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FACTORS IMPACTING ON BUYING DECISION OF ORGANIC FOOD IN SYRIA

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1. BACKGROUND AND OBJECTIVES

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).

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).

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.

2. RESEARCH METHODOLOGY

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.

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

A research paradigm is a philosophical framework guiding scientific inquiry. This study adopts the Positivism paradigm, emphasizing hypothesis testing and statistical analysis to enhance predictive understanding (Collis & Hussey, 2021; R. Kumar, 2019). The approach is deductive, where empirical observations test theoretical frameworks, deducing specific instances from general inferences (Collis & Hussey, 2021; Lancaster, 2005). Positivism prioritizes deductive reasoning, starting with a theory or hypothesis, followed by data collection to confirm or refute it. This research focuses on how SN, EC, HC, PC, SC, and BA influence PB.

Aligned with positivism, this study employs a quantitative approach, systematically analyzing causal relationships between variables (Creswell & Creswell, 2018). Primary data is collected to understand drivers of organic food purchase behaviors (R. Kumar, 2019).

Questionnaires, typical of positivist methodology, are utilized for primary data collection (Collis & Hussey, 2021). They offer standardized responses, cost-efficiency, confidentiality, and suitability for quantitative analysis (Hair et al., 2021). This study employs self-administered questionnaires, distributed via online platforms and email, ensuring cost-effectiveness and flexibility for respondents (Hair et al., 2022).

2.1 Measurements

The independent variables are SN, EC, HC, PC, SC, and BA, while the dependent variable is actual PB.

Scale development:

The Likert scale allows for the quantification of subjective constructs. The 5-point scale is valuable for constructing questionnaires (Roy, 2020) and it is employed in the current study.

Constructs Development: by extensively reviewing existing literature, researchers identified suitable measurement items and created new ones based on established concepts and theories. The questionnaire is composed of eight parts: demographic data, SNs, EC, HC, PC, SC, BA, and actual PB. For this study, all measurement items are adopted/adapted from the literature.

2.2 Population and Sampling

Non-random/non-probability sampling designs are utilized when accessing or identifying an inclusive population sample is difficult (Given, 2008). Specifically, convenience sampling may be appropriate to select participants based on their

availability. The qualified participants are Syrian individuals who consume organic food.

In terms of the appropriate sample size, there is no universally agreed-upon rule for the appropriate sample size for multiple regression analysis. Generally, Malhotra et al. (2015) assure that having a sample size of 200-1000 or more respondents is satisfactory. The current research collected 229 responses; 18 responses 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).

2.3 Data analysis

For finding causal relationships between SN, EC, HC, PC, SC, BA, and actual PB, data were analysed on SPSS. The other tests include the reliability and validity and normality.

Chapter Summary

This chapter introduces the positivist research design process to eventually test how SN, EC, HC, PC, SC, and BA impact the actual PB. Primary quantitative data were collected by distributing close-ended questionnaires. The scale measurement and the measurement instrument are designed to follow the best practices. 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.

3. RESULTS AND DISCUSSION

3.1 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 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 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
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

3.2 Organic Food-Related Characteristics

Table 2 displays the purchase frequency distribution that reveals a range of buying habits.

Table 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
Rarely	52	24.6
Total	211	100.0

Source: Author's Survey

Table 3 demonstrates the distribution of organic food types.

Table 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 4 indicates the purchase channels where the respondents buy their preferred organic food product.

Table 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 shows the main factor influencing the purchasing decision.

Table 5: Purchase Influencers

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

Table 6 illustrates the frequency of monthly purchase percentage provides insights into the and commitment to purchasing organic food.

Table 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 7 indicates the duration of purchasing organic food. These estimates provide insights into the level of familiarity and experience with organic food products.

Table 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
Less than one year	19	9.0
Total	211	100.0

3.3 Instrument-Related Tests

The employed instrument needs to be reliable and valid. 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 8 display the correlations between each item and its overall scale (two-tailed). The convergent validity analysis demonstrates that all SN 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 EC scale reflect significant positive correlations with the overall scale score; the correlations range from r=.611 to r=.840. Similarly, all items of the HC scale (r=.671 to r=.846).

Table 8: 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 9 illustrates, the PC scale (r=.534 to r=.732), the FC scale (r=.806 to r=.606), and the BA scale (r=.519 to r= .720). PB (r=.727 to r=.836). These estimates indicate a moderate to strong positive relationship between each item and the overall scale.

Table 9: 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**		

Table 10 demonstrates the correlation matrix that demonstrates the discriminant validity among the constructs.

Table 10: 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.

3.4 Statistical Assumptions tests

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

Table 11 indicates skewness and kurtosis values; reflecting that the proposed model is suitable for subsequent analysis.

Table 11: 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: Table 12 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 12: 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

3.5 Mean And Standard Deviation

Table 13 displays the mean and standard deviation values as measures of central tendency and dispersion, respectively.

Table 13: Mean and Standard Deviation

Variable	Mean	Std. Deviation
SN	3.44	0.81
EC	4.38	0.63
HC	4.05	0.81

Variable	Mean	Std. Deviation
PA	3.79	0.69
FC	4.07	0.75
BA	3.10	0.79
PB	3.54	0.62

3.6 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 f Syrian consumers? And to answer this question, a multiple regression model was run to test the corresponding hypotheses. Table 14 displays information about the overall fit and performance of the proposed model.

Table 14: 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.

Table 15 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 15: 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 16 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 16: 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 16.

PB is predicted based on the values of SN, EC, HC, PC, FC, and BA. The constant term is 1.90, and the coefficients represent the impact of each predictor variable on PB.

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 hypotheses are accepted while the alternative hypotheses are rejected, as shown in Table 17.

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 17 and Table 18.

Table 17: 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 18: 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.

3.7 Cluster Analysis

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. Table 19 demonstrates that the data could be effectively grouped into two clusters.

Table 19: Calinski-Harabasz pseudo-F indeces

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

Table 20 displays the results of the Kruskal-Wallis's test, showing that the two clusters differ significantly by referring to their attitudes, preferences, and behaviours.

Table 20: 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

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. The final cluster centres of the demographic clustering suggest varying levels of statistical significance in terms of the demographic variables.

Table 21 shows the significance levels of the Kruskal-Wallis tests. There is no statistically significant difference in gender distribution, Age, Marital status, or Occupation; they do not appear to be differentiating factors.

Table 21: 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, suggesting possible potential association between education and the identified clusters, but it does not touch a conventional level of significance. Remarkably, the effective 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.

3.8 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. 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 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. 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 the current study collected primary data from surveys. Remarkably, just a few studies collected actual purchase. The current study attempts to bridge the academic literature gap by measuring the direct effect of SN, EC, HC, PC, SC, and BA, on PB 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 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.

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 (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.

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.

4.CONCLUSION & RECOMMENDATIONS

4.1 Conclusion

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.

4.2 Recommendations

The current results reflect the importance of emphasizing individual autonomy, personal preferences, and consumer confidence. It also reveals the importance of online reviews and expert opinions on purchase behaviours. It also reveals the

importance of raising consumer awareness about the health benefits and environmental gains of organic food.

1- Engaging with consumers through social media to address their FC directly
2- Collaborating with health experts to validate and endorse the benefits of organic food.
3- Investing in educational campaigns to raise consumer awareness.
4- Designing pricing strategies such as promotions and loyalty programs.
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.
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- In-Store Demonstrations: Organize in-store demonstrations or workshops.

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.

5. NEW SCIENTIFIC RESULTS

This study 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.

6. PUBLICATIONS AND OTHER SCIENTIFIC OUTPUT

6.1 Publications relating to the topic of the dissertation:

6.1.1 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

6.1.2 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.

6.2 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.

6.3 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.