours, income is still relevant since places with lower per capita income have lower per capita use of organic food (The World of Organic Agriculture. Statistics and Emerging Trends 2020, 2020), as it is expensive (Khan et al., 2022). Dangi et al. (2020) observed differences in factors of importance and perception between emerging economies and high-income economies. Li and Xin (2015) reported a relationship between income, where consumers with middle to high-income incline more toward organic food

purchases. (Sana et al., 2018) also showed that income strongly impacts consumers' willingness to pay for organic food products. Conversely, Dangi et al. (2020) argued that shopping location, organic brand knowledge, label, and positive beliefs are more impactful factors than income regarding organic food purchases. This articulation shows income's role in determining organic food's purchasing behaviours. However, several researchers believe that other factors seem more important than income.

In terms of education, education is another critical factor affecting organic food purchases. Higher education makes consumers more interested in purchasing organic foods than less education (Singh & Verma, 2017). Education, motivation, or other technical skills can determine the ability of a consumer to seek and recognize various information sources, such as the Internet and food labels, in addition to the ability to interpret this information (Aslihan Nasir & Karakaya, 2014; Dangi et al., 2020). Therefore, education has been seen to drive sustainable behaviours (Schäfer et al., 2011). Most previous studies found a positive relationship between education and organic food consumption. Sana et al. (2018) observed that education level significantly affects consumer willingness to pay for organic food products. Li and Xin (2015) reported a relationship between education and organic food purchase, where consumers with higher education certificates inclined more toward organic food purchases. A few studies have reported a negative relationship (Rimal et al. 2005, 2005; Thompson & Kidwell, 1998; Wilkins & Hillers, 1994). It seems that higher education makes consumers more inclined towards organic food purchases.

In short, demographic factors such as gender, age, income, and education are critical factors in organic food purchases. However, results differ from one study to another and from one country to another. These contradictions call for more studies to examine the influence of demographic factors on the actual buying behaviours of consumers in Syria.

Purchasing Behaviour (PB): The connection between intentions and behaviours has been reported in various fields throughout the literature (Mohammed, 2021; Sheppard et al., 1988). It is argued that when behaviours exhibit no severe control problems, they can be predicted and calculated from intentions with remarkable accuracy (Ajzen, 1991). Accordingly, willingness or intentions are significant predictors of actual buying behaviours (Ajzen, 1991), and intention to purchase organic foods is a prerequisite of the actual purchase behaviours (Singh & Verma, 2017).

Accordingly, it is essential to shed light on both terms. In general, consumer behaviours; involves analyzing the underlying motivations and factors that drive individuals to choose

specific products and services. It encompasses the study of purchasing patterns, habits, and various aspects of people's decision-making processes. This field is of interest not only to marketers but also to professionals from diverse disciplines, such as psychologists, economists, biologists, and chemists. Several categories are employed t classify the various aspects of consumer behaviours (North Wales Management School, 2022). Purchase behaviours refers to a consumer's decisions leading up to a purchase. It initiates when the consumer experiences a need or desire to fulfill (Hanaysha, 2018).

Gaining a comprehensive understanding of consumer behaviours is indispensable for marketers. By delving into the reasons behind people's choices between different products or services, marketers can achieve the following several advantages they can determine the preferences of consumers; by studying consumer behaviours, marketers can identify the specific products or services that individuals desire or, equally important, the ones they do not prefer. They can also shape marketing strategies and campaigns; marketers can mold their marketing strategies and campaigns by leveraging insights gained from consumer behaviours research. This strategy enables them to influence consumer behaviours that aligns with their business objectives. Additionally, they can refine marketing efforts; through consumer behaviours analysis, marketers can unearth new customer demographics, enhance their messaging techniques, and forecast future market trends. This information allows them to adjust their marketing initiatives to better resonate with their target audience and stay ahead of emerging market dynamics (North Wales Management School, 2022).

The intention is the instant antecedent of the purchase behaviours (Ajzen, 1991). Intention is defined as the strength of the mind to think in a specific manner as a means to purchase. It is characterized by the individual's readiness to complete a specific behaviours (Ajzen, 1991). Intention also denotes an individual's commitment, plan, or decision to achieve a particular goal or perform an action (Wang et al., 2019).

Consumers who intend to purchase particular products show more significant degrees of actual purchasing than consumers who show a lack of intention to buy, as argued by Brown et al. (2003). Intent to purchase organic food positively influences purchasing behaviours, as reported by several studies (Budhathoki & Pandey, 2021; Singh & Verma, 2017; Tarkiainen & Sundqvist, 2005; Wee et al., 2014). This claim reflects the role of purchase intentions in pushing customers to involve in actual purchase behaviours. Therefore, marketers commonly make marketing decisions for new products based on purchase intentions and willingness to buy.

An individual's decision and intentions to buy are influenced by various factors that illustrate various consumer objectives and are different in different circumstances. Why do individuals purchase organic food products? Throughout the literature, there is a clear consensus of the same reasons despite the differences in the preferences order in the demographic and specific cultural factors. The main reasons are health concerns and environmental concerns. This claim was supported by previous studies years ago (Tregear et al., 1994) and has endorsedorted by several following studies (Singh & Verma, 2017).

Influential factors Organic food purchases are categorized differently throughout the literature. For example, Wang et al. (2019) argued that factors influencing consumers' intention to buy could be product features, the perception of other consumers, or the perception of the manufacturing country, which usually originates from quality concerns. Anne-Laure et al. (2019) ensured that cultural differences and demographic factors influence organic food buying. Al-Abarth (2021) the determinants of intention to buy can be grouped into the economic-related, functional, marketing mix, personal, psychological, social, and cultural factors. Svecova and Odehnalova (2019) referred to moral aspects, health concerns, and environmental concerns as the most frequently studied factors.

Dangi et al. (2020) studied various categories of factors, including socio-demographic factors such as education, gender, values, income, and culture, and knowledge and awareness; product-related factors such as eco-labels, origin, traceability, food safety, naturalness; supply-related factors such as brand, nutrition appearance, price, availability, and assortment, lack of government support; and consumer psychographics related factors such as health, environment, social, animal concern, trust, and experience.

Wankhede and Rajvaidya (2021) grouped the influential factors into environmental-related factors such as health concern, safety, environmental concern, and quality; facilitating factors such as ease-of-use and security concerns, promotions, availability; as well as social factors such as hedonic and social acceptance. Sana et al. (2018) described that willingness to buy organic food depends greatly upon health, attitudes, subjective norms, knowledge, availability, and labeling & certification and is less affected by perceived price, culture, and environmental concerns.

In short, consumer behaviours is one of the most challenging areas in marketing. Many things, including education, gender, values, income, culture, knowledge and awareness, eco-labels, origin, traceability, food safety, naturalness, brand, nutrition appearance, price, availability,

assortment, lack of government support, health, environment, social, animal concern, trust, and experience influence consumer behaviours.

Subjective Norms (SNs): Subjective norms (SNs) refer to the perceived social influence/pressure to perform or not a specific behaviour (Ajzen, 1991), such as to buy or not to buy organic food. SNs indicate individuals' perceptions about how their reference groups will see them if they engage in a particular behaviour. McClelland's (1987) theory of needs claims that individuals have a proclivity to show conduct that their reference groups appreciate as they seek partnerships and group linkages. SNs are integral to the TPB as they shape an individual's behavioural intentions by reflecting social influences and perceived societal expectations. SNs are established by an individual's normative ideas and expectations of others, as well as the individual's drive to adhere to those beliefs (Fishbein & Ajzen, 1975). In this vein, Kang (2010) believes that SNs are the amount individuals are aware of or influenced by a prominent referent's judgments about how they should behave. SNs are integral to purchase behaviours, as purchase behaviours is a function of purchase intention, which, in turn, is a function of subjective norms (Polonsky et al., 2012). Therefore, an individual who perceives sturdier SNs about the consumption of organic food will have, in all likelihood, greater intent to purchase organic food (Chaplin & John, 2010). Thus, subjective norms are the sum of normative ideas and motivation to act (Fishbein & Ajzen, 1975).

Thus, SNs can be identified as whether individuals approve or disapprove of organic food purchase behaviours. They represent a vital part of the TPB and correlate to a person's beliefs about whether peers and people around him think they should engage in the behaviours.

Environmental Concern (EC): Consumers' concern for the environment is central to environmental research and implies a direct association with environmentally friendly behaviours (Yadav & Pathak, 2016). Environmental concern refers to "the degree to which people are aware of problems regarding the environment and support efforts to solve them or indicate the willingness to contribute personally to their solution" (Dunlap et al., 2002, p. 482).

Environmental, social, and economic sustainability are central to organic farming (Stockdale & Watson, 2008). Much literature on the relationship between the environment and organic food consumption exists. Organic food represents a transition towards more sustainable production (Seyfang, 2006). Organic food is considered an environmentally favorable option and is included in green consumption (Kose & Kircova, 2021). Organic food is perceived to have a lower environmental effect (J. Wang et al., 2020). Environmentally and socially conscious consumers are assumed to buy more organic food as a sign of interest in natural farming

procedures (Grunert & Juhl, 1995). Lifestyles of health and sustainability that portray a conscious lifestyle evolve as interest in consumerism's environmental and social repercussions grows (Sung & Woo, 2019). According to this lifestyle, eco-friendly lifestyles of health and sustainability followers are conscious of the environment, living in an environmentally responsible manner, utilizing ecologically friendly items (Park, 2017), and regularly consuming organic foods (Higuchi & Dávalos, 2016).

Health Concerns (HC): Health is one of the significant motivating factors of organic food consumption (Köse & Kırcova, 2021). Organic food involves various health benefits. Nevertheless, no clear proof exists about how conventional and organic foods vary regarding nutritional content (Bourn & Prescott, 2002; Forman et al., 2012). Although the health benefits of organic food are commonly challenging to measure (Shafie & Rennie, 2012), and there is no clear proof that conventional foods are less healthy than organic food, though, consumers believe that organic foods are more nutritious since they are free of chemicals (Chen, 2007; Prada et al., 2017). Organic food consumers take more responsibility for their health and are more inclined to practice preventative health measures (Schifferstein & Oude Ophuis, 1998).

Health consciousness is "the degree to which health concerns are integrated into a person's daily activities" (Jayanti & Burns, 1998). It refers to how health concerns are unified into people's daily activities. Since health consciousness causes healthy nutrition (Shin & Mattila, 2019), health consciousness affects organic food purchase intention (S. Y. Hsu et al., 2019). Health consciousness is considered one of the substantial determinants for buying organic food as consumers perceive organic food as healthier, nutritious, and safe (Liang & Lim, 2020). Customers will be more favorable about purchasing organic items if they are more worried about their health (Paul & Rana, 2012). Organic foods are generally perceived as healthier than conventionally grown foods, and health concern is considered one of the significant factors motivating the consumer's attitude and intention toward purchasing organic foods (Yadav & Pathak, 2016).

Price Consciousness (PC): Price consciousness refers to people's tendency to spend time and energy looking for the most significant discounts on (grocery) items (Lichtenstein et al., 1993). One of the critical factors of organic food consumers' behaviours is high-priced. Organic food is well-known as more expensive than conventional food. Organic food products are known to be more costly comparable to non-organic food products (Khan et al., 2022). Overall, the difference in price between organic and conventional food is significant, with organic food

costing up to 100-170 % more. Similarly, in Malaysia, organic goods cost 50-300 percent more than conventional foods, comparable to neighboring Thailand and China (Chekima et al., 2019).

Previous TPB research mainly operationalized perceived behavioural control broadly by investigating how easy or difficult it is to do or not conduct a particular activity and not explicitly point or direct at the barrier (Chekima et al., 2019). It also was indicated that several factors could present a barrier, such as a lack of skills, time, and economic variables (Ajzen, 1991). Accordingly, an individual's financial resource, reflected in their capability (perceived self-efficacy) to pay, is essential when investigating green consumption (Chekima et al., 2019). Prices were reported as a remarkable obstacle that hinders organic food purchasing decisions (Soroka et al., 2021). Certified organic foods have higher prices than conventional foods. Thus, price becomes important in organic food marketing (Singh & Verma, 2017).

Economic-related factors represent the framework of any purchasing intention (Al-Abarth, 2021). Consumers purchase commodities that they can afford. If the organic product prices are very high, and the consumers cannot afford them, they may not be able to purchase them. Additionally, Consumers are assumed to purchase organic food if the benefits of organic food outweigh the costs of purchasing (Pang et al., 2021). In the protection motivation theory, response costs refer to any expenses related to taking the adaptive coping response, including monetary and non-monetary charges, such as financial costs and effort, as well as time taken to carry out the particular action (Wang et al., 2019).

Food Safety Concerns (FC): Food safety is correctly handling, storing, and preparing food to safeguard a person and reduce the risk of contracting foodborne infections (Chan et al., 2022). Several risks arise from a lack of food safety standards in everyday life. Eating unclean and contaminated food, drinking harmful chemicals or germs, and eating unwashed vegetables and fruits with high proportions of pesticides cause foodborne illnesses (Foodborn Illness, 2012). Foodborne infections might involve a devastating impact on health, ultimately causing hospitalization and death. According to the Compendium of Environment Data, food poisoning has upsurged to frightening percentages, with the highest occurrence rate of food and vector-borne disease at 47.3 instances of food poisoning for every 100,000 inhabitants (Chan et al., 2022). Accordingly, production process transparency is essential, as is food safety, which is considered primordial when purchasing organic food (Anne-Laure et al., 2019).

Organic food involves that it does not contain any residues or does not contain non-organic components. Organic foods are developed by different methods, away from fertilizers, chemicals, and pesticides (S. Kumar et al., 2022). Natural foods refer to food items that have

not gone under any chemical alteration or synthesis action by any means (Kuchler et al., 2020). Most consumers think that food residues cause diseases. Therefore, the traceability of all stages of the supply chain that ensures the safety of organic food is an important consideration (Waqas & Hong, 2019).

Brand Awareness (BA): Customers will probably choose this brand when the product becomes more credible and develop intentions to buy it (Al-Abarth, 2021). The brand is identified as a constant and clearly stated promise to deliver a unique, relevant, and focused benefit that distinguishes an offering from competitors. Branding aims to build preference by overseeing what consumers expect from the brand. This aim entails establishing a brand strategy that sets guidelines and rules to fulfill the brand owner's objectives and goals (Jeevan & Bhargav, 2016). Brand directly affects perceived quality, and with some products, it has an even more significant effect on [perceived] quality than its physical characteristics (Vraneševic' & Stančec, 2003). A good brand reputation is essential for companies to maintain a competitive edge. Corporations with solid brand reputations possess higher awareness levels, favorable image connections, and lower risk perceptions (Ryan & Cassidy, 2018). By drawing on the signaling theory (Boulding & Kirmani, 1993), brand reputation and image represent critical external cues as they can direct consumers when evaluating a product, eventually impacting their purchase intention. Brand reputation can help consumers make choices without intrinsic signals (Román & Sánchez-Siles, 2018). According to the behavioural reasoning theory, brand reputation could be an essential external cue influencing the "different, distinct, and systematic psychological processes, or paths" in people's decision-making (Westaby, 2005, p. 103). Media sources are used to rank brands, likely impacting customer perception. This capability is true because, in some instances, brand reputation, rather than total satisfaction, might significantly impact consumer loyalty and purchase intent (Ryan & Cassidy, 2018).

From the customer's perspective, credibility leads to the belief that the brand is trustworthy and honest. Consumer trust in a brand's efficacy and knowledge has been closely connected to brand internationalization, resulting in a favorable brand image (Sekhar et al., 2022). Globalization has been known as a big game changer for the market during the last decade. Past research on developed and developing markets has revealed several facets of how brand globalization influences customers' purchasing intentions (Mandler et al., 2021). Personal experiences and expertise are used to determine a brand's globalness. They have an impact on businesses' marketing techniques as well as how customers receive and spread information.

This section reviewed several factors, including demographic factors, purchasing behaviours as the dependent variable, and several influencing factors, namely, subjective norms, environmental concerns, health concerns, price consciousness, food safety, and brand awareness. These variables together contribute to a comprehensive understanding of consumer behaviours regarding purchasing decisions. Demographic factors, including age, gender, education, and income, have long been recognized as influential factors in consumer behaviours studies. They provide insights into the diverse characteristics and preferences of different consumer segments. SNs play a significant role in consumer decision-making processes. They reflect individuals' social pressures, opinions, and expectations from their reference groups, such as family, friends, or colleagues. These norms can influence consumers' inclination to conform to societal expectations or adopt certain purchasing behaviours. In recent years, EC has gained prominence because consumers become more aware of the ecological impact of the available choices. How far individuals prioritize environmental sustainability in purchasing decisions can prominently influence their behaviours, comprising a willingness to pay for premium eco-friendly products. HC is another crucial variable that influences consumer behaviours. As people become more conscious about their health, they often prioritize products closely aligned with their well-being, gravitating towards choices that promote better health and vitality. HC can significantly impact consumers' attitudes and choices in the marketplace. PC reflects consumers' sensitivity to the cost of products and their tendency to seek value for money. Individuals with higher price consciousness may be more inclined to compare prices, seek discounts, or opt for lower-priced alternatives. This variable can be pivotal in understanding consumer behaviours about affordability and perceived value. FS is an essential factor that influences consumer choices. Concerns about foodborne illnesses, product quality, and the integrity of the supply chain can significantly impact purchasing behaviours. Consumers may prioritize products with trustworthy certifications, transparent sourcing practices, or reputable brands prioritizing food safety. BA is a critical variable encompassing consumers' familiarity, recognition, and knowledge of specific brands. Robust brand awareness influences consumers' perception of product quality, reliability, and trustworthiness, resulting in repeated purchases and brand loyalty. In short, this section examined multiple variables that contribute to a holistic understanding of consumer behaviours and purchasing decisions. Demographic factors, subjective norms, environmental concerns, health concerns, price consciousness, food safety, and brand awareness collectively shape consumers' attitudes, preferences, and choices.

3.3 Hypotheses Development

The current study aims to test the relationship between the independent variables: SN, EC, HC, PC, SC, and BA, and actual PB as the dependent variable. This section is dedicated to developing the corresponding hypotheses; and reveals how these hypotheses are developed through a critical literature review and justification of the relationships. Figure 2.1 displays the research model and the proposed hypotheses. The alternative hypotheses are as follows:

1. H1: Subjective norms significantly positively influence the purchasing behaviours of organic food in Syria.
2. H2: Environmental concerns significantly influence the purchasing behaviours of organic food in Syria.
3. H3: Health Concerns significantly positively influence the purchasing behaviours of organic food in Syria.
4. H4: Price Consciousness significantly influences the purchasing behaviours of organic food in Syria.
5. H5: Food Safety has a significant positive influence on the purchasing behaviours of organic food in Syria.
6. H6: Brand awareness significantly influences the purchasing behaviours of organic food in Syria.

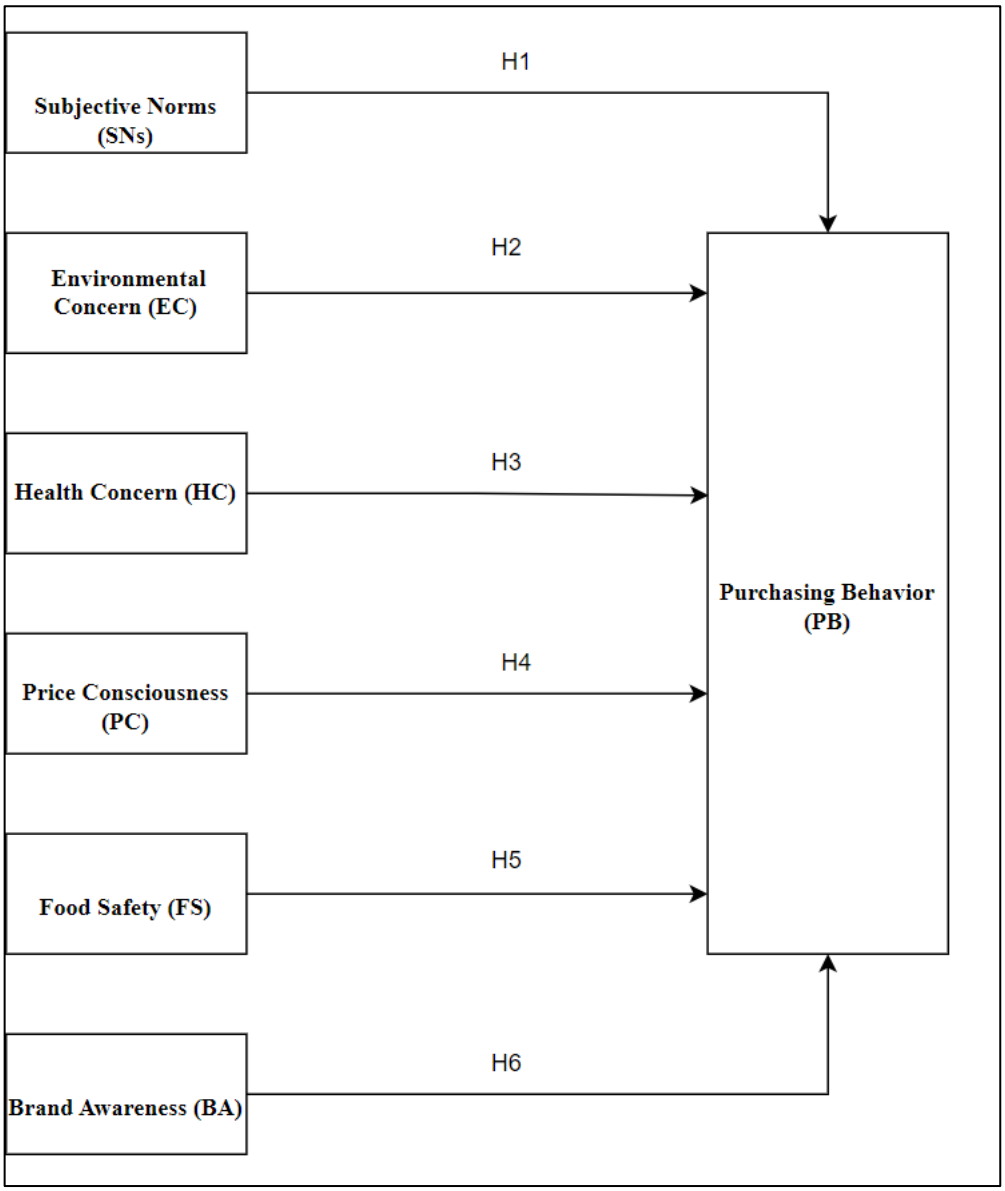

Figure 1: The Research Model

The relationship between SNs and PB has been explored and assessed throughout the literature. A number of empirical studies shows that SNs strongly predict organic food purchases. For instance, Boobalan et al. (2021) observed that SB is the most critical predictor of organic consumption and other relevant situations. According to Hofstede's (1984) claim, the role of social influence is higher for collectivistic cultures such as Syria than for individualistic cultures such as the USA (cited in Muthukrishna & Schaller, 2020). People in collectivistic countries value others' opinions more while indulging themselves in any consumption, unlike those in individualistic countries (Gilboa & Mitchell, 2020). It indicates that one's norm in a collectivistic culture such as Syria was built by the people caring for them. However, people in individualistic cultures such as the USA make their norms; also, they show less importance to others' opinions regarding any decision (Boobalan et al., 2021).

There is considerable literature on the relationship between SN and organic food consumption. Most of the relevant studies reported a significant positive relationship between SNs and consumers' intention to purchase organic food (Al-Swidi et al., 2014; Anh et al., 2017; Asif et al., 2018; Kusumaningsih et al., 2019; F. Pacho, 2020; Palmero & Montemayor, 2020; Pang et al., 2021; Saleki et al., 2020; Wong & Aini, 2017). Few studies did not observe any relationship between SNs and purchase intention (e.g., Yadav, 2016; Zayed et al., 2022). In explaining this issue, Zayed et al.' s (2022) believe that organic food purchase intention is influenced by consumers' attitudes and environmental concerns, perceived behavioural control, and health consciousness rather than SNs.

Given the importance of SNs and the contradictions in the results of various studies, it is imperative to examine them mainly in the organic food purchase context rather than the purchasing intention stage, which would yield a misleading result. Accordingly, more research is required to understand how SNs influence consumers' purchase behaviours, especially in Syria. Thus, based on the above articulation, we posit the following alternative hypothesis:

H1. Subjective norms influence the buying behaviours of organic food in Syria.

The relationship between EC and PB has been explored and assessed throughout the literature. Lifestyles of health and sustainability consumers are described as the organic market's engine room (Mitchell et al., 2010). Environmental consciousness influences the perceived value of organic food (De Toni et al., 2018). Furthermore, ecological value is linked to cognitive and emotional aspects (Koller et al., 2011). It was also discovered that the ecological welfare feature of organic food influences cognitive and emotional attitudes toward organic food (Kim et al., 2013). The number of environmentally concerned customers has grown in recent years, and consumers are increasingly likely to reduce environmental issues as a sign of being a good role model (Budhathoki & Pandey, 2021).

Previous studies documented a significant positive relationship between EC and consumers' intention to purchase organic food. In their comparative study in Pakistan, Turkey, and Iran, Asif et al. (2018) found that the results vary from country to country, and the relationship of the environmental concern with intention to purchase varies across different contexts. However, numerous studies found that EC is a predictor of consumers' purchase intention. For example, environmental consciousness directly and positively impacts consumers' intention to buy organic food product as confirmed by Prakash et al. (2018) and Yadav and Pathak (2016) in India, Su et al. (2022) in Pakistan, Zayed et al. (2022) in Egypt, and Zheng et al. (2021) in Bangladesh. Additionally, a positive impact of environmental concern on the actual purchase

decision has been reported by Kumar et al. (2022) in India, and Zheng et al. (2021) in Bangladesh. On the other side, Sana et al. (2018) in Pakistan noticed that EC has less effect or negative impact on the willingness to pay to purchase organic food.

Given the importance of EC and the contradictions in the results of various studies, examining it, particularly in the organic food purchase context rather than the purchasing intention stage, would yield a misleading result. Accordingly, more research is required to understand how HC influences consumers' purchase behaviours, especially in Syria. Thus, based on the above articulation, we posit the following alternative hypothesis:

H2. Environmental concerns influence the purchasing behaviours of organic food in Syria.

The relationship between HC and PB has been explored and assessed throughout the literature Consumers' impression of organic products being healthier than conventional alternatives was one of the most often reported reasons for choosing organic items REF. Consumers constantly buy sustainable items to prioritize health, to be a member of a social group, to separate themselves from others, and to fulfill the demand to test out new technology. Organic food is consistently perceived as healthier than conventional food by consumers in Asia Pacific Region and growing nations such as India and China (Singh & Verma, 2017). Similarly, consumers in the Western and Eastern worlds appear to be aware of the broader benefits of organic foods as a nutritious diet with a beneficial environmental effect (Frewer & Trijp, 2007).

Previous research has shown that **HC** significantly influences organic food purchasing intention (Köse & Kırcova, 2021; F. T. Pacho & Batra, 2021). Yadav and Pathak (2016) found that health consciousness positively influenced consumers' intention to purchase organic food. Zheng et al. (2021) revealed that health consciousness significantly impacts purchase intention and, later, the actual purchase behaviours of organic food. Wong and Aini (2017) observed that the respondents in Malaysia seemed to be concerned about their health and observed a relationship between health consciousness and purchase intention. However, health consciousness was not a good predictor of purchase intention because of other factors such as price, meat characteristics, perceived control behaviours, and subjective norms. Unexpectedly, Zayed et al. (2022) demonstrated that the purchase intention of organic food is influenced by consumers' attitudes and environmental concerns rather than e-WOM, subjective norms, perceived behavioural control, and health consciousness. Similarly, Waqas and Hong (2019) revealed that health consciousness was insignificant to purchasing intentions of organic food.

Given the importance of HC and the contradictions in the results of various studies, it is imperative to examine HC, particularly in the organic food purchase context, rather than the purchasing intention stage, which would yield a misleading result. Accordingly, more research is required to understand how HC influences consumers' purchase behaviours, especially in Syria. Thus, based on the above articulation, we posit the following alternative hypothesis:

H3: Health Concern influences the buying decision of organic food in Syria.

The relationship between PC and PB has been explored and assessed throughout the literature. Persons with high degrees of price sensitivity are less likely to enforce their environmental knowledge and opinions on their desire to engage in green consumption. One of the primary reasons for people's avoidance of organic foods is high costs (Hack, 1995). In this vein, it was observed that organic foods are unpopular in underdeveloped nations due to their high costs (Willer et al., 2019).

Price consciousness was found to have a direct and adverse relationship with the purchase of organic food intention; for example, Katt and Meixner (2020) in US , Zheng et al. (2021) in Bangledsh, Bolat et al. (2020) in Turkey. Aung and Chotiyaputta (2020) in Myanmar, Saleki et al. (2019) in Malysia, Wang et al. (2020) in China, Sana et al. (2018) in Pakistan, noticed that perceived expensiveness has negative impact on willingness to pay to purchase organic food. All these studies indicated that consumers are less likely to buy without positive purchasing intentions due to the strong constraint of high prices, which depicts the non-translation of purchase intention into actual buying behaviours.

In contrast, higher price no longer represents one of the primary barriers to organic food purchase in some for some consumers. Particular consumer segments in Croatia (Radman ,2005) and consumers in Czech Republic (Svecova & Odehnalova, 2019) and in Australia (Smith & Paladino, 2010) are willing to pay high prices to obtain high-quality food. Krystallis and Chryssohoidis (2005) revealed that willingness to pay is driven by food quality, safety, and trust in certifications more than price.

Customers tend to overstate or understate their willingness to pay, implying that the proportion of explained variance may be more significant or lower. The actual behaviours must be monitored/investigated for an accurate indicator (Kovalsky & Lusk, 2013). Consumers assume they cannot afford organic food at the purchase stage, and some believe that the market customarily charges more for healthy food. Thus, their reported WTP does not represent their proper judgment (Chekima et al., 2019).

Given the importance of PC and the contradictions in the results of various studies, examining it, particularly in the organic food purchase context rather than the purchasing intention stage, would yield a misleading result. Accordingly, more research is required to understand how HC influences consumers' purchase behaviours, especially in Syria. Thus, based on the above articulation, we posit the following alternative hypothesis:

H4: Price Consciousness influences the purchasing behaviours of organic food in Syria.

The relationship between FC and PB has been explored and assessed throughout the literature. Consumers buying organic products are more proactive about the physical risks of food consumption. Therefore, food safety is a crucial reason for choosing organic foods. The consumption of organic products mitigates the hazards of consuming chemically processed foods (Zheng et al., 2021).

Previous research has shown that FC significantly influences organic food purchasing intention. Trust in quality standards and integrity influences organic food purchase intention (Anne-Laure et al., 2019). Food safety consciousness impacts purchase intention and, later, the actual purchase behaviours of organic food (Zheng et al., 2021).

Owing to the health benefits of organic foods, safety concerns have been recognized as a significant motivator of purchase intention (Hsu et al., 2016; Prentice et al., 2019; Waqas & Hong, 2019; Yazar & Burucuoglu 2019; Bolat et al. 2020).

Given the importance of FC and the lack of evidence regarding its impact on organic food actual purchase decision, more research is required to understand how FC influences consumers' purchase behaviours, especially in Syria. Thus, based on the above articulation, we posit the following alternative hypothesis:

H5: Food Safety Concern influences the purchasing behaviours of organic food in Syria.

The relationship between BA and PB has been explored and assessed throughout the literature Brand globalization plays a vital role in driving marketing activities. It anticipates and assesses buying intent (Mandler et al., 2021). Moreover, ambiguity in food labels regarding origin, traceability, and quality can make consumers suspicious and increase the gap between intention and the actual purchase (Dangi et al., 2020). Additionally, it is argued that shopping location, organic brand knowledge, and label and positive beliefs towards organic foods are more impactful factors than income (Dangi et al., 2020).

The literature provides evidence that brand reputation significantly impacts customer purchasing decisions as customers choose companies with a good reputation and directly link to values that are important to them (Ryan & Cassidy, 2018).

Sekhar et al. (2022) claimed that purchase intent in India is positively connected to brand credibility, and customer value mediates the relationship between brand credibility and purchase intentions. Prakash et al. (2018) observed that in India brand loyalty, brand consciousness, hedonistic shopping consciousness, and price consciousness significantly impact the purchase intention of organic food. Siyal et al. (2021) demonstrated that green brand positioning has a positive and significant relationship with green purchase intention. The relationship between attitude towards green brands and green purchase intention is significantly moderated by green brand knowledge. The effect on green purchase intention would be more substantial when consumers know strongly about green brands. Ryan and Cassidy (2018) found that consumer reasoning (reasons for and reasons against) has significant effects on attitude towards consuming organic food under both low and high brand reputation conditions, and attitude towards consuming organic food has significant effects on intention to consume organic food under low and high brand reputation conditions. Hyun Baek and Whitehill King (2011) found that brand credibility significantly impacts purchase intention by enhancing perceived value for money, perceived quality, and information costs saved, as well as reducing perceived risks. They also found that the influence level of brand credibility on purchase intention changes in the context of hedonic and utilitarian services in the United States. Sana et al. (2018) noticed that the willingness to buy organic food in Pakistan depends on availability, labeling & certification.

The previous section revealed that brand awareness might be an extra rational reinforcement for consumers when shaping their attitudes towards organic food consumption and purchase. It was expected that consumers with strong brand awareness stimuli would associate more reasons for consuming organic food with the target brand. In this study, Consumers who consider a brand more (or less) trustworthy are likely to have more (or fewer) reasons to purchase organic food.

Given the importance of BA and lack of evidence on how BA particularly in the organic food purchase context would impact the purchase behaviour. Accordingly, more research is required to understand how HC influences consumers' purchase behaviours, especially in Syria. Thus, based on the above articulation, we posit the following alternative hypothesis:

H6: Brand awareness influences the buying decision of organic food in Syria.

3.4 Related Studies

This section is dedicated to reviewing the related studies that attempt to investigate what drives consumers' purchasing decisions and makes them buy organic foods in developing countries. The focus is on the studies investigating the relationship between subjective norms, health concern, environmental concern, brand, price, and food safety as independent variables and the actual purchase behaviours or purchase intention as the dependent variable. Since intention is an essential indicator of consumers' actual purchasing behaviours – based on TPB – studies that investigated the predictors of purchase intention are also considered.

The review is divided into two sections. The first section reviews the related studies examining the effect of subjective norms, health concerns, environmental concerns, brand, price, and food safety as independent variables on purchase behaviours. The second section reviews the related studies that examine the effect of subjective norms, health concerns, environmental concerns, brands, price, and food safety as independent variables on purchase intention.

In the developing countries, the effect of various factors on the actual purchase behaviours has been examined by several researchers:

For example, Khan et al. (2022) targeted a developing country, namely Pakistan. They aimed to assess the influence of various motivational factors on consumers' actual behaviours regarding organic food purchase and consumption. Based on self-determination theory (SDT) and TPB, the researchers studied how a favorable attitude among consumers can be translated into positive purchase intention and actual buying behaviours. A close-ended and self-administered questionnaire was developed and distributed among a purposive sample of 1265 Pakistani households. After a preliminary analysis, 787 valid responses were obtained. The data were analyzed using Partial least squares structural equation modeling (PLS-SEM) using SmartPLS3. To test the proposed hypotheses, the researcher used a 5,000 boot-strapping method. The results revealed that based on TPB, attitude, subjective norm, and perceived behavioural control appeared to have a substantial influence.

In contrast, the relationship between attitude and purchase intention was moderated by trust. Based on SDT, external and integrated regulations significantly impact consumers' attitudes, while introjected regulation and intrinsic motivation showed insignificant effects. According to the Q-square values, the combined model indicated more predictive relevance than the TPB model.

Mohammed (2021) assessed the influence of perceived values, subjective norms, and trust (utilitarian and hedonic) on purchasing intentions of organic food in Saudi Arabia as a developing country; it also investigated the link between the intentions and actual purchasing behaviours. Based on a quantitative study, a questionnaire was developed and distributed. The valid responses were 236. Partial Least Square Modelling (PLS) was used to test the various relationships among variables. Subjective norms, trust, utilitarian and hedonic values influence consumers' purchase intention.

The relationship between consumers' purchasing intention and actual behaviours was also observed. However, the study was conducted in Riyadh Province, limiting the findings' generalization. The study did not analyze the predictors in light of the socio-economic characteristics, which may impact the participants' intention and purchase behaviours.

Mandler et al. (2021) conducted a study to assess the drivers of organic food purchases among young Indians and how these intentions translate into actual purchase behaviours. The study drew upon the TPB and consumer behaviours literature to develop a model that includes five antecedents of organic food purchase intention and their relationship with purchase behaviours. Data was collected through surveys from 401 students enrolled in higher education institutions in North India and analyzed using structural equation modeling (SEM). The outcomes indicated that attitude towards organic food purchases and SNs significantly influenced organic food purchase intention and that organic food purchase intention powerfully predicted purchase behaviours. These findings have implications for organic food producers and marketers in India and internationally, as they can use this information to tailor their strategies to the specific demographic of young Indian buyers.

An additional example, Zheng et al. (2021) examined the determinants of organic food purchase behaviours among young Bangladeshi consumers. By following the TPB and previous studies, the researchers developed 11 hypotheses. A questionnaire was developed using a quantitative approach, and cross-sectional data were collected from a purposive sample of 464 young consumers. The relationships were tested by developing a structural equation model (SEM) on AMOS. Environmental consciousness, health consciousness, price consciousness, food safety consciousness, novelty consciousness, and trust are significant precursors of purchase intention and, consequently, the actual purchase of organic foods. The highest predicting power is the novelty consciousness factor, then food safety concerns.

Additionally, the relationship between purchase intention and actual purchase is moderated by price consciousness and trust negatively and positively, respectively. However, price

consciousness does not mediate the environmental consciousness and purchase intention relationship. Though the study has limitations because it surveyed young consumers who stay in metropolitan areas, the findings may differ for those living in rural and semi-urban areas and from other older age groups.

In line with the above studies, Wankhede and Rajvaidya (2021) have examined the determinants of purchase behaviours in India as a developing country. They believe contemporary consumers are more aware of their health and seek a sustainable lifestyle, pushing marketers to build new purchase behaviours models that consider the environment, society, and consumers. By following a quantitative study and developing a questionnaire, 392 Indian consumers were surveyed in only Mumbai and Pune. Therefore, based on the UTAUT model and the marketing mix elements, the researchers introduced a conceptual framework that tests the effect of environmental factors (health concern, safety, environment concern, quality), facilitating conditions (ease-of-use, security concern), promotions, availability, social factors (hedonic, social acceptance) on purchase intention and subsequently the actual purchase behaviours. They also investigated the influence of trust on the relationship between purchase intention and purchase behaviours. The findings demonstrated a significant effect of environmental factors (health concern, safety, environment concern, quality), promotions, availability, and social factor on purchase intention.

Additionally, it was found that consumers with stronger purchase intentions have more inclination towards actual purchase. However, insignificant effects of availability and facilitating conditions (ease-of-use, security concern) were observed. In a country with diverse ethnic cultures and a traditional country like India, targeting only a particular region limits the generalization of the results.

The objective of Nguyen et al. (2019) was to examine how consumers' personal and situational factors in Vietnam influence their attitude and purchase behaviours toward organic meat. The study used a validated survey to gather data from 609 organic meat consumers at four food outlets in Hanoi. The results indicated that environmental concerns, health, food safety, and knowledge of organic food influenced consumers' attitudes toward organic meat purchases. However, a positive attitude towards organic meat only sometimes led to actual purchases. The study also found that food stores' green marketing practices increased consumers' actual purchase behaviours, while high prices were a deterrent. The implications of these findings are significant for organic food producers, retailers, policymakers, and socio-environmental organizations seeking to promote organic meat consumption in Vietnam.

Lian and Yoong (2019) studied young consumers in Malaysia, a developing nation, to understand their motives for purchasing organic food. The study focused on four key motives: food safety concerns, health consciousness, affordability, and environmental concern. Purchase behaviours was measured through purchase intentions and actual purchases. A self-administered questionnaire was used to collect data from a convenience sample of 398 young consumers from Kuala Lumpur and Petaling Jaya, Malaysia. The data was analyzed using SEM, and five hypotheses were tested. The results showed that food safety concerns, health consciousness, and environmental concern significantly influenced purchase intentions of organic food, which was positively correlated to actual purchases. However, affordability had little effect on purchase intentions. Based on the findings, strategies should be implemented to enhance quality, long-term health benefits, environment friendliness, and reduce organic food pricing.

Singh and Verma (2017) sought to test the determinants of the actual buying behaviours of organic foods in India. The researchers collected and analyzed 611 valid questionnaires based on a quantitative design. Various statistical tests were performed, including ANOVA multiple linear regression, hierarchical multiple regression analysis, independent t-test, and factor analysis. The applied theories are TPB and TRA. SNs, health consciousness, and price were determinants of the consumer's attitude toward organic food. However, purchase intention is affected by these four factors along with one additional factor (i.e., availability). The actual buying behaviours was found to be affected by these five factors through attitude and pure use of intention as mediators. Moreover, behaviours was observed to be influenced by socio-demographic factors, including income, age, and education. Though, the results should be interpreted in light of several limitations. The study only considered five factors to examine the influence on buying behaviours. Factors like government regulation, advertisement, and distribution can be considered in future studies. Surveying only 611 consumers in a big country like India hinders the generalization of the results.

Also, in the developed countries, the effect of various factors on the actual purchase behaviours has been examined by several researchers:

To understand what determines the purchase of organic food in developed countries, Roseira et al. (2022) attempted to discover the differences among groups of organic food consumers in Portugal And Norway in terms of cultural dimensions. They evaluated the impact of collectivism on various purchase (intention and actual purchase) determinants. Drawing on TPB, the researcher established an additional set of variables that were expected to be related

to explaining consumer behaviours. By following a quantitative study, a sample of samples of 448 and 468 from Portugal and Norway were collected, respectively. The data were analyzed using the SEM, and the findings showed that collectivism positively impacts attitude, SN, perceived price, and EC towards organic food. The influence of collectivism on availability and HC was not observed. Additionally, attitude, SN, PP, HC, and EC have a positive relation with intention to purchase organic food, but availability had an insignificant influence on intention. In compliance with the existing literature, the study depicted that intention is positively related to purchase behaviours. A positive connection between Collectivism and Availability, and between Availability and Purchase Intention, was observed as significant for only Portuguese consumers. The study confirms the role of cultural dimensions, namely collectivism/individualism, in describing organic food consumer behaviours. The limitations are attributed to targeting younger generations, two European countries, and the fact that purchase behaviours was self-reported.

Schäufele and Janssen (2021) employ SEM on household purchase panel data to examine the relationship between values, attitudes, and behaviours. Their study is based on actual purchase data and surveying 8400 individuals in Germany. Like Singh and Verma (2017), Schäufele and Janssen (2021) have also studied the effect of various socio-demographic factors. Unlike the other studies, but similar to Nguyen et al. (2019), Schäufele and Janssen (2021) have studied the effect of various factors through the consumer's attitude, not purchase intention. The findings showed that environmental protection, healthiness, price, age, education, and income influence the purchase of organic food. The study finds a significant attitude-behaviours gap in the organic market, particularly concerning meat, frozen food, cheese, and sweets. However, the gap is less pronounced in overall organic purchases. Further analysis across different product categories indicates that although food-related values drive purchase behaviours, their relative significance varies.

Ali et al. (2021) explored the correlation between health consciousness, pricing policy, consumer trust, personal attitude, and purchasing behaviours of organic food among Chinese university students. The study also tested and underlined the moderating effect of word of mouth (WOM). The research was conducted using a quantitative method and convenience sampling, which involved survey questionnaires administered to organic food buyers in five Chinese universities from November 2020 to February 2021. A total of 335 questionnaires were collected and analyzed. The results of SEM indicated that purchasing behaviours was positively associated with health consciousness and negatively influenced by pricing policy. At the same time, personal attitude and consumer trust had no significant relationship with students' buying

behaviours of organic food. Moreover, WOM was found to have a positive moderating effect on the correlation between health consciousness and purchasing behaviours and strengthened the negative relationship between pricing policy and organic food purchasing behaviours. This study has significant implications for researchers, organic food retailers, and marketers.

Svecova and Odehnalova (2019) used an expanded version of TPB to study the effect of SN, HC, EC, personal attitude, conscious control of behaviours (price), and moral aspects on the actual buying *behaviours* through purchase intention as a mediator in the young generation in the Czech Republic. The researchers collected 403 questionnaires. The uppermost variables are SN, HC, and personal attitude. Remarkably, consumers were found to be willing to pay costly prices to obtain high-quality food, reflecting that higher price no longer represents one of the fundamental barriers to organic food purchase. The study focused on the behaviours of purchasing organic food in general and not on the purchase of different organic foods. Additionally, it is limited in terms of the target group as it only targets the young generation and more than the collected sample was needed to generalize the results.

Testa et al. (2019) conducted a study to investigate the impact of SN, perceived behavioural control, intention to buy, and organic knowledge on consumers' purchasing behaviours using actual purchase data and self-reported data from 79 Italian consumers. The findings revealed that intention to buy positively affected actual purchasing behaviours, while SN had a negative effect. Additionally, health consciousness and perceived behavioural control positively influenced consumers' attitudes toward organic foods, and organic knowledge impacted purchase intentions. However, the study has limitations regarding the small sample size of 79 Italian consumers and the generalizability of the results, as the sample was based on over 200,000 purchases.

Unsimilar to the above-reviewed studies, Dangi et al. (2020) conducted a theoretical study. They explored various literature works to identify the determinants of organic food purchase with particular reference to eco-labels and categorize the relative influence of these factors. After analyzing 91 research studies between 2001 and 2020, the total reported sample was 154,072 consumers. The determinants were grouped into four categories in terms of relatedness, time, region, and national economic status. The analysis indicated that consumer socio-demographics, psychographics, and product-related determinant categories were more pronounced than supply-related categories. HC, EC, knowledge and awareness, eco-labels, and price, followed by trust, are the greatest significant factors in organic food purchase. Though, they also found that consumers of high-income economies and emerging economies show

differences in factors of importance and perception. The study relied on limited data from each country and did not collect data from all countries. Also, the study collected data from individual and generic types of organic food research.

Table 3-1: Summary of the Related Studies Review

Study	Sample	theory	Tool	SN	EC	HC	PC	FC	BA	Socio-demographic factors	Directly	Indirectly
Khan et al. (2022)	787 Pakistani	SDT + TPB	survey	++								Yes (intention)
Mohammed (2021)	236 Saudi Arabia	TPB	survey	++								Yes (intention)
Mandler et al. (2021)	401 Indian	TPB	survey	++								Yes (intention)
Zheng et al. (2021)	Bangladeshi, 464	TPB	survey		++	++	--	++				Yes (intention
Wankhede and Rajvaidya (2021)	392 Indian	UTAUT	survey		++	++		++				Yes (intention
Nguyen et al. (2019)	Vietnam 609	Alphabet theory	survey		++	++	--	++				Yes (attitude)
Lian and Yoong (2019)	Malaysia, 398	Hierarchy of Effect Model (HEM)	survey		++	++		++				Yes (intention
Singh and Verma (2017)	611, Indian	TPB, TRA	survey	++		++	++			Age (+) education (+), income (+)		Yes (intention)
Developed Countries												

Study	Sample	theory	Tool	SN	EC	HC	PC	FC	BA	Socio-demographic factors	Directly	Indirectly
Roseira et al. (2022)	Portugal (448) And Norway (468)	-		++	++	++	++					Yes (intention
Schäufele and Janssen (2021)	Germany, 8400	TPB	Actual purchasing data + survey		++	++	--			Age (+) education (+), income (+)		Yes (attitude)
Ali et al. (2021)	China, 335	TPB	survey			++	--				yes	
Svecova and Odehnalova	Czech Republic, 403	TPB		++	+	++	+					Yes (intention
Testa et al. (2019)	79 Italian	TPB	Actual purchasing data + survey	--							yes	Yes (intention
Dangi et al. (2020)	154,072				++	++	--		++	Socio-demographic factors		

+ +significant positive relationship, -- Significant negative relationship

+insignificant positive relationship, - insignificant negative relationship

In developing countries: SNs, EC, HC, FC have a positive impact and drive consumers intention to purchase organic food. **SNs** is a predictor of purchase intention in many countries specifically in Pakistan (Khan et al., 2022), Saudi Arabia Mohammed (2021), India (Mandler et al., 2021; Singh & Verma (2017). **EC** is a predictor of purchase intention specifically in Bangladesh (Zheng et al., 2021), India (Wankhede & Rajvaidya, 2021), Vietnam (Nguyen et al., 2019), Malysia (Lian & Yoong, 2019). **HC** is a predictor of purchase intention specifically in Bangladesh (Zheng et al., 2021), India (Wankhede & Rajvaidya,2021; Singh & Verma, 2017) Vietnam (Nguyen et al. ,2019), Malysia (Lian & Yoong ,2019). **PC** is a negative influencer in Bangladesh (Zheng et al., 2021), and Vietnam (Nguyen et al., 2019) and surprisingly PC was identified as a positive influencer in India (Singh & Verma (2017). **FC** is a predictor of purchase

intention specifically in in Bangladesh (Zheng et al., 2021), India (Wankhede & Rajvaidya, 2021), Vietnam (Nguyen et al. ,2019), and Malysia (Lian & Yoong ,2019).

In developed countries, SNs, EC, HC, FC remain influentials in addition to PC. SNs have been found as an influencer on purchase intention but in a few countries, specifically in Portugal (Roseira et al., 2022), in Czech Republic (Svecova & Odehnalova, 2019). EC in Portugal (Roseira et al., 2022), in German, (Schäufele & Janssen, 2021), in Czech Republic (Svecova & Odehnalova, 2019). HC in Portugal (Roseira et al., 2022), in Czech Republic (Svecova & Odehnalova, 2019), in German, (Schäufele & Janssen, 2021), , in China Ali et al. (2021). PC in Portugal (Roseira et al., 2022) and in Czech Republic (Svecova & Odehnalova, 2019) is positive while PC is negative influecer in German, (Schäufele & Janssen, 2021), , in China Ali et al. (2021).

Age (+) education (+), income (+) has been underlined as influencers of purchase intention in developing countries, particularly in India Singh and Verma (2017) as well as in Developed countries specifically in German (Schäufele & Janssen, 2021).

In conclusion, the predictors of organic food purchase intention exhibit differences from country to another as well as differences developing and developed countries. In developing countries such as Pakistan, Saudi Arabia, and India, subjective norms (SNs), environmental concern (EC), health consciousness (HC), and food concern (FC) positively influence purchase intention. As expected, price has been underlined as a negative influencer in some regions like Bangladesh and Vietnam but surprisingly acts as a positive factor in India. While in developed countries like Germany, Portugal, and the Czech Republic, SNs and EC remain influential, though PC tends to have mixed impacts, being positive in Portugal and unexpectedly has a negative impact in Germany. Additionally, demographic factors like age, education, and income play a significant role in influencing purchase intention across both regions.

The differences in organic food predictors between developing and developed countries are not overwhelmingly distinct, except for the stronger influence of subjective norms (SNs) in developing countries. SNs appear to have a broader impact in regions like Pakistan, Saudi Arabia, and India, where social and cultural factors may play a more prominent role in shaping consumer behavior. In developed countries, factors like environmental concern EC and HC remain important, but the overall patterns of predictors show more similarities than contrasts across regions, which call for more in depth research.

Furthermore, the above review underlines several facts and uncovers research gaps in organic food research as follows:

Regarding agreement and disagreement: 1) The current study complies with all the conducted studies in developing countries and most studies in developed countries, where they only collect primary data from surveys. Just a few studies collected actual purchase data to support survey-based data. Outperforming the other studies, Schäufele and Janssen (2021) and Testa et al.(2019) collected data through two methods, actual purchase data and self-reported data through surveys. Notably, each of these two studies was conducted in a developed country 2) Similar to the current study, all of the reviewed studies are quantitative; no single study was found to be qualitative or mixed 3) Most of the studies tested the effect of different purchase drivers on actual purchase behaviours indirectly through purchase intention. They examined the indirect effects through the purchase intention as a mediator (Khan et al., 2022; Lian & Yoong, 2019; Mandler et al., 2021; Mohammed, 2021; Roseira et al., 2022; Singh & Verma, 2017; Wankhede & Rajvaidya, 2021; Zheng et al., 2021), or through the attitude as in (Nguyen et al., 2019; Schäufele & Janssen, 2021). However, similar to the current study and unlike the other studies, only Ali et al. (2021) and Testa et al. (2019) tested the direct relationship 4) aligned with extant literature, all the studies found a positive impact of intention to purchase behaviours of organic food 5) in most of the studies, TPB was used extensively to describe how individuals' intention to perform a specific behaviours is influenced by the importance of others' opinions (SN) 6) similar to the current study, all the studies are empirical except the study by Dangi et al. (2020) that was depended on the literature to collect data 7) similar to the current study, the focus of most extant studies is predominantly on organic food in general or on food products with a relatively high organic markets share, such as milk and eggs.

In terms of academic gaps: 1) the literature scares to studies that focus on measuring the direct effect of various product- and value-related factors on the actual purchase behaviours 2) This exploration shows a lack of understanding of the determinants of organic food consumption in the light of actual purchasing behaviours 3) just a few studies examined the role of sociodemographic factors in shaping the purchase intention. As observed, the studies conducted by Singh and Verma (2017), as well as Schäufele and Janssen (2021), have outperformed the other studies by analyzing the predictors in the light of the socio-economic characteristics, including income, age, and education 4) There is a scarcity of studies that target the effect of food safety and brand 5) No single study whether in developing or developed countries was found to test the current study's variables in one study. Finally, there is a geographical gap, where no single study was found focusing on Syria.

In short, these findings reveal several academic gaps. The literature needs studies that collect actual purchase data. Only a few studies have considered food safety and brand awareness. No single study, whether in developed or developing countries, was found to involve all the target variables together. There needs to be more testing of the actual purchase behaviours directly. Finally, there is a geographical gap related to Syria. These gaps require more studies on consumer purchasing behaviours, especially in Syria.

3.5 Theory of Planned Behaviours

The theory of reasoned action (TRA) (Fishbein & Ajzen, 1975) underlines the importance of anticipating human behaviours by stating that a person's behaviours is influenced by behavioural intentions, mainly attitudes toward the act and subjective standards. Thus, TRA has two components: first, the consumer's attitude toward the act, which is determined by the perceived consequences of the behaviours. Second, subjective norms result from views about the desire to act on those beliefs; it is a function of beliefs. Numerous articles on consumer behaviours and social psychology backed up these relationships (Al-Swidi et al., 2014). The theory of Planned behaviours (TPB), suggested by Ajzen (1991), is an extension of the TRA.

The TPB is a social psychological theory that seeks to explain and predict human behaviours, particularly in the context of goal-directed actions such as purchasing decisions. TPB proposes that behaviours is determined by an individual's intentions to engage in a particular behaviours. TPB comprises attitude formation, perceived behavioural control, and subjective norms. Individuals' intention to perform a specific behaviour is influenced by individuals' attitude (in the context of the current study, attitude toward buying organic food), perceived behavioural control (i.e., how far consumers perceive their controlling behaviours toward a particular action), and subjective norms (i.e., the importance of others' opinions, perceived social influence/pressure).

The role of social factors in shaping people's attitudes has attracted the interest of psychologists. TPB is a well-known model for measuring social factors such as SNs, a fundamental component of the TPB. In the context of the TPB, SNs play a crucial role in shaping an individual's intention to engage in a particular behaviours (Ajzen, 1991). According to the TPB, SN influences behaviours indirectly by impacting an individual's attitude and subjective evaluation of the behaviours. The theory postulates that if an individual perceives that the significant others (e.g., friends, family, or colleagues) think they should or should not engage in a particular behaviour, it will influence their attitude toward those behaviours and their perceived behavioural control.

TPB is also a well-known model for measuring the cognitive factors of consumers. The TPB has been used to examine a wide variety of food-related behaviours. For example, some of the studies emphasized dietary intake (Bauer et al., 2020; Paisley & Sparks, 1998), well-being food consumption (Lim & An, 2021), domestic food consumption (Vabø & Hansen, 2016), and online food delivery (Troise et al., 2020).

Since organic food is healthier, more nutritious, and tastes better, consumers are growing more interested and mindful about consuming nutritious and environmentally friendly food. As a result, people have formed a favorable attitude toward organic food consumption (Al-Swidi et al., 2014), and growing research related to organic food consumption has been conducted based on the TPB. In Particular, in describing the phenomenon of individuals' behaviours toward buying organic food, the TPB model has been employed effectively (Al-Swidi et al., 2014; Singh & Verma, 2017; Tariq et al., 2019; Wee et al., 2014).

The principle of the TPB in describing behaviours revolves around how individuals are involved in a particular behaviours through their intention to perform it (Ajzen, 1991). Accordingly, the performance of a behaviours is a function of both perceived behavioural control and intention. The intention is identified as the instant antecedent of the actual purchase behaviours. Intention is defined as the strength of the mind to think in a specific manner as a means to purchase. It is characterized by the individual's readiness to complete a specific behaviours (Ajzen, 1991). Intention is also defined as an individual’s commitment, plan, or decision to perform an action or achieve a particular goal (Wang et al., 2019).

TPB is useful in predicting actual behaviours (Sheppard et al., 1988), and the connection between intentions and behaviours has been reported in various fields throughout the literature (Mohammed, 2021; Sheppard et al., 1988). It is argued that when behaviours exhibit no severe control problems, they can be predicted and calculated from intentions with remarkable accuracy (Ajzen, 1991). Accordingly, willingness or intentions significantly predict buying behaviours (Ajzen, 1991). Consequently, the intention to purchase organic foods is a prerequisite for actual purchase behaviours (Singh & Verma, 2017).

TPB has commonly been studied in the domain of organic food. Consumers who intend to purchase particular products show more significant degrees of actual purchasing than consumers who show a lack of intention to buy, as argued by Brown et al. (2003). Intention to purchase organic food positively influences purchasing behaviours, as reported by several studies (Budhathoki & Pandey, 2021; Singh & Verma, 2017; Tarkiainen & Sundqvist, 2005; Wee et al., 2014). This positive influence reflects the role of purchase intentions in pushing

customers to involve in actual purchase behaviours. Therefore, marketers commonly make marketing decisions for new products based on purchase intentions and willingness to buy.

Moreover, Ajzen (1991) suggests that the TPB framework can be modified and extended by additional constructs or by adjusting the causal path of the constructs to deepen and broaden the framework. As already stated, the TPB suggests that behavioural intention is a function of three pillars: attitude, SN, and perceived behavioural control. However, some researchers argue that other variables are not included in the TPB, which is vital to improving the model's ability to predict the actual behaviours (Armitage & Conner, 1999). Researchers have also argued that the TPB model might only capture some determining determinants of more complex behaviours, such as food choices. Therefore, several previous studies have extended the TPB with additional constructs to improve its descriptive and predictive power (Budhathoki & Pandey, 2021).

Since the TPB framework is applied extensively to describe consumer purchase behaviours and can be modified and extended by HC and EC, FC, PC, and BA in the context of organic food consumption in Syria. The current study employs the TPB as the theoretical foundation to understand the actual behaviours of organic food consumers; and it considers an additional set of explanatory variables that are shown to be relevant to explain consumer purchase behaviours.

Chapter Summary

In conclusion, the organic food market has witnessed global growth, driven by increasing consumer demand for healthy and sustainable food products. In the case of Syria, despite challenges posed by conflict and instability, there is potential for the organic food sector to thrive. Addressing challenges related to resource availability, market transparency, and regulatory frameworks will be crucial in sustaining the growth and development of the organic food market, both worldwide and in Syria.

This chapter examined multiple variables contributing to a holistic understanding of consumer behaviours and purchasing decisions. Demographic factors, subjective norms, environmental concerns, health concerns, price consciousness, food safety, and brand awareness collectively shape consumers' attitudes, preferences, and choices. It also introduced a justification for how each relationship between SN, EC, HC, PC, SC, BA, and actual purchase behaviours was hypothesized. The related studies section demonstrated several academic gaps. The literature needs studies that collect actual purchase data. Few studies have considered food safety and brand awareness. No single study, whether in developed or developing countries, was found to

involve all the target variables together. There needs to be more testing of the actual purchase behaviours directly. Additionally, there is a geographical gap related to Syria. These gaps require more studies on consumer purchasing behaviours, especially in Syria.

The TPB framework is applied extensively to describe consumer purchase behaviours, and it can be modified and extended by additional constructs; the current study employs the TPB as the theoretical foundation to understand the actual behaviours of organic food consumers in Syria, and it considers an additional set of explanatory variables that are shown to be relevant to explain the direct consumer purchase behaviours. The additional constructs include HC and EC, FS, PP, and BA in the TPB framework in the pretext of organic food consumption in Syria.

4 RESEARCH METHODOLOGY

4.1 Overview

This methodology chapter investigates the drivers of actual purchase behaviours in Syria. It encompasses several sections essential for understanding the research process and ensuring the validity of the findings. The chapter first revisits the research hypotheses, which serve as the foundation for the study. This section outlines the specific expectations and predictions that will be tested throughout the research. Next, this chapter delves into the process of the research design. It highlights the overall approach and strategy employed to address the research objectives. This approach includes decisions regarding the research paradigm, research approach, data collection, and research method. A remarkable aspect of the methodology chapter is the design of the measurements. It involves the development of scales and constructs that precisely measure the variables under investigation. The chapter discusses the meticulous process undertaken to ensure the reliability and validity of these measurement instruments. Furthermore, the chapter explores the best practices in questionnaire design. It covers aspects such as question wording and question sequencing. Sampling design is another critical aspect addressed in the methodology chapter. It reveals the process of selecting participants, underlining the steps required to guarantee the sample representativeness and the generalizability of the findings. Finally, this chapter outlines the multiple regression analysis performed on SPSS. This chapter establishes a solid framework for understanding the subsequent findings and interpretations presented in the study by providing a comprehensive overview of the research methodology.

4.2 Recall of Research Purpose

The current study seeks to identify what motivate Syrian consumers to purchase organic food. It therefore aims to test the relationship between the independent variables: SN, EC, HC, PC, SC, and BA, and actual PB as the dependent variable. This section is dedicated to developing the corresponding hypotheses; and reveals how these hypotheses are developed through a critical literature review and justification of the relationships. Figure 2.1 displays the research model and the proposed hypotheses.

4.3 Research Design Process

The research design process determines the approach, paradigm, method, and data type.

Research Paradigm: a research paradigm represents a philosophical framework that directs the execution of scientific research. Philosophy is several beliefs that come from studying the

fundamental nature of knowledge, reality, and existence (Collis & Hussey, 2021). The current research follows the Positivism paradigm. It is a paradigm often described as a traditional scientific approach rooted in the natural sciences, utilizing observable social reality to generate law-like generalizations (Collis & Hussey, 2021; R. Kumar, 2019). Positivism employs a quantitative analytical approach based on a statistical analysis of data to evaluate theories (Collis & Hussey, 2021).

There are two types of research, deductive research, and inductive research. For the current study, the most suitable approach is the deductive approach. Deductive research is a study in which empirical observation develops and tests a conceptual and theoretical structure; thus, particular instances are deduced from general inferences (Collis & Hussey, 2021). The deductive approach (i.e., testing a theory) is commonly associated with the positivist research philosophy paradigm. Positivism emphasizes deductive reasoning, where researchers start with a general theory or hypothesis and then design specific research methods and collect data to test, confirm, or refute the theory (Lancaster, 2005).

The current research is a positivist paradigm and deductive. The researcher builds upon the theory of the TPB framework, which is applied extensively to describe consumer purchase behaviours, and it can be modified and extended by additional constructs. The current research is also driven by several recent published studies (e.g., Khan et al., 2022; Mandler et al., 2021; Mohammed, 2021; Zheng et al., 2021). The researcher believes in the potential of SN, EC, HC, PC, SC, and BA to impact the actual PB. It is a single reality that can be measured and understood.

Research Approach: a research approach refers to the overarching framework or strategy researchers adopt to conduct their studies and investigate research questions. The research approach can be selected based on the research question, available resources, and disciplinary or methodological traditions (Creswell & Creswell, 2018).

Several research approaches are available: each suits a distinct purpose. The quantitative approach focuses on numerical data analysis to determine patterns and relationships (Collis & Hussey, 2021). For the current study, a quantitative approach is employed to gather and analyze data because it aligns with the positivism paradigm and deductive research type (Collis & Hussey, 2021).

For the current research purpose, quantitative design helps investigate the causal relationships between the research variables SN, EC, HC, PC, SC, BA, and actual PB. The quantitative

approach allows the researcher to observe and statistically describe the drivers of purchasing behaviours in organic food.

Data Type: In research, two main types of data exist. Primary data refers to original data directly collected by the researcher for a specific study or purpose. It involves first-hand information gathered through surveys, interviews, observations, or experiments. Primary data is tailored to address the research questions and gives researchers control over data collection processes and quality. Examples of primary data include survey responses, interview transcripts, field notes, or experimental measurements (R. Kumar, 2019).

Conversely, secondary data denotes the already existing data collected by another person for a different purpose. It is data that is already available and has been published, documented, or archived. Researchers get access to secondary data from various sources, including government agencies, academic journals, research institutions, or online databases. Secondary data is used to complement primary data or to conduct additional analysis. Examples of secondary data are published research studies, datasets, official statistics, or reports (Bell et al., 2022).

Researchers utilize primary, secondary, or a mix of both, relying on the research objectives, feasibility, and resources. Every type holds several advantages and considerations, and researchers must cautiously evaluate their data needs to determine the most appropriate approach.

The current research intends to gather primary data to understand the drivers of organic food purchase behaviours. It also utilizes secondary data from previous studies.

Research Method: research methods are the specific techniques, procedures, and tools researchers employ within a chosen research approach to collect, analyze, and interpret data. Examples of research methods include surveys, interviews, observations, experiments, content analysis, and document analysis, among others.

Questionnaires are usually associated with a positivist methodology (Collis & Hussey, 2021). Questionnaires are a widely employed method for collecting primary data from a sizable sample, enabling the drawing of generalized conclusions representing the entire target population (Hair et al., 2021). Questionnaires offer advantages, including standardized responses, high efficiency of data collection, anonymity and confidentiality, cost-effectiveness, and appropriateness for quantitative data collection (Hair et al., 2021). Questionnaires convert the research objectives into a comprehensive set of items and questions. With careful attention to the design of the questionnaire, it can gather a wide range of information, as Kumar et al.

(2019) and Malhotra (2015) recommended. For the current quantitative study, a close-ended questionnaire will collect primary data from the sample (Creswell & Creswell, 2018). Utilizing a questionnaire tool facilitates the examination of the proposed research hypotheses. A survey is usually used to collect data from a large sample, which can be representative of the whole target population, allowing for generalized conclusions to be drawn (Hair et al., 2021). Additionally, questionnaires provide efficient data collection, standardized responses, anonymity and confidentiality, cost-effectiveness, and suitability for quantitative data collection (Hair et al., 2021).

Therefore, employing a questionnaire approach in this study facilitates the examination of the developed study hypotheses. Moreover, the questionnaire can convert the current research objectives into a series of items and questions. The questionnaire has been meticulously designed to gather a comprehensive range of information, as suggested by (Kumar et al., 2019; Malhotra et al., 2015).

In terms of questionnaire administration, it can be done through self-administration and face-to-face questionnaires. In self-administered questionnaires, respondents complete the questionnaire independently, without directly interacting with the researcher. They can be distributed through various means, such as email, postal mail, or online platforms. Respondents have the flexibility to complete the questionnaire at their convenience. On the other hand, face-to-face questionnaires involve direct interaction between the researcher and the respondent. The researcher asks the questions verbally, and the respondent provides immediate responses. This method allows for clarifications and additional probing based on the respondent's answers.

Self-administered questionnaires provide several advantages, including convenience and flexibility. Participants can complete the questionnaire at their own pace and in their preferred setting. This convenience feature can increase response rates as respondents have more control over when and where they complete the questionnaire. Self-administration provides anonymity and reduces social desirability bias. Respondents may feel more comfortable providing honest and unbiased responses in self-administered questionnaires due to the absence of direct interaction with the researcher. Anonymity reduces social desirability bias, potentially leading to more accurate and candid responses. Self-administered questionnaires are often more cost-effective than conventional questionnaires if compared to face-to-face questionnaires. They eliminate the need for researchers to be physically present during data collection, reducing travel and logistical expenses. Additionally, self-administered questionnaires can be distributed to a larger sample size since they do not require direct interaction with the researcher. This

feature allows for a broader range of participants and potentially enhances the representativeness of the sample (Hair et al., 2022). In this vein, Hair et al. (2022) suggest that choosing between self-administered and face-to-face questionnaires is essential depending on various factors such as research objectives, target population, and available resources.

Due to the flexibility and cost-effectiveness of the self-administered questionnaire, the current study applies it.

4.4 Measurements

After choosing the survey research as an appropriate method for collecting data for this study, selecting appropriate measurements is now needed. The following subsection deals with the instrument of all constructs involved in this study, including the independent variables, namely, SN, EC, HC, PC, SC, and BA, as well as the dependent variable, actual PB. This section sheds light on scale development, operational constructs, questionnaire design, questionnaire pre-testing, sampling plan, and identifying anticipated statistical analysis. This information was gathered based on the literature review that provided a foundation for developing the first draft for constructs development and measurement.

Scale development: the Likert scale is a commonly used measurement tool in social science research for assessing respondents' attitudes, opinions, and perceptions (Roy, 2020). It involves presenting a series of statements or items to participants, who then indicate their level of agreement or disagreement on a numerical scale (Roy, 2020). The Likert scale offers several advantages in research methodology.

Firstly, the Likert scale provides a standardized format for data collection, allowing for consistent measurement across respondents. This standardization enables researchers to compare and analyze responses systematically, facilitating the identification of patterns and trends (Roy, 2020).

The Likert scale additionally allows for the quantification of subjective constructs. Researchers quickly transform qualitative data into quantitative data by assigning numerical values to the response options, facilitating statistical analysis and interpretation (Roy, 2020).

Furthermore, the Likert scale offers flexibility regarding the number of response options. The Likert scales range from 2 to 10 or more points. However, a commonly used design is the 5-point Likert scale, which includes response options ranging from "Strongly Disagree" to "Strongly Agree" (Roy, 2020). The 5-point Likert scale balances providing enough response categories for nuanced responses and keeping the scale manageable for respondents.

In short, the Likert scale, particularly the 5-point scale, is valuable for constructing questionnaires and measuring constructs in research studies. Its advantages lie in its standardization, flexibility, ease of administration, and the ability to quantify responses. Accordingly, it is employed in the current study to collect reliable and meaningful data to address the research objectives effectively.

Constructs Development: the literature review played a critical role in developing the measurement instruments for the target variables in the current research. By extensively reviewing existing literature, researchers identified suitable measurement items and created new ones based on established concepts and theories. The literature review served multiple purposes in this process. Firstly, it provided valuable insights into how previous studies defined and measured target variables, enhancing understanding of their dimensions and indicators. Secondly, it facilitated the identification of validated measurement scales used in prior research. It was a reliable foundation for measuring SN, EC, HC, PC, SC, BA, and actual PB. Additionally, the researcher cautiously tested the psychometric properties, including reliability and validity, to ensure the scale's suitability for the current study.

The questionnaire in the current research is composed of eight parts. The first part measures the participants' demographic data, while each part measures a corresponding research variable, including SN, EC, HC, PC, SC, BA, and actual PB. Each construct complies with the multi-item approach recommended by Iacobucci and Churchill (2010).

For this study, all measurement items are adopted/adapted from the literature, as Table 4.1 to Table 4.8 displays.

Table 4-1: Subjective Norms (SNs) Construct

No.	**Items**	**Source**
01	My family thinks that I should buy organic foods rather than non-organic foods.	(Chonsiripong, 2018)
02	Most people around me would buy organic foods rather than non-organic foods.	
03	People who are important to me think that I should buy organic foods.	
04	I am in an environment that requires me to choose organic foods.	
05.	Most friends whose opinions regarding diet are important to me think that I should buy organic foods.	

06.	Society thinks the healthiest option for food is organic food.	Literature review
07	My family and friends' advice and purchase behaviours of organic food can influence my purchase intention.	(Li et al., 2015)
08	Buying organic food is the current trend	Literature review

Table 4-2: Environment Concern (EC)

No.	items	Source
01	The balance of nature is very delicate and can be easily upset.	(Saleki et al., 2020)
02	Human beings are severely abusing the environment.	
03	Humans must maintain a balance with nature in order to survive.	
04	Human interferences with nature often produce disastrous consequences.	
05.	It is very important that the food items have been prepared in an environ-friendly way.	(Iqbal et al., 2021)
06.	It is very important that the foods are produced in a way that does not shake the balance of nature.	
07	Organic farming can prevent soil, air, water, and food contamination and pollution.	(Chonsiripong, 2018)
08	Organic farming treats animals humanely.	

Table 4-3: Health Concern (EC)

No.	items	Source
01	I intend to invest more in my health.	(Chonsiripong, 2018)
02	I have a goal to consume organic foods as much as possible.	
03	I buy organic foods for my health to avoid illness.	
04	I choose food carefully to ensure good health.	(Wang et al., 2019)
05.	I am a health-conscious consumer.	
06.	I often think about health-related issues.	
07	I feel good when eating organic food since they do not have harmful chemicals which cause non-communicable diseases.	Literature Review
08	Organic foods are high quality and have high nutritional value.	(Chonsiripong, 2018)

Table 4-4: Price Consciousness (PC)

No.	Items	Source
01	Organic products are more expensive than conventional products	(Gan et al., 2017)
02	I accept the higher price of an organic product because a part of its price is donated toward environmental protection.	(Brzezińska et al., 2021)
03	I accept the higher price of an organic product because I know it has been manufactured in a non-polluting way.	
04	The price of organic products is a barrier to the decision to buy	(Gan et al., 2017)
05.	People think organic food products are very expensive	Literature Review
06.	I accept the higher price of an organic product because I know the product is healthy: its taste is good and natural; it is more nutritious.	(Brzezińska et al., 2021)
07	If the price difference gets reduced, I will increase my purchases of organic foods.	Literature Review
08	It is overall worth paying a higher price for organic foods.	Literature Review

Table 4-5: Food Safety (FS) Construct

No.	Items	Source
01	I am very concerned about the number of artificial additives and preservatives in foods.	(Iqbal et al., 2021)
02	The quality and safety of food nowadays concern me.	
03	I am concerned about food processing.	
04	I am highly involved in searching and reading information about good quality foods, like organic food.	
05.	Organic foods do not contain genetically modified ingredients.	(Chonsiripong, 2018)
06.	Organic foods can reduce the food poisoning risk.	
07	Organic foods are safer to eat.	
08	Organic foods are the best foods for children	Literature Review

Table 4-6: Brand Awareness Construct

No.	Items	Source
01	I prefer to buy organic food from brands familiar to me	(Li et al., 2015)
02	There are several brands of organic foods chosen in the market.	Literature Review
03	I have trust in the product which are under the reputed brand.	
04	Trustworthy organic certification on packages of branded products.	(Gan et al., 2017)
05.	I always tried to buy all my organic food needs from one brand.	Literature Review
06.	I identify organic food brands through mass media advertising.	
07	I like to buy products which are under imported brand names.	
08	I think it is important to have a brand for any organic food item.	

Table 4-7: Actual Purchase Behaviour

No.	Items	Source
01	I have been purchasing organic food to fulfill my daily needs.(Quoquab et al., 2020)	
02	I often buy organic food products.(Ali et al., 2021a)	
03	I always try to buy organic food with green labeling marks(Ali et al., 2021a)	
04	If organic foods were available in the shops, I would buy them. (Teng & Wang, 2015)	
05.	I am willing to buy organic foods despite their higher prices(Teng & Wang, 2015)	
06.	The probability I would buy organic foods is very high.(Teng & Wang, 2015)	

Table 4-8: Overall Measurement Items

Construct	No. of items
Subjective Norms	8
Environment Concern	8
Health Concern	8
Price Consciousness	8
Food Safety	8
Brand Awareness	8
Purchase Behavior	6
Total	**54**

Questionnaire Design: in this subsection, we will delve into different questionnaire administration options and discuss the principles behind selecting question wording and sequencing.

Questionnaires can be designed in two formats: self-administered questionnaires and face-to-face questionnaires. Self-administered questionnaires require participants to complete the questionnaire independently without direct interaction with the researcher. Questionnaires are

distributed through online platforms, email, or even postal mail, providing participants flexibility and convenience. In contrast, face-to-face questionnaires require direct interaction with the researcher, where questions are asked verbally and instant responses are provided, permitting the researcher to gain clarifications and probing.

In addition to convenience and flexibility, self-administered questionnaires hold several advantages. Participants can complete the self-administered questionnaire at their own pace and in their preferred setting, potentially increasing response rates. Self-administration also holds the advantage of anonymity, diminishing social desirability bias and supporting more honest and unbiased responses. Furthermore, self-administered questionnaires are known to be more cost-effective as they do not need physical presence during data collection, cutting down travel and logistical expenses. They can also be distributed to a larger sample size, allowing for a broader range of participants and potentially enhancing sample representativeness (Hair et al., 2022).

However, to select between self-administered and face-to-face questionnaires, various factors such as research objectives, target population, and available resources should be considered (Hair et al., 2022). Sequencing questions is another vital questionnaire design factor. It is essential to adhere to best practices regarding sequencing questions to ensure reliability, clarity, and validity. The design of a questionnaire involves careful considerations supported by established guidelines and research.

It is crucial to provide clear and concise instructions at the outset. These instructions should give respondents an overview of the survey's purpose and any relevant information. This contextual information helps participants understand the nature of the questions (Tourangeau et al., 2000).

Including a cover letter with the questionnaire is also essential. The cover letter serves multiple purposes, such as establishing rapport, communicating the study's purpose, and providing instructions. Research has shown that a well-crafted cover letter enhances response rates and data quality by personalizing the survey, establishing credibility, and offering clear guidance (Dillman et al., 2014; Fowler, 2013; Collis & Hussey, 2021).

Additionally, screening questions play a role in identifying and qualifying respondents who meet specific criteria or belong to a particular target group. Such questions ensure that the study sample is representative of the target population and that the collected data comply with the

research objectives (Fowler, 2014). The current research questionnaire utilized screening questions only to consider organic food consumers.

Furthermore, organizing questions logically and coherently is essential. Grouping related questions together maintains a consistent flow and helps respondents understand the structure of the survey. This approach enhances participant engagement and minimizes confusion (Dillman et al., 2014). Therefore, it is carefully employed in the designed questionnaire, where each construct has a separate section.

When it comes to question-wording, using language that is simple, unambiguous, and easily understood by the target audience is crucial. Avoiding jargon and technical terms helps prevent misunderstandings and ensures respondents can provide accurate and meaningful responses (Fowler, 2014).

It is beneficial to group related questions together to maintain a logical and coherent flow. This approach helps respondents understand the survey's structure, promotes engagement, and minimizes confusion (Dillman et al., 2014).

In order to pick up various related to the research topic, it is essential to consider including a mix of question types, such as multiple-choice and open-ended questions. This diversification enhances the richness of the data and enables a more comprehensive analysis (Albaum, 1996).

Positioning demographic questions at the end of the survey allows participants to engage with the main content before being asked to provide personal information. This sequencing can help reduce response bias and increase response rates as respondents may feel more comfortable answering demographic questions after investing time and effort in the survey (Dillman et al., 2014; Fowler, 2014). Furthermore, placing demographic questions toward the end maintains the flow and continuity of the survey. Participants can focus on the substantive questions directly related to the research objectives without being distracted by personal characteristics (Collis & Hussey, 2014).

Finally, directing a pre-test of the questionnaire to a small sample of participants is recommended. This pre-testing helps identify potential issues, such as confusing or biased questions and allows for necessary revisions before the main data collection (Collis & Hussey, 2021).

According to these guidelines, the questionnaire in the current research was designed to include a cover letter and a demographic section that was placed towards the end and preceded by seven sections related to the research's seven variables. Each section represents a construct for a

specific variable. The researcher has consulted relevant experts to ensure the questionnaire design aligns with best practices.

4.5 Population and Sampling

The precision of the findings is seriously dependent on the sample selection process. Any sampling design aims to minimize the disparity between the values collected from the sample and those present in the study population while considering cost limitations. The underlying premise of sampling is that a small number of units, chosen to represent the study population truthfully, can reasonably accurately reflect the intended population with a high probability level. Two key aims should be pursued when selecting a sample: maximizing precision within the available resources and avoiding bias in sample selection (R. Kumar, 2019). Two main sampling designs exist, random or probability sampling designs and non-random/non-probability sampling designs (Given, 2008)

Random or probability sampling designs involve selecting participants from a population to ensure every individual has an equal and known chance of being included in the sample. The main types of random sampling designs include (Creswell & Creswell, 2018; Given, 2008):

1- Simple Random Sampling: Participants are randomly chosen from the population without specific criteria or grouping.
2- Stratified Random Sampling: The population is divided into distinct groups or strata, and participants are randomly selected from each group to ensure representation from all subgroups.
3- Cluster Sampling: The population is divided into clusters or groups, and entire clusters are randomly selected for inclusion in the sample.
4- Systematic sampling: using a predetermined pattern, participants are selected from a sampling frame at regular intervals.

Choosing a random or probability-based sampling design permits fairness and decreases bias in the sample selection process, boosting the reliability and generalizability of the findings (Creswell & Creswell, 2018).

Conversely, choosing a non-random or non-probability sampling design requires selecting participants that do not ensure equal chances of inclusion for all individuals. The next are two main types of non-random sampling designs (Given, 2008).

1- Convenience Sampling: Participants are chosen based on their easy availability and accessibility to the researcher. It is a commonly used method due to convenience.

However, it may involve bias since it relies on individuals willing to participate or readily accessible.

2- Purposive Sampling: Participants are selected intentionally based on specific characteristics or criteria relevant to the research objectives. Researchers purposefully choose individuals with the desired qualities or knowledge for the study. It is suitable for targeted sampling but may limit the generalizability of the findings.

Non-random/non-probability sampling designs are utilized when accessing or identifying an inclusive population sample is difficult. While these designs offer practicality and flexibility, it is essential to underline the potential limitations and biases (Given, 2008).

The current study assesses the drivers of organic food consumers' purchasing behaviours in Syria. Accordingly, qualified participants are Syrian individuals who consume organic food.

Accordingly, the appropriate sampling design is non-probability sampling because access to the entire population is difficult or not feasible. Non-probability sampling methods like convenience sampling may be appropriate. Convenience sampling involves selecting participants based on their availability.

In terms of the appropriate sample size, there is no universally agreed-upon rule for the appropriate sample size for multiple regression analysis. However, researchers typically aim for a sample size with adequate statistical power to detect meaningful relationships. For example, Tabachnick et al. (2013) suggest a minimum of 10-20 participants per predictor variable. This rule of thumb helps ensure sufficient statistical power and stability in estimating the regression coefficients. Similarly, Hair et al. (2021) suggest that the sample size for a study should be ten times the number of items included in the questionnaire. Kline (2023) recommends that sample sizes should be greater than 200 respondents for SEM analyses, and the sample size should be adequate based on the statistical method employed and the population under consideration. Generally, Malhotra et al. (2015) assure that having a sample size of 200-1000 or more respondents is satisfactory. The current research collected 229 questionnaires. Exactly 18 participants have been excluded as they do not purchase any organic food. Therefore, 211 cases were qualified for the intended data analysis, demonstrating a satisfactory sample size for multiple regression analysis (Kline, 2023; Malhotra, 2015).

In terms of participant recruitment, as a crucial aspect of the sampling design process, the present study followed various avenues to reach potential participants. One practical approach involves leveraging online platforms such as Facebook. Through this method, the researcher

crafted a concise and persuasive recruitment message that conveys the research's purpose and importance. Furthermore, active engagement with relevant groups or individuals who align with the target population was undertaken, inviting them to participate in the study.

4.6 Data analysis

For finding causal relationships between SN, EC, HC, PC, SC, BA, and actual PB, data were analyzed on SPSS to test the reliability and validity of the questionnaire through Cronbach alpha values (reliability tests), divergent and discriminant tests (validity tests). It is also necessary to check normality through Kurtosis.

To investigate the relationships between SN, EC, HC, PC, SC, BA, and actual PB of organic food in Syria, a linear regression analysis will be employed. Linear regression is a statistical method used to model the relationship between a dependent variable (PB) and one or more independent variables (SN, EC, HC, PC, SC, and BA).

The following regression model will be used:

$$PB = \beta0 + \beta1SN + \beta2EC + \beta3HC + \beta4PC + \beta5SC + \beta6BA + \varepsilon$$

Where: β0 IS THE Intercept AND β1, β2, ..., β6 are Regression coefficients, ε is the error term

Before conducting the linear regression analysis, the following assumptions have been checked to ensure the validity of the results. **Normality refers to t**he residuals (the differences between the actual PB and the predicted PB) should be normally distributed. This can be checked using histograms, Q-Q plots, and statistical tests like the Skewness **and Kurtosis. No multicollinearity:** There should be no strong correlations among the independent variables. This can be checked using correlation matrices and variance inflation factor (VIF) analysis.

The following hypotheses was tested:

H1: There is a significant relationship between subjective norms, environmental concerns, health consciousness, price consciousness, Food safety concern, brand awareness, and actual purchase behavior of organic food. The significance of the regression coefficients will be assessed using t-tests. If the calculated t-value is greater than the critical t-value at a specified significance level (e.g., $\alpha = 0.05$), the null hypothesis will be rejected, indicating a significant relationship between the independent and dependent variables.

Model Evaluation: the goodness of fit of the regression model has been evaluated using particular metrics: R-squared that measures the proportion of variance in the dependent variable explained by the independent variables. A higher R-squared indicates a better

fit. Adjusted R-squared is a corrected version of R-squared that penalizes for the inclusion of unnecessary variables. F-statistic tests the overall significance of the regression model. A significant F-statistic indicates that at least one independent variable is significantly related to the dependent variable.

The significant regression coefficients will be interpreted to understand the impact of each independent variable on the actual purchase behavior of organic food. Positive coefficients indicate that an increase in the independent variable is associated with an increase in the dependent variable, while negative coefficients indicate an inverse relationship. The magnitude of the coefficients reflects the strength of the relationship.

Chapter Summary

This chapter introduces the proposed research design process that most suits the nature of the research. To understand how SN, EC, HC, PC, SC, and BA impact the actual PB, the researcher followed a positivist paradigm with deductive research that collected primary quantitative data by distributing close-ended questionnaires. The scale measurement and the measurement instrument are designed to follow the best practices so that reliable data can be collected. All the measurement instruments have been adopted from the existing literature. Data were analyzed on SPSS. A multiple linear regression model was developed to test the hypotheses.

5 RESULTS AND DISCUSSION

5.1 Overview

The present chapter broadly analyzes the current study's findings, focusing on the interrelationships between SNs, EC, HC, PC, SC, and BA and the PB of Syrian consumers in the organic food market. By examining these fundamental drivers, a deeper understanding of the factors influencing consumer behaviours in the organic food market can be achieved. This chapter first recalls the research questions, then delves into the demographic analysis, organic food-related characteristics, instrument reliability and validity, statistical assumptions tests, multiple regression analysis, and clustering of the purchasing behaviours variable.

5.2 Research Questions

Recalling the current research questions is essential, as they represent the foundation for data collection, analysis, and interpretation.

1- What is the influence of subjective norms (SNs) on Syrian consumers' organic food purchase behaviours?
2- How does environmental concern (EC) influence the organic food purchase behaviours of Syrian consumers?
3- How does health concern (HC) influence the organic food purchase behaviours of Syrian consumers?
4- How does price consciousness (PC) influence the organic food purchase behaviours of Syrian consumers?
5- How does food safety (FS) influence the organic food purchase behaviours of Syrian consumers?
6- How does Brand Awareness (BA) influence the organic food purchase behaviours of Syrian consumers?

5.3 Participants' Profile

The demographic analysis provides a clear picture of the study's participants and their relevance to understanding organic food purchasing behaviors in Syria (Table 5.1). The gender distribution was fairly balanced, with 57.8% males and 42.2% females, ensuring representation of diverse perspectives. The age profile was dominated by younger individuals, with 48.8% under 30 years old and a gradual decline in representation among older age groups. This suggests a strong interest in organic food among youth, a key demographic for targeted initiatives.

Education levels were notably high, with 88.6% of participants holding at least a bachelor's degree. This indicates a well-informed sample likely to understand the benefits of organic food, though the limited representation of less-educated groups highlights potential gaps in awareness.

Marital status was evenly distributed, with 50.2% married and 46.9% single. This balance offers insights into household and individual purchasing dynamics, as family priorities often differ from those of single consumers. Urban residents comprised 85.8% of the sample, reflecting the urban-centric development of organic markets and the accessibility challenges faced by rural populations.

Income varied, with the majority (31.8%) earning between 101,000 and 200,000 Lira. While mid-level earners dominate, affordability remains critical, especially for lower-income groups. Lastly, occupational diversity was evident, with private-sector employees (28.0%) and government workers (25.1%) forming the largest groups, alongside students and smaller numbers of craftsmen, business owners, and retirees.

Overall, the analysis highlights a youthful, urban, and well-educated consumer base. Addressing affordability, expanding rural access, and leveraging digital platforms can enhance organic food adoption in Syria while tailoring strategies for different demographics.

Table 5-1: Demographics of respondents

Variable	Frequency	Percent (%)
Gender: Female	89	42.2
Gender: Male	122	57.8
Age: <30	103	48.8
Age: 31-40	66	31.3
Age: 41-50	32	15.2
Age: 51-70	10	4.7
Education: High School/Diploma	23	10.9
Education: BSc	133	63.0
Education: MSc	39	18.5
Education: PhD/Other	16	7.6
Marital Status: Single	99	46.9
Marital Status: Married	106	50.2
Marital Status: Other	6	2.8

Variable	Frequency	Percent (%)
Residence: City	181	85.8
Residence: Town	21	10.0
Residence: Village	9	4.3
Income: 0-100,000	43	20.4
Income: 101,000-200,000	67	31.8
Income: 202,000-300,000	36	17.1
Income: 401,000-500,000	42	19.9
Income: 501,000-600,000	3	1.4
Income: >600,000	20	9.5
Occupation: Student	33	15.6
Occupation: Government Employee	53	25.1
Occupation: Private Sector Employee	59	28.0
Occupation: Craftsman/Business Owner/Retired	22	10.4

5.4 Organic Food-Related Characteristics

Considering various characteristics related to organic food purchase decisions is important as it highlights the multifaceted nature of consumer interests and concerns. It allows for an inclusive understanding of the various dimensions of preferences, opportunities, and challenges related to organic food consumption, enabling the development of customized strategies to address these issues effectively.

Table 5-2 displays the purchase frequency distribution among the respondents. The results reveal a range of buying habits. Nearly a third of respondents showed purchasing organic food on a weekly basis, trailed by those who buy organic food monthly and twice a week. A smaller slice of respondents showed purchasing organic food daily, while a significant slice stated purchasing organic food rarely.

Table 5-2: Frequency of Purchase

Purchase	Frequency	percent (%)
Rarely	52	24.6
Monthly	44	20.9
Weekly	57	27.0
Twice a Week	34	16.1
Daily	24	11.4
Total	211	100.0

Source: Author's Survey

The figures introduce insights into the level of engagement and commitment participants have toward buying organic food products. For instance, participants who purchase organic food weekly or daily may have stronger motivations and preferences related to organic attributes, while those who purchase rarely may be influenced by different factors such as availability, affordability, or limited exposure to organic options. Taking into consideration the purchase frequency diversity in the result interpretation helps identify possible patterns or trends in purchase behaviours.

Table 5.3 demonstrates the distribution of organic food types. Reveals their preferences for different organic food categories. The majority of participants assured the consumption of organic fruits and vegetables, tailed by dairy products. A noteworthy proportion also showed consuming organic meat, grains, and nuts. Additionally, there was a smaller percentage of respondents who consumed other organic food categories.

Table 5-3: Type of Organic Food

Food categories	Frequency	percent (%)
Fruits and Veg	177	83.9
Meat	73	34.6
Dairy Products	116	55.0
Grain	67	31.8
Nuts	22	10.4
other	15	7.1

Table 5.4 indicates the purchase channels where the respondents buy their preferred organic food product. Three-fifths of respondents indicated purchasing organic food from supermarkets, tailed by vegetable stalls and farmers. A slighter percentage of respondents demonstrated purchasing from convenience shops and online shops. The results show diversity in purchasing channels, reflecting the varied options available to consumers in the Syrian organic food market.

Table 5-4: Purchase Channel

Purchase Channel	Frequency	percent (%)
Supermarket	129	61.1
Convenient shop	34	16.1
Vegetable stalls	103	48.8
Farmers	45	21.3
Online shops	4	1.9

Table 5.5 shows the main factor influencing the purchasing decision. The majority of respondents demonstrated that price is a significant influencer, tailed by quality and availability. A minor proportion of respondents mentioned other factors as influencers in their purchase decisions. This shows that price and quality were the most critical factors.

Table 5-5: Purchase Influencers

Influencer	**Frequency**	**percent (%)**
Price	146	69.2
Quality	124	58.8
Availability	47	22.3
Other	3	1.4

Table 5.6 illustrates the frequency of organic food purchase percentage compared to the overall food purchase each month. It provides insights into the and commitment to purchasing organic food. organic food purchase. More than a third of respondents demonstrated buying organic food at 50-74% of their monthly food purchases. This suggests a significant level of engagement and regularity in purchasing organic products. A substantial portion of

respondents, almost quarter, informed that they buy organic food less than 25% of the time, showing an inferior level of organic food consumption in their overall food purchases. Furthermore, almost fifth of participants occupy the ranges of 75-99 %, and 25-49 % reflecting a moderate level of organic food consumption. A minor percentage demonstrate a high commitment to organic food consumption as they reported that they purchase organic food products 100% of the time,

Table 5-6: Monthly Purchase Percentage

Category	frequency	percent (%)
Less than 25%	54	25.6
25-49%	39	18.5
50-74%	72	34.1
75-99 %	39	18.5
100%	7	3.3
Total	211	100.0

Table 5.7 indicates the duration of purchasing organic food. These estimates provide insights into the level of familiarity and experience with organic food products. Less than third of respondents indicated purchasing for more than 20 years, showing a long-term commitment to organic food consumption. A substantial ratio of participants reported purchasing commitment for almost 5-10 years, followed by those who have been purchasing for 10-20 years. This reflects that a substantial number of respondents have been purchasing organic food for a significant period, indicating a continual interest in purchasing organic products. A few respondents indicated purchasing organic food for less than one year or 1-5 years (19.0%), demonstrating moderately recent adoption or exploration of organic food.

Table 5-7: How long have you buying organic foods?

Category	frequency	percent (%)
Less than one year	19	9.0
1-5 years	40	19.0
5-10 years	50	23.7
10-20 years	45	21.3
More than 20 years	57	27.0
Total	211	100.0

Analysing the distribution of the purchasing duration helps in understanding the degree of experience, knowledge, and loyalty among consumers.

The diversity in the purchasing duration in the result is essential as it highlights the range of experiences and engagement levels among consumers. It helps in designing marketing strategies and product offerings to fulfil the expectations and needs of consumers at different stages of their organic food journey.

Table 5.8 displays the findings of organic food issues shedding light on the perceived challenges and concerns related to organic food consumption. The majority of respondents (almost two thirds) identified high prices as a significant issue, referring to the cost of organic food products as an obstacle to their widespread adoption. A significant proportion of respondents (almost two fifths) reported availability issues, suggesting that accessing a variety of organic food options may be limited in certain areas or regions. Accordingly, it is important to improve the distribution and availability of organic food products to meet consumer demands.

Quality issues were recorded by more than quarter of the respondents, indicating that concerns about the organic food's overall freshness, quality, and consistency have the potential to influence their purchase decisions. This finding emphasizes the need for maintaining high-quality standards and addressing any quality-relevant concerns within the organic food market.

The "Other" category, with a 6.2% response rate, suggests that respondents identified additional issues related to organic food consumption that were not specifically mentioned in the options provided. These issues possibly involve factors such as trust in labelling, lack of knowledge or understanding about organic certifications, or particular concerns related to production practices or environmental impact.

The understanding of these findings assists in grasping the challenges that consumers face in adopting organic food and the factors that influence their purchase behaviours. It provides valuable insights into the barriers and areas for improvement in the organic food market. Addressing these issues, such as price affordability, improving availability, and maintaining quality standards, can contribute to increasing consumer acceptance and market growth. The diversity in organic food issues highlights the multifaceted nature of consumer concerns. This diversity helps in providing a comprehensive understanding of the different dimensions of challenges associated with organic food consumption, which enables the development of targeted strategies that address these issues successfully.

Table 5-8: Finding Issues

	frequency	percent (%)
High Price	146	69.2
Availability Issues	81	38.4
Quality issues	60	28.4
other	13	6.2
Total	211	100.0

5.5 Instrument-Related Tests

The employed instrument needs to be reliable and valid. Therefore, it is essential to test it for reliability, convergent validity, and discriminant validity.

Reliability: Cronbach's alpha (α) value test is considered one of the best methods to test any scale's reliability. It measures internal consistency between items in the scale. It indicates how far a construct can consistently measure a particular concept. The alpha coefficient reflects the closeness of the relationship among a set of items as a group. Cronbach (1951) pointed out that a scale would only be regarded as reliable if the alpha coefficient value is equal to or greater than 0.70.

As shown in Table 5.9, Cronbach's alpha for all variables extends from 0.775 to 0.901. This reflects high consistency in replying to the questions of each construct.

Table 5-9: Cronbach's Alpha for various Constructs

Variable	items	Cronbach's α value
Subject norms	8	0.826
Environmental concern	8	0.862
Health concern	8	0.901
price consciousness	8	0.775
Food safety	8	0.873
Brand Awareness	8	0.779
Purchase Behaviour	5	0.845

Convergent validity: Convergent validity tests the correlations between items within the same construct (scale). Convergent validity denotes the extent of how closely related an item is to other items that measure the same (or similar) constructs. Two items measuring the same construct, such as subjective norms, should have a moderate to high correlation. High correlation provides a piece of evidence for convergent validity, which, in turn, is an indication of construct validity. In the current study, there are seven constructs. Convergent validity for each construct was verified using Pearson correlation between each item and its construct.

The aim is to test whether the items claimed to measure a particular construct are indeed measuring them. In other words, if these items do measure a specific construct, then they need to converge (Bollen, 1989). Table 5.10 and Table 5.11 display the correlations between each item and its overall scale (two-tailed). The convergent validity analysis demonstrates that all subjective norm items hold significant positive correlations with the overall scale score; the correlations range from r=.470 to r=.780. It also shows that all items of the Environment Concern scale reflect significant positive correlations with the overall scale score; the correlations range from r=.611 to r=.840. Similarly, all items of the Health Concern scale (r=.671 to r=.846).

Table 5-10: Convergent Validity for SN, EC, and HC Scales

Subjective Norms	r	Environment Concern	r	Health Concern	r
SN_ 1	.676**	EC_ 1	.611**	HC_1	.671**
SN_ 2	.639**	EC_ 2	.723**	HC_2	.801**
SN_ 3	.780**	EC_ 3	.802**	HC_3	.807**
SN _4	.776**	EC_ 4	.671**	HC_4	.846**
SN_ 5	.746**	EC_ 5	.757**	HC_5	.762**
SN _6	.571**	EC_ 6	.840**	HC_6	.731**
SN _7	.470**	EC_ 7	.722**	HC_7	.776**
SN _8	.720**	EC_ 8	.702**	HC_8	.758**

Similarly, as Table 5.11 illustrates, the Price Awareness scale (r=.534 to r=.732), the Food Safety scale (r=.806 to r=.606), and the Brand Awareness scale (r=.519 to r= .720). Purchase Behaviour (r=.727 to r=.836). These estimates indicate a moderate to strong positive relationship between each item and the overall scale.

Table 5-11: Convergent validity for PC, FC, BA Scales

Price	r	Food Safety	r	Brand Awareness	r	Purchase Behaviour	r
PC_1	.619**	FC_1	.669**	BA_1	.665**	PB_1	.780**
PC_2	.661**	FC _2	.775**	BA_2	.519**	PB_2	.730**
PC_3	.732**	FC _3	.758**	BA_3	.685**	PB_3	.768**
PC_4	.569**	FC _4	.606**	BA_4	.577**	PB_4	.827**
PC_5	.617**	FC_5	.690**	BA_5	.637**	PB_5	.836**
PC_6	.639**	FC_6	.806**	BA_6	.632**		
PC_7	.625**	FC_7	.804**	BA_7	.592**		
PC_8	.534**	FC_8	.773**	BA_8	.720**		

Discriminant Validity: The Fronell-Larcker criterion is perceived as a common technique for checking the discriminant validity of measurement models. It entails that the square root of the average variance extracted (AVE) by a construct must be greater than the correlation between the construct and any other construct. Once this condition is fulfilled, discriminant validity is established. In discriminant validity, the aim is to ensure that the correlation of a construct with other constructs is less than the square root of its AVE.

Table 5.12 demonstrates the correlation matrix that demonstrates the discriminant validity among the constructs.

Table 5-12: Discriminant Validity Tests

	SN	EC	HC	PA	FC	BA	PB
SN	**0.717**						
EC	.411**	**0.750**					
HC	.508**	.583**	**0.655**				
PA	.321**	.506**	.526**	**0.693**			
FC	.467**	.642**	.743**	.643**	**0.679**		
BA	.331**	.272**	.438**	.378**	.332**	**0.699**	
PB	.267**	.289**	.311**	.320**	.403**	.213**	**0.765**

Source: Author's Survey

The discriminant validity for the current constructs is supported by two points. First, the diagonal figures, representing the square root of the AVE, indicate that each construct's correlation with itself is higher than the correlations between different constructs, reflecting that each construct captures more variance within itself than it shares with other constructs. Second, the off-diagonal figures, representing the correlations between different constructs, are generally smaller than the diagonal values. These results suggest that the constructs measure unique aspects of the research domain and are not highly redundant or overlapping.

5.6 Statistical Assumptions tests

Before proceeding to the main regression analysis, it is essential to check for the fulfilment of normality and collinearity assumptions.

Normality and Kurtosis Tests: Checking whether the normality assumption is fulfilled is essential for ensuring model suitability for subsequent analysis before proceeding with the main analysis. Concerning normal distribution, data is normally distributed if normal curves are free of extreme skewness and Kurtosis. Sposito et al. (1983) proposed the range ± 2.2 for a normal distribution free of skewness and Kurtosis.

Table 5.13 indicates skewness and kurtosis values; all skewness values fall within the suggested range and are almost close to zero; kurtosis values also fall within the suggested range, demonstrating that the sample is free of extreme skewness and Kurtosis. The proposed model is suitable for subsequent analysis.

Table 5-13: Normality and Kurtosis tests

	Mean	Std. Deviation	Skewness	Std. error	Kurtosis	Std, error
SN	3.44	0.81	-0.15	0.17	-0.24	0.33
EC	4.38	0.63	-1.33	0.17	1.49	0.33
HC	4.05	0.81	-0.84	0.17	0.49	0.33
PA	3.79	0.69	-0.53	0.17	0.56	0.33
FC	4.07	0.75	-0.73	0.17	0.17	0.33
BA	3.10	0.79	-0.02	0.17	0.06	0.33
PB	3.54	0.62	-0.28	0.17	0.01	0.33

Collinearity Tests: When two or more predictor (independent) variables are greatly correlated to each other, multicollinearity in regression analysis happens. Collinear variables do not provide unique or independent information in the regression model. If the degree of correlation is high enough between variables, it results in problems when fitting and interpreting the regression model. The variance inflation factor (VIF) is employed to test multicollinearity by detecting the correlation and the strength between the predictor variables in regression models. VIF values above one indicate the existence of some levels of multicollinearity, with higher values indicating a stronger correlation between the variables. Though, as a rule of thumb, the VIF values should not exceed a critical threshold of 10, it refers to a guideline for identifying severe multicollinearity Pallant (2011).

The aim of the proposed model is to perform a linear regression using purchase behaviours as the response variable and SN, EC, HC, PC, FC, and BA as the predictor variables, but we want to make sure that the six predictor variables aren't highly correlated.

Table 5.14 illustrates VIF and tolerances. The results showed that VIF values evidently not exceeding the threshold of (10), demonstrating no issue of multicollinearity in the data and suitability of the model for multiple linear regression.

Table 5-14: Collinearity tests through VIF

Variable	tolerance	VIF
SN	.699	1.431
EC	.545	1.834
HC	.378	2.648
PC	.545	1.834
FC	.322	3.108
BA	.760	1.316

*The dependent variable is Purchase Behaviour

5.7 Mean And Standard Deviation

Table 5.15 displays the mean and standard deviation values as measures of central tendency and dispersion, respectively.

Table 5-15: Mean and Standard Deviation

Variable	Mean	Std. Deviation
SN	3.44	0.81
EC	4.38	0.63
HC	4.05	0.81
PA	3.79	0.69
FC	4.07	0.75

Variable	Mean	Std. Deviation
BA	3.10	0.79
PB	3.54	0.62

SN has a mean of 3.44 and a std. Deviation of 0.81, the respondents' ratings on subjective norms tend to center around 3.44, with a moderate level of variability.

EC has a mean of 4.38, showing that respondents generally have a positive perception of the environmental factor in relation to organic food. The standard deviation of 0.63 suggests a relatively low level of variability among the responses.

HC has a mean of 4.05; respondents show a positive attitude towards health concerns in the context of organic food. The standard deviation of 0.81 indicates a moderate level of variability in responses.

PC has a mean of 3.79, suggesting a somewhat neutral perception of price among respondents. The standard deviation of 0.69 shows moderate variability in the responses regarding price.

FC has a mean of 4.07, showing that the respondents tend to have a positive perception of the safety factor; the standard deviation of 0.75 suggests a moderate level of variability in the responses.

BA has a mean of 3.10, indicating a somewhat neutral perception of brands in the context of organic food. The standard deviation of 0.79 suggests a moderate level of variability among the responses.

PB has a mean of 3.54; respondents show a moderate level of organic food purchase behaviours. The standard deviation of 0.62 suggests relatively low variability in the responses.

These mean and standard deviation values provide a summary of the central tendency and dispersion of the variables in the dataset, giving an overview of the general trends and variability in respondents' perceptions and behaviours related to organic food and its drivers.

5.8 Hypotheses Testing

The main research question is What are the influences of various purchase drivers, namely, SN, EC, HC, PC, FC, and BA, on PB (organic food purchase behaviours) of Syrian consumers?

And to answer this question, a multiple regression model was run to test the corresponding hypotheses.

Table 5.16 displays information about the overall fit and performance of the proposed model.

Table 5-16: Multiple Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error
	.422[a]	0.178	0.154	0.56980

A: Predictor: SN, EC, HC, PC, FC, BA, and the dependent variable is PB

The coefficient of multiple determination (R) is 0.422, indicating a moderate correlation between the predictors and the dependent variable. The R Square value (0.178) represents the portion of the variance in PB that can be attributed to the predictor's SN, EC, HC, PC, FC, and BA. The predictors collectively contribute approximately 17.8% to the variance in PB. The Adjusted R Square value is 0.154; it takes into consideration the sample size and the number of predictors, representing a more conservative estimate of the model's explanatory power. It is somewhat lower than the R Square value. The Std. The error of the Estimate is 0.57, reflecting the average distance between the observed values and the predicted values in the regression model.

Overall, a moderate level of predictive power is shown by the model, with the predictors collectively explaining a significant portion of the variance in PB. However, remarkably there is still a considerable proportion of unexplained variance in PB, as the relatively low R square value shows.

The model summary emphasizes that the predictors in the model have a certain ability to explain the variance in the dependent variable (PB), but there may still be unaccounted factors or sources of variability.

Table 5.17 depicts the ANOVA analysis. It is an analysis of variance that breaks down the total variability in the dependent variable (PB) into two components: regression and residual.

Table 5-17: ANOVA Test

Model	Sum of Squares	df	Mean Square	F
Regression	14.30	6	2.384	7.343
Residual	65.91	203	0.325	
Total	80.21	209		

The F statistic (7.343) tests the overall significance of the regression model. The F statistic has a significance level of ($p < .001$), which is statistically significant, indicating that the regression model as a whole has a significant effect on the dependent variable.

Table 5.18 shows standardized coefficients (Beta) that represent the estimated effect of each predictor variable on the dependent variable (PB). Beta values indicate the relative importance of each predictor variable after standardizing the variables. The t-values and associated p-values (Sig.) indicate the statistical significance of each coefficient.

Table 5-18: Model Coefficients

	Unstandardized coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
Constant	1.901	0.299		6.358	0.000
SN	0.071	0.058	0.093	1.223	0.223
EC	0.018	0.084	0.018	0.213	0.831
HC	-0.041	0.079	-0.054	-0.519	0.604
PA	0.069	0.078	0.077	0.888	0.376
FC	0.261	0.092	0.318	2.835	0.005
BA	0.048	0.057	0.061	0.835	0.405

According to the coefficients obtained from the regression analysis, as displayed in Table 5.18. PB is predicted based on the values of SN, EC, HC, PC, FC, and BA, the predictor variables.

The constant term is 1.90, and the coefficients represent the impact of each predictor variable on PB, while the other variables are constant.

The coefficient for SNs, EC, HC, PC, and BA are 0.07, 0.02, -0.04, 0.07, and 0.05, correspondingly showing how much PB can be increased by a one-unit increase in each predictor. Though, these coefficients are not statistically significant at the 95% confidence level, as indicated by the t-values. Accordingly, the corresponding null hypothes are accepted while the alternative hypotheses are rejected, as shown in Table 5.19.

Only the coefficient for FC is 0.26. This indicates that for each one-unit increase in FC, the PB is expected to increase by 0.26, while the other variables are kept constant. This value is statistically significant at the 95% confidence level (p-value = 0.005), as suggested by the t-value (2.84), the related null hypothesis is rejected, and the alternative hypothesis is accepted, as displayed in Table 5.20.

Table 5-19: Hypotheses Testing

No.	Null Hypotheses	The Accepted Hypothesis
H1	Accepted	Subjective norms have no significant influence on the purchasing behaviours of organic food in Syria.
H2	Accepted	Environmental concerns have no significant influence on the purchasing behaviours of organic food in Syria.
H3	Accepted	Health Concern has no significant influence on the purchasing behaviours of organic food in Syria.
H4	Accepted	Price Consciousness has no significant influence on the purchasing behaviours of organic food in Syria.
H5	Rejected	Food Safety has a significant influence on the purchasing behaviours of organic food in Syria.
H6	Accepted	Brand awareness has no significant influence on the purchasing behaviours of organic food in Syria.

Table 5-20: Direction and Strength of the Relationships with the Purchase Behaviour

Variable	Relationship
SNs	+
EC	+
HC	-
PC	+
FS	++
BA	+

+ Positive relation, − Negative relation,

++ Strong evidence, +/- Weak evidence

In short, the FC variable appears to have a statistically significant positive impact on PB, while the other predictors, SN, EC, HC, PC, and BA, do not show any statistically significant effects.

5.9 Justification of the accepted/rejected Hypotheses

The insignificance of SNs, HC, EC, PC, and BA implies that consumer behavior in purchasing organic food is complex and may be influenced by factors other than SNs, HC, EC, PC, and BA. One possible reason for the insignificant relationships could be the sample size, which may not have been large enough to detect significant relationships.

FC show a significant relationship with PB, while HC did not. One reason could be because FC is directly related to the immediate, short term human health. For example, if food is contaminated it can lead to death.

The fact that SNs have an insignificant impact on PB in the current study suggests that contrary to what the TPB posits, where social influence from others may not play a significant role in composing consumers' purchase decisions in the current particular context. The rejected hypotheses on subjective norms highlight absence of social influences on organic food purchases in Syria. This could indicate a unique consumer behavior pattern in the Syrian market where personal considerations outweigh external influences. This result could reflect that consumer in the current study value independence and personal autonomy in their purchase decisions. With the rise of e-commerce and online shopping, consumers might depend more on online ratings, reviews, and expert opinions rather than SNs from their close social circle.

Additionally, findings on price consciousness challenge traditional views on consumer behavior in Syrian organic food market. Consumers may prioritize the food safety of organic foods over their cost. When consumers view organic food as significantly better for their health, they might be willing to pay a premium despite being generally price conscious. This can be explained

further by the current finding related to income that significantly differentiates consumer clusters. Higher-income consumers may not be as sensitive to price due to their greater financial flexibility, allowing them to purchase organic food regardless of its higher cost. For lower-income consumers, the inability to afford organic food might override their price concerns, making price less relevant in their decision-making process. The issue is not having enough income rather than the high price of the product.

5.10 Cluster Analysis

Cluster analysis underline any potential clusters within the data and identify whether specific demographic factors are account for cluster membership. It allows grouping similar observations together according to their characteristics and thus identifying different types of consumers based on their organic food purchase drivers and purchase behaviours within the sample.

The Calinski-Harabasz pseudo-F index was used to determine the optimal number of clusters. Moreover, nonparametric tests, explicitly the Kruskal-Wallis's test, were utilized to assess the differences in the distributions of various variables across the recognized clusters. The Kruskal-Wallis's test is suitable for comparing distributions when the assumptions of parametric tests are not fulfilled or when dealing with ordinal or non-normally distributed data. Furthermore,

Cluster analysis is a powerful technique used It allows researchers to discover unseen patterns and heterogeneity within a dataset, providing valued insights for understanding consumer behaviours, market segmentation, and targeted marketing strategies.

Table 5.21 demonstrates that the optimal number of clusters determined through the Calinski-Harabasz pseudo-F index indicated that the data could be effectively grouped into two clusters.

Table 5-21: Calinski-Harabasz pseudo-F indeces

Number of clusters	Index
2	62.86
3	44.91
4	38.64
5	31.95

Table 5.22 shows the final cluster centers based on K-mean clustering.

Table 5-22: Final Cluster Centers

Variable	Cluster 1	Cluster 2
SN	0.29	-0.59
EC	0.50	-1.01
HC	0.49	-0.98
PA	0.42	-0.85
FC	0.53	-1.06
BA	0.24	-0.48
PB	0.26	-0.52
No. of Cases	70	141

Table 5.23 displays the results of the Kruskal-Wallis's test, showing a piece of evidence that the distributions of the Z scores for various variables, SN, EC, HC, PA, FC, BA, and PB, were not the same across the two identified clusters. This result shows that the two clusters differ significantly by referring to their attitudes, preferences, and behaviours in the context of organic food purchases

Table 5-23: Kruskal-Wallis Tests

Variable	Sig.
SN	<.001
EC	.000
HC	.000
PA	.000
FC	.000
BA	<.001
PB	<.001

Note: The significance level is .05

Employing cluster analysis and nonparametric tests helped the researcher to gain insights into the heterogeneity of consumer behaviours and preferences regarding organic food purchases. The identified clusters help in a more nuanced understanding of consumer segments and help in guiding the development of tailoring product offerings, targeted marketing strategies, and effective communication strategies in the Syria organic food sector.

To identify whether specific demographic factors are account for cluster membership, a demographic clustering analysis has been conducted, and two clusters have been identified.

Table 5.24 illustrates the final cluster centres of the demographic clustering.

Table 5-24: Demographic Clustering Final Cluster Centres

Variable	Cluster 1	Cluster 2
Gender	2	2
Age	2	3
Education	4	3
Marital Status	2	2
Income	2125000	274824
Occupation	4	3

Based on the significance levels obtained from the demographic clustering analysis, the results suggest varying levels of statistical significance in terms of the demographic variables.

Table 5.25 shows the significance levels of the Kruskal-Wallis tests. Gender registered a significance level of .317, indicating that there is no statistically significant difference in gender distribution among the identified clusters. This finding suggests that gender does not play a significant role in differentiating the clusters in terms of their demographic composition. Similarly, Age, Marital status, and Occupation recorded non-significant levels of 0.30, 0.79, and 0.62, respectively. Accordingly, Age, Marital status, and Occupation do not appear to be differentiating factors when it comes to clustering the participants.

Table 5-25: Kruskal-Wallis test for Demographic Clustering

Variable	Sig.
Gender	.317
Age	.300
Marital Status	.798
Occupation	.617
Education	.097
Income	<.001

The significance level of .097 for education indicates a borderline level of statistical significance. This suggests that there might be a potential association between education and the identified clusters, but it does not touch a conventional level of significance. Further investigation may be required to explore the role of education in differentiating the clusters.

Remarkably, the lowest significance level observed was for income, with a value of <.001. This indicates a highly significant difference in income distribution across the identified clusters. Income plays a significant role in clustering individuals based on other demographic variables.

Overall, the results of the demographic clustering analysis suggest that income is the utmost significant factor among the current study's variables, as it significantly differentiates the identified clusters. Whereas education exhibits borderline significance, gender, age, marital status, and occupation do not appear to play significant roles in differentiating the clusters. These findings highlight the importance of income as a key demographic variable when analyzing and understanding the identified clusters.

5.11 Discussion

A broad analysis of the collected data was essential to gain a deeper understanding of the factors influencing consumer behaviours in the organic food market in Syria.

The demographic analysis of the participants helped in providing valuable insights into the participants' characteristics and assist in contextualizing the findings. Data were collected from both genders, showing the study's equity and inclusivity. However, there is a limited representation of very young and older age groups, and there is a gradual decline in the proportion of participants as the age increases. The sample is well-educated and, with great possibility, knowledgeable about the topic. The sample considered the urban-rural share. The diversity of income levels and different occupational groups is noticeable. The diversity in terms of age, education, residential place, income level, and occupation enhances and guarantees generalizability and representativeness.

The demographic analysis also highlighted various characteristics related to organic food purchase decisions, which is important for underlining the multifaceted nature of consumer interests and concerns. The sample shows a range of buying habits, from weekly purchases to rare purchases. The majority of participants prefer the consumption of fruits and vegetables. Almost a third of respondents show a long-term commitment to organic food consumption as well as a significant level of engagement and regularity in purchasing. The majority of respondents identified high prices as a significant issue.

The instrument used to measure the research's variables were deemed reliable as Cronbach's alpha values for all variables extend from 0.775 to 0.901. The convergent validity for the current constructs is supported as the estimates indicate a moderate to strong positive relationship between each item and the overall scale. The discriminant validity for the current constructs was supported as the square root of the AVE indicates that each construct's correlation with itself is higher than the correlations between different constructs. The sample is free of extreme skewness and kurtosis, plus it also demonstrates no issue of multicollinearity in the data and thus shows the suitability of the model for multiple linear regression.

Generally, the regression model shows a moderate level of predictive power, with the predictors collectively explaining a significant portion of the variance (17.8%) in PB. However, remarkably there is still a considerable proportion of unexplained variance in PB, as the relatively low R square value shows. The F statistic (7.343) shows a significant level of the regression model.

ALL the null hypotheses of the study were rejected except the hypothesis associated with FC. Therefore, the research confirms that FC has a significant influence on the purchasing behaviours of organic food in Syria.

By conducting a cluster analysis, Calinski-Harabasz pseudo-F index indicated that the data could be effectively grouped into two clusters. The Kruskal-Wallis's test shows that the two clusters differ significantly by referring to their attitudes, preferences, and behaviours in the context of organic food purchases. Additionally, the demographic clustering analysis suggests that income is the utmost significant factor among the current study's variables, as it significantly differentiates the identified clusters.

To discuss the previously mentioned results, it is essential to emphasize that similar to most related studies, the current study collected primary data from surveys. Remarkably, just a few studies, such as Schäufele and Janssen (2021) and Testa et al. (2019), collected actual purchase data in addition to survey-based data. The current study attempts to bridge the academic literature gap by measuring the direct effect of six product- and value-related factors on actual purchase behaviours in Syria. It provides insights into the determinants of organic food consumption by collecting data about actual purchasing behaviours. The current study has paid attention to food safety and brand as insufficiently covered factors in the previous studies. The current study is the first study, to the best knowledge of the researcher, to test the target variables collectively in one study. The current study also bridges a geographical gap, where it is the first study to focus on organic food purchase behaviours in Syria.

The regression model shows a moderate level of predictive power, with the predictors collectively explaining a significant portion of the variance (17.8%) in the dependent variable. ALL the null hypotheses of the study were rejected except the hypothesis associated with Food Safety.

The study's first hypothesis (H1) is that SNs have a significant positive influence on the PB of organic food in Syria. The estimates showed that SNs have an insignificant positive influence on the PB of organic food in Syria. A similar result has been reported by Almohammad et al. (2021), who found that support from family and friends may be an insufficient reason to engage in an entrepreneurial project.

However, the current result related to SNs contradicts the known fact that in a collectivistic culture such as Syria, SNs that are built by the people around the person have an impact on their behaviours. The current result also contradicts a number of earlier studies that had identified a positive influence of SNs on purchase intention in developing countries. For example, Khan et al. (2022) analyzed 787 Pakistani household responses and found that SNs had a substantial influence. Mohammed (2021) analysed 236 Saudi responses and found that SNs positively influence. Mandler et al. (2021) analyzed 401 young Indian responses and found that SNs had a significant influence. In developed countries, Svecova and Odehnalova (2019) focused on analyzing the young generation in the Czech Republic, and Roseira et al. (2022) targeted 448Portuges and 468 Norway, and they all found that SNs are one of the most influential factors. However, Testa et al. (2019) used both actual purchase and self-reported data from Italian consumers and found a negative effect of SNs on actual purchasing behaviours.

According to the TPB, SNs represent the perceived social pressure from reference groups or substantial others to perform or not perform a particular behaviour. SNs, in the case of PB, would be the influence of friends, family, colleagues, or society on a consumer's decision to purchase a particular product. The fact that SNs have an insignificant impact on PB in the current study suggests that contrary to what the TPB posits, social influence from others may not play a significant role in composing consumers' purchase decisions in the current particular context. Several factors could explain this result. This result could reflect that consumer in the current study value independence and personal autonomy in their purchase decisions. They are possibly less influenced by external opinions and social pressures when making decisions. Additionally, with the rise of e-commerce and online shopping, consumers might depend more on online ratings, reviews, and expert opinions rather than SNs from their close social circle.

Furthermore, some products might be more influenced by social pressures, while others, such as food-related products, may be more driven by utilitarian factors or personal preferences.

The second proposed hypothesis is that EC has a significant influence on the purchasing behaviours of organic food in Syria. However, the estimates showed that environmental concerns have an insignificant influence on the purchasing behaviours of organic food in Syria. Similarly, Svecova and Odehnalova (2019) analyzed the young generation in the Czech Republic and found EC is insignificant. Additionally, On the other side, Sana et al. (2018) noticed that EC has less effect or negative impact on willingness to pay to purchase organic food. On the other side, the current study's result regarding EC contradicts several previous studies that documented a significant positive relationship between EC and purchase behaviours/intention. Yadav and Pathak (2016) provided a piece of evidence that environmental concern plays a significant role in predicting purchase intention. Prakash et al. (2018) indicated that environmental consciousness has a direct and positive impact on consumer intention. In their comparative study in Pakistan, Turkey, and Iran, Asif et al. (2018) found that the results vary from country to country. Zheng et al. (2021) revealed that environmental consciousness significantly impacts purchase intention and actual purchase behaviours. Schäufele and Janssen (2021) analyzed actual purchase data and surveyed 8400 Germanies and found that environmental protection is an influencer on the purchase of organic food. Su et al. (2022) observed the impact of environmental awareness on organic food purchasing intention. Kumar et al. (2022) found that environmental concern significantly affects actual purchase behaviours. Zayed et al. (2022) demonstrated that environmental concern influence purchase intention.

The insignificant impact of EC may be attributed to the fact that other factors may have a more prominent influence on consumers' purchasing decisions for organic food, overshadowing the influence of EC. The result may also reflect a lack of awareness or understanding about the environmental impacts of organic food among consumers in Syria, which may fade the relationship between EC and PB. Additional factors, such as affordability, income levels, and the relatively higher cost of organic food, may influence consumers to prioritize price over environmental considerations, restraining consumers' ability to prioritize EC in their food choices.

The third proposed hypothesis is that HC has a significant influence on the Purchasing Behaviour of organic food in Syria. However, the current estimates indicate that HC has an insignificant positive influence on the purchasing behaviours of organic food in Syria. While the results of a number of previous studies, both in developing and developed countries, ensure

a statistically significant positive influence on health concerns. For example, in developing countries, Zheng et al. (2021) who analyzed 464 Bangladeshi, Wankhede and Rajvaidya (2021) who analysed 392 Indian, Nguyen et al. (2019) who analysed 609 Vietnam, Lian and Yoong (2019) who analysed 398 Malaysian, Singh and Verma (2017) who analysed 611 Indian. Similarly, in developed countries, several researchers found the same significant influence. For example, Roseira et al. (2022) analyzed 448 in Portugal and 468 in Norway, Schäufele and Janssen (2021) analyzed 8400 in Germany, Ali et al. (2021) analyzed 335 in China, Svecova and Odehnalova (2019) analyzed 403 in Czech Republic.

The insignificant impact of HC may be attributed to the fact that other factors have a more dominant influence on consumers' purchasing decisions for organic food, overshadowing the influence of HC. The result may also reflect a lack of awareness or understanding about the health benefits of organic food among consumers in Syria, which may fade the relationship between HC and PB. An additional factor, such as affordability and income levels, might limit consumers' ability to prioritize HC in their food choices.

The Fourth proposed hypothesis is that PC has a significant positive influence on the PB of organic food in Syria. However, the current estimates demonstrated an insignificant influence of Price Consciousness on purchasing behaviours. In the Czech Republic, Svecova and Odehnalova (2019) analyzed the young generation's responses and concluded that price is no longer a purchase behaviours determinant. This is because they found that consumers were willing to pay for costly prices to obtain high-quality food.

However, numerous studies; in developing as well as developed countries; confirm that organic food prices are still a determinant of purchase behaviours. For example, Zheng et al. (2021) analyzed 464 Bangladeshi, Nguyen et al. (2019) 609 Vietnam, and Singh and Verma (2017) analyzed 611 in India and found price as a determinant of purchase behaviours. Similarly, Schäufele and Janssen (2021) analyzed actual purchase data and surveyed 8400 Germanies and found that price is an influencer on the purchase of organic food. Similarly, Roseira et al. (2022) analyzed 448 in Portugal and 468 in Norway, and Ali et al. (2021) analysed 335 in China, and they found a significant impact on price. Remarkably, Singh and Verma (2017) and Roseira et al. (2022) found a significant positive relation between price and purchase behaviours. This may show that people know that organic food is expensive, and the higher price of the product is, the more trust they have in it.

The insignificance of PC might not be the primary driver of PB, and other factors may have a more significant influence. The insignificant relation can be attributed to the characteristics of the participants, for example, their buying habits and income levels.

The fifth proposed hypothesis is that Food Safety Concern has a significant positive influence on the purchasing behaviours of organic food in Syria. The current estimates ensure this hypothesis and confirm a statistically significant positive relationship with purchase behaviours. Remarkably, very few studies have tested the impact of food safety on purchase. Though, the current estimates from the current study comply with the previous results found in the literature. For example, Zheng et al. (2021), Wankhede and Rajvaidya (2021), Nguyen et al. (2019), and Lian and Yoong (2019) all detected a significant positive impact on food safety. In the same vein, Syrian farmers also reported that using chemical inputs in agriculture has negative impacts on the health of both people and animals. These results reflect how incidents of food safety make consumers more worried about food safety issues (S. Y. Hsu et al., 2019). Food safety concern shows to what extent consumers are concerned about production methods, agricultural practices, and food ingredients. The more anxious consumers are about food safety, the more they will eat foods that are free of any harmful substances, and therefore they will purchase natural, pure, and safe foods. However, few studies failed to prove any relationship between food safety concerns and purchase intention, for example, in India and Turkey Nagaraj, 2021; Yazar & Burucuoglu, 2019).

This significant influence of FC indicates that Syrian consumers are motivated to purchase organic food products as they are concerned about food safety. Food safety is gaining growing concern worldwide, showing the increasing importance of informed consumer behaviours in the Syrian market.

The sixth proposed hypothesis is that BA has a significant positive influence on the Purchasing Behaviour of organic food in Syria. However, the current estimates demonstrated an insignificant influence of Brand Awareness on Purchasing Behaviour. Remarkably, very few studies have tested the impact of Brand Awareness on Purchasing Behaviour. While, (Anh et al., 2017; Sekhar et al., 2022; Siyal et al., 2021) introduced a piece of evidence that brand credibility is a contributor to shaping the consumer's purchasing intention.

5.12 Limitations

Despite the significance of the current study results, there are certain limitations. The research depends on reported data; therefore, the research is prone to response bias and social desirability bias. Though, these biases were minimized through careful questionnaire design and data

analysis. The findings may be influenced by the sample size and characteristics of the participants. The study involved a specific sample of Syrian consumers, and drawing broader conclusions based exclusively on the responses of the selected sample limits generalizability. Since data collection may be subject to constraints such as limited time, budget, and access to participants, these limitations may impact the breadth and depth of the analysis and restrict the ability to investigate particular aspects in detail.

Chapter Summary

The collected data show did not provide sufficient evidence to confidently establish a reliable and meaningful relationship between SNs, HC, EC, PC, BA, and PB. The estimates showed insignificant relations. This means support from family and friends may be an insufficient reason to engage in purchasing organic food. Similarly, EC, HC, PC, and BA may be insufficient reasons for predicting organic PB. However, FC reported a significant relationship with PB. The insignificant relations may reflect the complexity of consumer behaviours and the need for further research in such areas. The insignificant relations also show that PB is a complex outcome that may be more influenced by other factors beyond SNs, HC, EC, PC, and BA. One possible reason for the lack of significance could be the sample size, where future studies can be conducted with a more powerful sample size. Factors like consumer demographics and cultural influences can change how SNs, HC, EC, PC, and BA impact purchase decisions.

6 CONCLUSION AND RECOMMENDATIONS

6.1 Overview

This chapter summarizes the fundamental findings of the current study and provides actionable suggestions for practical applications and future research. It begins by recalling the research objectives and questions. It then introduces a summary of the key findings and the main insights gained from data analysis. Next, it delves into an interpretation of the obtained results, explaining the implications and significance of the findings and explaining how the results contribute to the existing body of knowledge in the organic food field. It discusses any contradictory or unexpected results and offers possible explanations. Later, recommendations for future research are introduced based on the limitations of the study and the gaps in the current literature. Additionally, practical implications of the findings are presented to help decision-making, policies, or business strategies.

6.2 Conclusion and Recommendation

In conclusion, this study investigated the impact of SNs, EC, HC, PC, FC, and BA on PB in Syria, providing valuable insights for businesses, policymakers, and researchers. FC emerged as a significant driver of organic food purchases, emphasizing the importance of food safety in consumer decision-making. Additionally, the study found no strong evidence that support a reliable and meaningful connection between environmental consciousness, subjective norms, price consciousness, and brand awareness in shaping purchasing behaviours. These findings underscore the need for businesses to adopt targeted marketing strategies that address consumer preferences and concerns, promoting the benefits of organic food while assuring its safety and quality. Recommendations include prioritizing health-focused marketing, investing in consumer education, and strengthening supply chain transparency. As the organic food market evolves, continuous research is essential to understand changing consumer behaviours and adapt strategies to align with their needs and expectations. By heeding these recommendations, stakeholders can contribute to a thriving organic food industry that meets both consumer demand and societal well-being.

Based on the obtained results, a number of recommendations can be shared. The current results reflect the importance of emphasizing individual autonomy, personal preferences, and consumer confidence. It also implicitly reveals the importance of online reviews and raising

consumer awareness about the health benefits and environmental gains of organic food. Therefore, the recommendations include:

1- Engaging with consumers through social media and other platforms to address their food safety concerns directly. Responding to inquiries and feedback can build consumer confidence.
2- Collaborating with health experts or nutritionists to validate and endorse the safety and health benefits of organic food.
3- Investing in educational campaigns to raise consumer awareness about the organic food health benefit, environmental gains, and food safety. Collaborating with government bodies or health organizations to launch public awareness campaigns. Educated consumers are more likely to make informed choices.
4- Designing pricing strategies such as promotions and loyalty programs to cater to price-sensitive consumers.
5- Ensuring safety throughout the organic food supply chain by emphasizing rigorous quality control measures, proper handling, and adherence to food safety standards.
6- Promoting organic certifications and labels prominently on packaging and marketing materials to reinforce the safety assurance of organic products. This commitment to transparency and certifications ensures safety.
7- Provide Safe Handling Guidelines to Educate consumers about proper food handling and storage practices to maintain the safety of organic food products after purchase.
8- Implement non-stoppable quality monitoring procedures to address and detect any potential safety issues promptly. Regular testing and inspection can bolster consumer trust.
9- In-Store Demonstrations: Organize in-store demonstrations or workshops showcasing safe food handling practices and the safety advantages of organic food, engaging consumers at the point of purchase.
10- Targeting specific consumer segments with personalized marketing strategies.
11- Invest in influencer and word-of-mouth marketing to increase brand exposure.

These implications should benefit policymakers and marketers. Businesses are recommended to develop customized strategies that prioritize safety and quality to realize increased consumer confidence and organic food purchases.

6.3 Implications for Future Research

While the current study presents valuable insights into the influence of six factors on organic food purchasing behaviours in Syria, there are several channels for future research to deepen our understanding of the dynamism of the organic market, for example, including relevant control variables, such as region (urban and rural), income level (low and high), and societal desires, in the analysis to consider any potential confounding factors that may influence the relationship between variables. Carrying out a comparative analysis between urban and rural consumers may underline variations in preferences and purchasing behaviours across different demographics. Conducting a longitudinal study to observe alterations in consumer behaviours and preferences over time, offering valuable insights into the evolving impact of various factors on purchasing decisions. Additionally, assessing the effectiveness of specific marketing strategies, such as online promotions, on food purchases will aid businesses in optimizing their marketing efforts. Future research in these directions will contribute significantly to the organic food industry's growth and support the formulation of targeted marketing strategies to meet consumer needs effectively.

7. NEW SCIENTIFIC RESULTS

This dissertation introduces several new scientific insights into the domain of organic food purchasing behaviors, particularly within the underexplored context of Syria. These results contribute to the existing literature on consumer behavior, organic food marketing, and sustainable consumption while providing practical implications for policymakers and businesses.

Exploration of Organic Food Purchase Drivers in Syria

The study provides pioneering insights into the factors influencing organic food purchase behaviors in Syria, a market not extensively examined in prior research. By focusing on a country with unique cultural and economic conditions, the dissertation enriches the global understanding of sustainable food consumption patterns. Unlike studies conducted in more developed markets, this research reveals the contextual nuances shaping consumer behavior in a developing country.

Identification of Key Behavioral Drivers

The research identifies and evaluates six primary drivers of organic food purchasing behavior in Syria: subjective norms, environmental concerns, health concerns, price consciousness, food safety, and brand awareness. These factors were analyzed for their relative importance, revealing significant differences compared to findings in other regions. Food safety emerged as the most critical determinant, reflecting heightened concerns about health and contamination risks. This finding underscores the importance of safety assurances and certifications in influencing consumer decisions in Syria.

Re-evaluation of Cultural and Economic Influences

A critical outcome of the research is the nuanced understanding of how cultural and economic conditions affect consumer behavior in Syria. While subjective norms were expected to play a prominent role, they were found to have an insignificant impact. This contrasts with established theories, such as the Theory of Planned Behavior, which typically emphasize the importance of social influences in shaping consumer actions. The results suggest that Syrian consumers may rely more on personal autonomy and digital sources, such as online reviews and social media, rather than traditional social cues.

Price Sensitivity and Consumer Segmentation

The study challenges traditional views on price consciousness. While price is often considered a significant barrier to organic food adoption, the findings indicate that income constraints, rather than price sensitivity, may play a more substantial role in Syria. Higher-income consumers appear less deterred by the cost of organic food, while lower-income consumers are primarily restricted by financial limitations. This nuanced understanding provides a basis for targeted strategies to improve accessibility and affordability.

Cluster Analysis of Consumer Segments

Through advanced statistical techniques, including cluster analysis, the study identifies two distinct consumer segments in Syria based on demographic and behavioral attributes. The segmentation highlights income as the most significant demographic factor, significantly differentiating consumer clusters. This approach provides actionable insights for designing tailored marketing and communication strategies aimed at specific consumer groups.

Theoretical Contributions

The research contributes to the theoretical discourse by testing and contextualizing global models like the Theory of Planned Behavior (TPB) in a developing country setting. The findings highlight the limitations of universal applicability, advocating for localized adaptations of theoretical frameworks. For instance, the diminished role of subjective norms in the Syrian context suggests the need for integrating alternative behavioral predictors in future studies.

Recommendations for Policymakers and Businesses

The dissertation offers practical recommendations for stakeholders aiming to promote organic food consumption in Syria. It emphasizes the need for:

Consumer Education: Initiatives to enhance awareness of food safety, health benefits, and environmental gains.

Price Strategies: Designing loyalty programs and promotions to address financial barriers.

Safety Assurances: Promoting certifications and transparent supply chains to build trust.

Digital Engagement: Leveraging social media and online platforms to influence purchasing decisions.

These strategies provide a roadmap for fostering sustainable consumption while addressing the unique challenges of the Syrian market.

Implications for Future Research

Finally, the study identifies avenues for further exploration, including comparative analyses between urban and rural consumers, longitudinal studies to track evolving behaviors, and assessments of specific marketing strategies. These directions aim to deepen the understanding of organic food consumption dynamics and support the broader goal of sustainable food systems globally.

8. SUMMARY OF THE STUDY

The global organic food market has been passing through significant growth recently, reflecting a growing consumer preference for healthier and more sustainable food options. The popularity of organic food cultivation and purchasing has recently widened quickly in developing nations. The Syrian organic food market has unique characteristics, where consumers' behaviours are affected by their country's culture. The Syrian organic sector is comparatively young, and only a tiny area is organically managed. Moreover, there is a scarce of related research.

For supporting and guiding the current study, the researcher examined multiple variables contributing to a holistic understanding of consumer behaviours and purchasing decisions. Demographic factors, subjective norms (SNs), environmental concerns (EC), health concerns (HC), price consciousness (PC), food safety concern (FC), and brand awareness (BA) collectively shape consumers' attitudes, preferences, and choices. It also introduced a justification for how each relationship between SN, EC, HC, PC, SC, BA, and actual purchase behaviours (PB) is hypothesized. Based on an extensive literature review of recent related studies, the researcher identified several academic gaps related to organic food purchase behaviour. There is a scarcity of studies that collect actual purchase data, most studies collected primary data through close-ended questionnaires. Very few studies have considered food safety concern and brand awareness, referring to a need for more relevant studies. Very few studies have considered the factors that affect the actual purchase behaviour directly. No single study, whether in developed or developing countries, was found to involve SN, EC, HC, PC, SC, and BA all together. Additionally, there is a geographical gap related to Syria, where there is a need for more studies that investigate consumer purchasing behaviours in Syria.

In response to these academic gaps, the current study attempts to identify and understand the antecedents of Syrian consumer purchase intentions for various organic food products for supporting and promoting the adoption of organic food consumption patterns in line with evolving Syrian consumer preferences. The researcher aimed to investigate the impact of SN, EC, HC, PC, SC, BA, on the actual PB.

The current study followed a positivist paradigm with deductive approach that collected primary quantitative data by distributing close-ended questionnaires. The researcher collected 229 questionnaires and excluded 18 participants as they do not purchase any organic food. Therefore, 211 cases were qualified for data analysis, demonstrating a satisfactory sample size for multiple regression analysis. The scale measurement and the measurement instrument were

designed to follow the best practices so that reliable data were collected. All the measurement instruments have been adopted from the previous literature.

Data were analysed on SPSS. The demographic analysis helped in providing valuable insights into the participants' characteristics and assisted in contextualizing the findings. Data were collected from both genders, showing the study's equity and inclusivity. However, there is a limited representation of very young and older age groups, and there is a gradual decline in the proportion of participants as the age increases. The sample is well-educated and, with great possibility, knowledgeable about the topic. The sample considered the urban-rural share. The diversity of income levels and different occupational groups is noticeable. The diversity in terms of age, education, residential place, income level, and occupation enhances and guarantees generalizability and representativeness.

The demographic analysis also highlighted various characteristics related to organic food purchase decisions, which is important for underlining the multifaceted nature of consumer interests and concerns. The sample shows a range of buying habits, from weekly purchases to rare purchases. The majority of participants prefer the consumption of fruits and vegetables. Almost a third of respondents show a long-term commitment to organic food consumption as well as a significant level of engagement and regularity in purchasing. The majority of respondents identified high prices as a significant issue.

The instrument used to measure the research's variables were deemed reliable as Cronbach's alpha values for all variables extend from 0.775 to 0.901. The convergent validity for the current constructs is supported as the estimates indicate a moderate to strong positive relationship between each item and the overall scale. The discriminant validity for the current constructs was supported as the square root of the AVE indicates that each construct's correlation with itself is higher than the correlations between different constructs. The sample is free of extreme skewness and kurtosis, plus it also demonstrates no issue of multicollinearity in the data and thus shows the suitability of the model for multiple linear regression.

Generally, the regression model shows a moderate level of predictive power, with the predictors collectively explaining a significant portion of the variance (17.8%) in PB. However, remarkably there is still a considerable proportion of unexplained variance in PB, as the relatively low R square value shows. The F statistic (7.343) shows a significant level of the regression model. ALL the null hypotheses of the study were rejected except the hypothesis associated with FC. Therefore, the research confirms that FC has a significant influence on the purchasing behaviours of organic food in Syria.

The analysis tested six hypotheses regarding the influence of SN, EC, HC, PC, SC, BA, on the actual PB of organic food in Syria. The results showed that subjective norms, environmental concerns, health concerns, price consciousness, and brand awareness all had no significant influence on purchasing behaviours, as the null hypotheses for these factors (H1, H2, H3, H4, and H6) were accepted. However, food safety concern was found to have a significant influence on purchasing behaviours, leading to the rejection of the null hypothesis for H5.

By conducting a cluster analysis, Calinski-Harabasz pseudo-F index indicated that the data could be effectively grouped into two clusters. The Kruskal-Wallis's test shows that the two clusters differ significantly by referring to their attitudes, preferences, and behaviours in the context of organic food purchases. Additionally, the demographic clustering analysis suggests that income is the utmost significant factor among the current study's variables, as it significantly differentiates the identified clusters.

The current study's findings introduce valuable insights for marketers, policymakers, and researchers planning to promote and understand sustainable food consumption patterns in Syria. Accordingly, the current study encourages the collaboration with health experts or nutritionists to validate and endorse the safety and health benefits of organic food, investing in educational campaigns to raise consumer awareness, and designing pricing strategies such as promotions and loyalty programs to cater to price-sensitive consumers.

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10. PUBLICATIONS AND OTHER SCIENTIFIC OUTPUT

10.1 Publications relating to the topic of the dissertation:

10.1.1 Published Papers:

1. Durbul, A., Fertő, I., & Zaien, S. (2021). Is Organic Food Good for Health and the Environment? Regional and Business Studies, 13(2), 11-30.
2. Durbul, A., Osiako, P., Alarawi, F. & Alshaabani, A. (2024). Does social media marketing increase the sales of organic food? Bulg. J. Agric. Sci., 30(3), 389–395

10.1.2 Accepted Papers and In-Progress:

"Factors Impacting on Purchasing Decision of Organic Food in Developing Countries: A Systematic Review "in the Journal of Open Agriculture.

10.2 Presentations and publication in the Conference book of abstracts:

Durbul, A. & Osiako, P. O. (2023). Does Social Media Marketing Increase the Sales of Organic Food? In: Book of abstract, FEB Zagreb 2023 – 14th International Odyssey Conference on Economics and Business – Poreč, Istria, Croatia, on May 10 -13, 2023.

10.3 Research seminar:

1. Topic presented - Factors impacting on buying decision of organic food in Syria (Research Seminar) on the 24th of February 2023. Hungarian University of Agriculture and Life Sciences.

2. Topic presented - Does Social Media Marketing Increase The Sales Of Organic Food? (Research Seminar) on the 25th of May 2023. Hungarian University of Agriculture and Life.

CURRICULUM VITAE

Ahmad, the doctoral candidate, was born on April 30, 1990, in Damascus, Syria. He successfully obtained his bachelor's degree in Agricultural Engineering from Damascus University, marking the commencement of his academic journey. Subsequently, he pursued and accomplished a master's degree in Animal Nutrition and Feed Safety at Kaposvár University.

Presently, Ahmad stands as a Ph.D. Candidate at the esteemed Hungarian University of Agriculture and Life Sciences - MATE University Kaposvár Campus, enrolled in the renowned "Doctoral School of Economic and Regional Sciences." His current research is, 'Factors Impacting on the Buying Decision of Organic Food in Syria.' This signifies a substantial contribution to the academic exploration of consumer behavior in the organic food market within the Syrian context.

Furthermore, Ahmad has actively participated in various scholarly forums, exemplified by his involvement in the "International Odyssey Conference on Economics and Business" held in Zagreb in 2023. His presentation, titled "Does Social Media Marketing Increase the Sales of Organic Food?", underscores his engagement with contemporary issues at the intersection of economics and business, further enhancing the breadth and depth of his academic pursuits.

Incidentally, he has published many articles in international journals such as the 'Regional and Business Studies Journal' (2021), Volume 13, Number 2, pages 11-30. The article is entitled "Is Organic Food Good for Health and the Environment?" Moreover, in the 'Open Agriculture Journal,' an article is entitled "Factors Impacting on Purchasing Decision of Organic Food in Developing Countries: A Systematic Review."

Moreover, he published in the 'Bulgarian Journal of Agricultural Science an article entitled: "Does Social Media Marketing Increase the Sales of Organic Food?"

In summary, Ahmad's multifaceted academic endeavors, from research to active participation and publication, reflect a commendable commitment to advancing knowledge and understanding in the fields of agricultural science and economics.

APPENDICES

Appendix 1: Questionnaire

Section 1: Demographic Data

01. Sex: Male / Female

02. Age Group:

20 or less	
21-30 years	
31-40 years	
41-50 years	
51-60 years	
61 or more	

03. Education Level:

High School	
Diploma	
Bachelor's Degree	
Master's Degree	
PhD	
Other	

04. Marital status:

Single	
Married	
Other	

05. Place of residence:

Village	
Town	
City	

06. Average monthly income (thousand)

Less than 100	0
100-199	1
200-299	2
300-399	3
400-499	4

500-599	5
600 or more	6

07. Occupation:

Craftsman	
Retired	
Business Owner	
Private Sector employee	
Government Officer	
Student	
Other	

08. How Often you buy the organic foods.

Daily	
Weekly	
Biweekly	
Monthly	
Rarely	
Never	

09. Type of organic food purchased.

Fruits and Veg	
Meat	
Dairy Products	
Nuts	
Grain	
Other	

10. Where do you buy organic foods (Brzezińska et al., 2021)

Supermarket	
Convenient shop	
Vegetable stalls	
Direct from the farmers	
Online shops	

11. What is the main factor influence in general purchasing of food for you and your family?

Price	
Convenient to buy	
Quality of the product	
Promotions	
Other	

12. What is the percentage of organic food purchase from your monthly food purchasing? (Li et al., 2015)

100 % organic	
75%-99% organic	
50%-74% Organic	
25%-49% organic	
Less 25 % organic	
No organic products	

13. How long have you buying organic foods?

More than 20 years	
10-20 years	
5-10 years	
1-5 years	
Less than 1 year	
Not yet	

14. What are the issues in finding organic foods?

Availability Issues	
Quality issues	
High price	
Organic Certification	

Section 2: Variables measurement

This part explores the impact of subjective norms, health concern, environment concerns, price consciousness, safety food concern, and brand awareness on actual purchase behaviour. By assessing these factors and the corresponding impacts on consumer behaviours, the current research aims to contribute to the knowledge of organic food consumption and underline the distinguished dynamics within the Syrian context. Please rate each statement from strongly disagree to strongly agree according to your perception.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1. Subjective Norms					
01	My family thinks that I should buy organic foods rather than non-organic foods. (Chonsiripong, 2018)					
02	Most people around me would buy organic foods rather than non- organic foods.(Chonsiripong, 2018)					
03	People who are important to me think that I should buy organic foods.(Chonsiripong, 2018)					
04	I am in an environment that requires me to choose organic foods. (Chonsiripong, 2018)					
05.	Most friends whose opinions regarding diet are important to me think that I should buy organic foods.(Chonsiripong, 2018)					
06.	Society thinks the healthiest option of food is organic food.					
07	My family and friends' advice and purchase behaviours of organic food can influence my purchase intention (Li et al., 2015)					
08	Buying organic food is the current trend					
	2. Influence of the brand					
01	I prefer to buy organic food from brands familiar to me (Li et al., 2015)					
02	There are several brands of organic foods choose in the market					
03	I have trust on the product which are under reputed brand					
04	Trustworthy organic certification on packages of branded products(Gan et al., 2017)					

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
05.	I always tried to buy my all organic food need from one brand					
06.	I identify the organic food brands through mass media advertising					
07	I like to buy the products which are under imported brand names					
08	I think it is important to have a brand for any organic food item.					
	3. Concern on the Environment					
01	The balance of nature is very delicate and can be easily upset. (Saleki et al., 2020)					
02	Human beings are severely abusing the environment. (Saleki et al., 2020)					
03	Humans must maintain the balance with nature in order to survive. (Saleki et al., 2020)					
04	Human interferences with nature often produce disastrous consequences. (Saleki et al., 2020)					
05.	It is very important that the food items have been prepared in an environmental-friendly way (Iqbal et al., 2021)					
06.	It is very important that the foods have been produced in a way which has not shaken the balance of nature.(Iqbal et al., 2021)					
07	Organic farming can prevent the contamination and pollution of soil, air, water and food supply (Chonsiripong, 2018)					
08	Organic farming treats animals humanely (Chonsiripong, 2018)					
	4. Concern on the Health					
01	I intend to invest more into my health.(Chonsiripong, 2018)					

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
02	I have a goal to consume organic foods as much as possible.(Chonsiripong, 2018)					
03	I buy organic foods for my health to avoid illness.(Chonsiripong, 2018)					
04	I choose food carefully to ensure good health. (Wang et al., 2019)					
05.	I consider myself as a health-conscious consumer. (Wang et al., 2019)					
06.	I often think about health-related issues.(Wang et al., 2019)					
07	I feel good when eating organic food since they do not have harmful chemicals which causing Non communicable diseases.					
08	Organic foods are high quality and have high nutritional value. (Chonsiripong, 2018)					
	5. Influence of the price					
01	Organic products are more expensive than conventional products.(Gan et al., 2017)					
02	I accept the higher price of an organic product because a part of its price is donated towards the environment protection (Brzezińska et al., 2021)					
03	I accept the higher price of an organic product because I know it has been manufactured in a non-polluting way (Brzezińska et al., 2021)					
04	Price of organic products is a barrier to decision to buy (Gan et al., 2017)					
05.	People think organic food products very expensive					
06.	I accept the higher price of an organic product because I know the product is healthy: its taste is good and natural, it is more nutritious. (Brzezińska et al., 2021)					

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
07	If the price difference get reduce, I will increase my purchases of organic foods					
08	It is overall worth to pay higher price for organic foods.					
	6. Food Safety					
01	I am very concerned about the amount of artificial additives and preservatives in foods.(Iqbal et al., 2021)					
02	The quality and safety of food nowadays concerns me.(Iqbal et al., 2021)					
03	I am concerned about food processing. (Iqbal et al., 2021)					
04	I am highly involved in searching and reading information about good quality of foods, like organic food.(Iqbal et al., 2021)					
05.	Organic foods do not contain genetically modified ingredients. (Chonsiripong, 2018)					
06.	Organic foods can reduce the food poisoning risk. (Chonsiripong, 2018)					
07	Organic foods are safer to eat. (Chonsiripong, 2018)					
08	Organic foods are the best foods for children					
	7.Purchase Behaviour					
01	I have been purchasing organic food to fulfill my daily needs.(Quoquab et al., 2020)					
02	I often buy organic food products (Ali et al., 2021)					
03	I always try to buy organic food with green labeling marks(Ali et al., 2021)					
04	If organic foods were available in the shops, I would buy them.(Teng & Wang, 2015)					

		Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
05.	I am willing to buy organic foods despite their higher prices(Teng & Wang, 2015)					
06.	The probability I would buy organic foods is very high.(Teng & Wang, 2015)					