



UNDERSTANDING CONSUMERS' PURCHASE INTENTION AND CONSUMPTION OF PROCESSED ORGANIC FOODS IN AN ACADEMIC ENVIRONMENT

Dhasaradha Rami Reddy L. Modugula¹

1. Teaching Associate, Department of food Processing technology, Acharya N. G. Ranga Agricultural University Guntur, Andhra Pradesh, India.

Abstract: The study aimed to investigate the factors influencing processed organic food consumption in academia. We used purposive sampling, distributing a pre-tested questionnaire to 500 consumers across five state universities in Andhra Pradesh, India. We employed descriptive statistics, confirmatory factor analysis, and structural equation modeling for data analysis. The reliability and validity of the questionnaire were established through factor loadings, Cronbach's alpha, composite reliability, and average variance extracted. The results highlighted nutritional quality as the primary positive driver of consumer purchase intention and consumption of processed organic food in an academic setting.

Keywords: processed organic food; determinants; purchase intention; consumption; confirmatory factor analysis; structural equation modeling

1. Introduction

The Indian organic food market is booming due to health benefits, with global growth projected at 14.0% CAGR, reaching \$259.06B in 2022 and \$437.36B in 2026. Access to markets is a challenge in developing countries. Organic fruits & veggies dominate (2020), while organic meat, fish & poultry is fastest-growing due to concerns about artificial preservatives. Organic beverages include coffee, tea, non-dairy products, and more, with non-dairy products leading (2020) due to vegan trends. Younger generations promote food awareness. Government, academics, NGOs focus on organic food for agriculture's future. Asia accounts for 46% of global organic producers.

The Asian organic food market sees significant imports of processed products. Major retail markets include Australia, New Zealand, Japan, Singapore, Taiwan, China, Hong Kong, and South Korea. Emerging urban consumers are growing in the Philippines, Thailand, India, China, and Malaysia. In India, Assam, West Bengal, Tamil Nadu, Kerala, and Karnataka are key markets. Major industry players include Suminter India Organics, Nature Bio-Foods Limited, Organic India Pvt. Ltd., and Sresta Natural Bio Products Pvt. Ltd. Singapore and Thailand serve as regional logistics hubs due to their strategic locations.

Knowledge and information about processed organic food attributes drive consumer choice (Gracia & Magistris, 2018; Singh & Verma, 2017; Effendi et al., 2015). Positive attitudes significantly influence purchase,

consumption, and satisfaction (Thøgersen, 2017; Ashraf et al., 2018). Sensory appeal and attractive packaging impact buying decisions (Lee & Yun, 2015; Raza et al., 2019). Food quality links to perception, purchase, and consumption (Bernues et al., 2012; Cecilia et al., 2016). Food safety motivates processed organic food consumption (Kumar & Ali, 2011; Thomas & Gunden, 2012; Van Loo et al., 2013). Health content builds trust (Muhammad et al., 2015; Yangui et al., 2016). Price perception hinders purchase (Lusk, 2011; Gracia & Magistris, 2018). Online availability and environmental concerns boost demand (Higuchi & Avadi, 2017; Padel & Foster, 2015; Basha et al., 2015; Raza et al., 2019). Ecological concern affects perception and behavior (Lee & Yun, 2015; Wang et al., 2015; Raza et al., 2019). Trust in organic foods is vital (Massey et al., 2018). Health, safety, and environment influence consumer behavior (Pandurangarao et al., 2017). Consumers choose organic for health, environment, and price reasons (J. Padmathy & R. Saraswathy, 2016). Organic foods are perceived as healthier due to natural ingredients (Wang et al., 2015; Raza et al., 2019). Awareness drives organic food consumption growth (Mohamed Bilal Basha et al., 2015). Ling (2013) studied drivers of green product purchase intention.

Prior research mainly addressed India, Vietnam, and Brazil (Basha & Lal, 2019; Van Huy et al., 2019; Feil et al., 2020), with a limited focus on South India. Despite strong organic food demand, comprehensive studies on factors influencing processed organic food purchase and consumption, including knowledge, attitude, sensory perception, nutrition, safety, health, trust, environmental/ecological concern, price, availability, and product information, are lacking.

2. Theoretical background and development of hypothesis

2.1 Knowledge

To increase consumers' knowledge of organic products and their likelihood to choose them, exposing them to more information is essential. Radman (2016) suggests that higher knowledge leads to a greater preference for organic products. Diaz (2012) found that knowledge and consumption levels influence willingness to pay for processed organic food. Considering the aforementioned research findings, the present study proposed the following hypothesis:

Hypothesis 1. *Knowledge is positively related to purchase intention of processed organic food*

2.2 Attitude

Attitude is a key predictor of organic food consumption (Thøgersen, 2017), driven by beliefs in health benefits, environmentally friendly production, and improved taste (Aschemann et al., 2017). Malaysian consumers' beliefs strongly influence organic food purchases (Shaharudin et al., 2010). Based on the aforementioned research findings, the following hypothesis is proposed:

Hypothesis 2. *A positive attitude leads to higher purchase intent for organic food.*

2.3 Sensory appeal

Sensory appeal, a key aspect of organic food quality alongside ethical values (Schleenbecker and Hamm 2013), significantly influences consumer motivation to purchase food in Western Balkan Countries (Milošević et al., 2012) and impacts consumer hedonic attitude toward organic foods (Lee and Yun, 2015). Based on the aforementioned research findings, the following hypothesis is proposed:

Hypothesis 3. *Sensory appeal boosts processed organic food purchase intent.*

2.4 Nutritional quality

Organic food is often more nutritious than conventional (Popa et al., 2018). Organic quality encompasses taste, flavor, and chemical residues (Xie et al., 2015). Improving the quality of organic food can attract more buyers

(Tsakiridou et al., 2008; Basha et al., 2015; Janssen, 2018; Nagy-Perci & Fogarassy, 2019). Based on the aforementioned research findings, the following hypothesis is proposed:

Hypothesis 4. *Nutritional quality positively influences processed organic food purchase intent.*

2.5 Safety attribute

Safety is a top reason for choosing organic foods (Paul, J. et al., 2012). Health benefits make safety a key motivator for buying organic (Prentice, et al., 2019). Buyers see their choices benefiting the community (Hsu, et al., 2016). Based on the aforementioned research findings, the following hypothesis is proposed:

Hypothesis 5. *Safety positively impacts processed organic food purchase intent.*

2.6 Health Consciousness

Studies show health is a key motivator for buying organic food (Schifferstein & Oude Ophuis, 2015). Consumers believe it's healthier because it's natural, without harmful chemicals or additives (Rana and Paul, 2017). Based on the aforementioned research findings, the following hypothesis is proposed:

Hypothesis 6. *Healthiness is positively related to purchase intention of processed organic food*

2.7 Competitive price

Family income matters for organic food consumers due to its higher cost compared to non-organic options. Price is a significant factor in organic food purchasing (Al-Swidi et al., 2014; Xie et al., 2015). Mohamed et al. (2012) examined consumer attitudes and willingness to pay premium prices in Egypt's capital. Based on the aforementioned research findings, the following hypothesis is proposed:

Hypothesis 7. *Competitive pricing boosts organic food purchase intent.*

2.8 Availability

Availability promotes processed organic food purchase intention (Davies et al., 2015). Dettmann & Dimitri (2017) highlight increased accessibility through marketing in mainstream stores. Consumer challenges in finding eco-friendly products due to information gaps are noted (Brown, 2013). Based on the aforementioned research findings, the following hypothesis is proposed:

Hypothesis 8. *Easy availability boosts processed organic food purchase intent.*

2.9 Environmental Concern

Akaichi et al. (2012) emphasized environmental benefits as key to consumer attitudes toward processed organic foods. Basha et al. (2015) identified environmental concern as a significant predictor of consumer attitudes toward organic foods. Vindigni (2016) highlighted health and environmental concern as fundamental criteria for consumers' purchase intention of organic products. Limited accessibility of organic products poses barriers to their purchase and consumption (Young et al., 2010). Based on the aforementioned research findings, the following hypothesis is proposed:

Hypothesis 9. *Environmental concern boosts processed organic food purchase intent.*

2.10 Ecological Concern

Lea and Worsley (2015) found Australian consumers see organic foods as eco-friendlier. De-Magistris and Gracia (2018) in Southern Italy and Tsakiridou et al. (2008) in Greece confirmed the importance of ecological welfare. Based on the aforementioned research findings, the following hypothesis is proposed:

Hypothesis 10. *Ecological concern boosts processed organic food purchase intent.*

2.11 *Trust*

Trust factors influence consumers' assessments of organic food trustworthiness (Müller and Gaus, 2015), affecting buying behavior (Massey et al., 2018). Trust is crucial for the success of eco-friendly organic food (Nagy-Perci and Forgássy, 2019). Based on the aforementioned research findings, the following hypothesis is proposed:

Hypothesis 11. *Trust is positively related to purchase intention of processed organic food*

2.12 *Product information*

Drexler et al. (2017) discovered that organic product labeling impacts decision-making, but 27% of respondents ignore or disregard organic quality labels. Due to inadequate labeling, consumer trust and direct connections with producers drive organic food purchases. Providing authentic information through labeling is essential (Drexler et al., 2017). Based on the aforementioned research findings, the following hypothesis is proposed:

Hypothesis 12. *Product info boosts processed organic food purchase intent.*

2.13 *Purchase Intension and Consumption*

In recent years, food industries and marketers use social media and electronic communication to drive consumer interest in processed organic foods. Labels like expiration dates, nutrition facts, and legal requirements (cooking instructions, quality and safety certifications, storage guidelines) influence purchasing (Tang et al., 2016; Hena et al., 2021a; Hena et al., 2021b). Consumer satisfaction relies on pre and post-consumption factors. Post-consumption satisfaction leads to repeat purchases, satisfaction, and loyalty (Tang et al., 2016; Hena et al., 2021a; Hena et al., 2021b). Key determinants for purchasing processed organic foods are food safety, environmental concerns, country of origin, and brand image (Tang et al., 2016; Hena et al., 2021a; Hena et al., 2021b). In the light of the aforementioned research findings, the following hypothesis is proposed:

Hypothesis 13. *Purchase intention positively influences processed organic food consumption.*



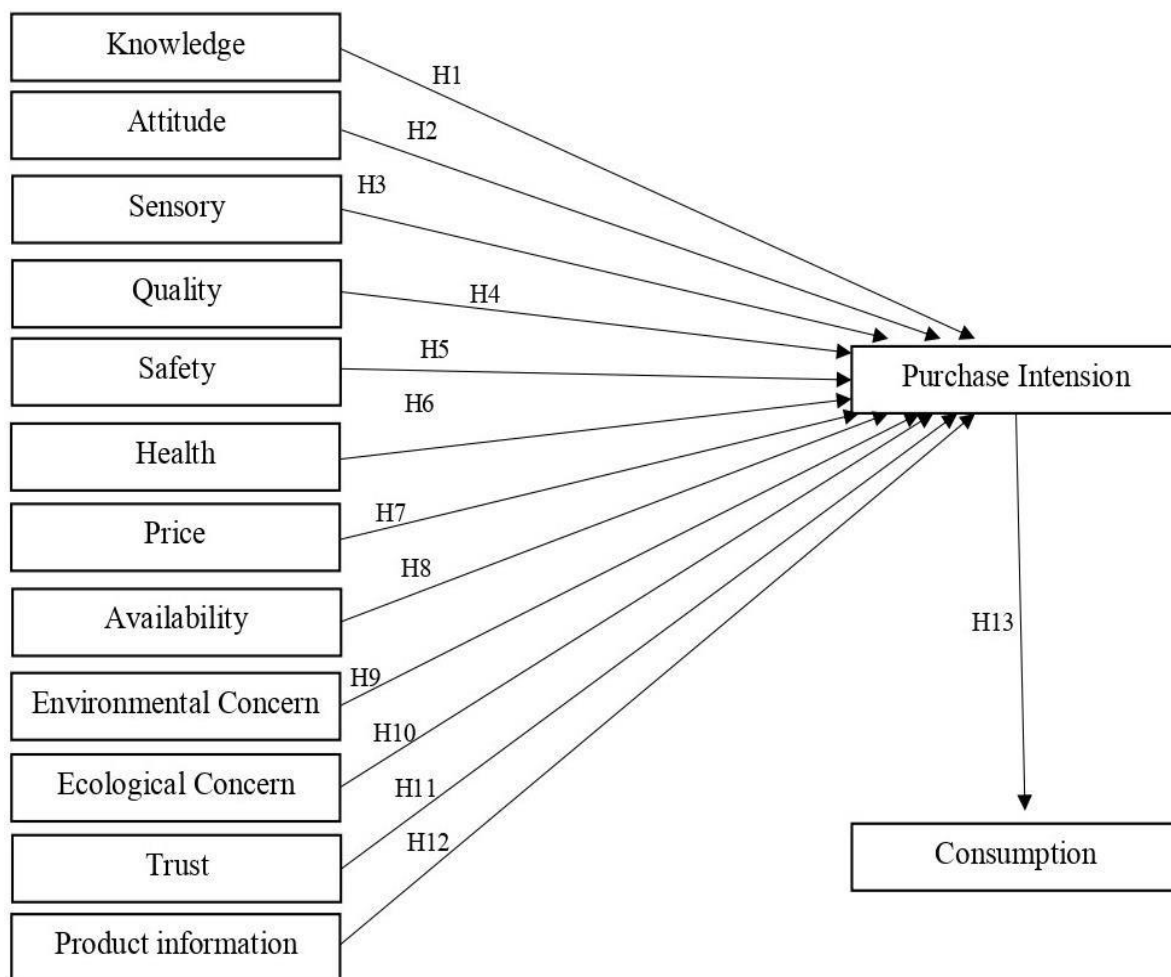


Figure 1. Conceptual model.

The conceptual model for the current study is based on aforementioned research to assess the role of all the determinates towards processed organic food (Figure 1).

3. Materials and methods

3.1 Development, Pre-Testing, and Structure of Questionnaire

The questionnaire development process includes setting research goals, formulating questions, and aligning them with research objectives (Pope et al., 2005; Phellas et al., 2012; Fink et al., 2013). Literature review and consumer feedback guided the creation of a questionnaire to study determinants of processed organic food purchase and consumption (Singh and Kalhuie, 2016; Ting et al., 2017; Konuk et al., 2019; Hena et al., 2021a, b). A pre-test involved 35 participants, including students, staff, and experts, who provided feedback to refine the questionnaire (Grimm et al., 2010; Pieniak et al., 2009; Wang et al., 2015; Singh and Kathuria, 2016; Konuk, 2019; Hena et al., 2021a, b)."

3.2 Participants

The study used non-probability purposive sampling to target specific participants, mainly heavy consumers of processed organic food (Gellynck et al., 2009; De Barcellos et al., 2010; Singh and Kathuria, 2016; Ting et al., 2017; Hena et al., 2021a; Hena et al., 2021b). This included 500 students and teaching staff from five Andhra Pradesh universities. The sample size exceeded the recommended 400 for a population over 0.25 million at a 95% confidence level and 5% margin of error (Singh and Kathuria 2016; Hena et al., 2021a; Hena et al., 2021b).

3.3 Data Collection

The pre-tested questionnaire was given to 500 consumers in five government universities in Andhra Pradesh in March 2022, including students and teaching staff. The questionnaire used a five-point Likert scale (1=Strongly disagree, 2=Disagree, 3=Don't know, 4=Agree, 5=Strongly agree) to assess determinants of processed organic food (Singh and Kathuria, 2016; Konuk, 2019; Hena et al., 2021a, b).

3.4 Data Analysis

The study employed SPSS v24 for descriptive statistics (mean, standard deviation, skewness, kurtosis, and Cronbach's alpha). A Cronbach's alpha threshold of 0.70 indicated questionnaire reliability (Pieniak et al., 2009; Singh and Kathuria, 2016; Hena et al., 2021 a, b). For confirmatory factor analysis (CFA) and structural equation modeling (SEM), AMOS v23 was used. Composite reliability was assessed with a minimum threshold of 0.70 (Contini et al., 2018; Konuk, 2019; Hena et al., 2021a; Hena et al., 2021b). Factor loading and average variance extracted validated the measurement model, requiring values of 0.50 for each (Hair et al., 2010; Rezai et al., 2014; Hena et al., 2021 a, b). Fit indices (CFI, TLI, GFI, RMSEA, SRMR) gauged model fit (Hair et al., 2010; Singh and Kathuria, 2016; Hena et al., 2021 a, b).

4. Results

4.1 Descriptive Statistics

Table 1 presents the socio-demographic characteristics of participants, including students and teaching staff from state government universities. The gender distribution showed 52.20% males and 47.80% females. Age groups were as follows: 18-25 years (30.40%), 26-35 years (23.20%), 36-45 years (27.40%), and 46-65 years (19%). Marital status indicated 48.20% single and 51.80% married participants. Regarding employment, 47.60% were unemployed, and 52.40% were employed. Education levels included 29% undergraduates, 24.20% with master's degrees, and 46.80% holding doctoral degrees.

Table 1. Socio-demographic profile of participants.

Demographics variables		Number of respondents	Percentage of respondents
Gender	Male	261	52.20
	Female	239	47.80
Age (Years)	18-25	152	30.40
	26-35	116	23.20
	36-45	137	27.40
	46-65	95	19.00
Marital status	Single	241	48.20
	Married	259	51.80
Employment status	Unemployed	238	47.60
	Employed	262	52.40
Education level	Undergraduate	145	29.00
	Masters	121	24.20
	Doctoral	234	46.80
Annual family income (₹)	50,000-75,000	16	3.20
	75,000-1,00,000	21	4.20
	1,00,000-2,00,000	43	8.60
	2,00,000-5,00,000	140	28.00
	5,00,000-15,00,000	243	48.60
	>15,00,000	37	7.40

Note: Total Sample Size=500; (₹) = Indian rupee.

The mean participant scores for various factors were analyzed, revealing that attributes such as "safe to eat," "good taste," "good value for money," and "best choice for me and my family" were crucial in influencing purchase intention and consumption of processed organic food (Appendix A; Table 2). The skewness and kurtosis of various factors related to processed organic food, including knowledge, attitude, sensory appeal, nutritional quality, safety attributes, health consciousness, competitive price, availability, environmental and ecological concerns, trust, product information, purchase intention, and consumption, were found to fall within acceptable ranges of -1 to 1 and -2 to 2 (Table 2). These results indicate that the data for these factors followed a normal distribution (Olsen et al., 2012; Rezai et al., 2014; Hena et al., 2021a, b).

Table 2. Mean participant's score, factor loading, Cronbach's alpha(α), composite reliability(CR) and average variance extracted (AVE)of product determinants influencing purchase intention and consumption of processed organic foods.

Construct	Item	Factor loading	p – value	Cronbach alpha (α)	Composite reliability (CR)	Average variance extracted (AVE)
Knowledge(KNW)				0.905	0.819	0.533
	• KNW 1	0.751	***			
	• KNW 2	0.769	***			
	• KNW 3	0.874	***			
	• KNW 4	0.865	***			
Attitude (ATT)				0.927	0.802	0.575
	• ATT 1	0.985	***			
	• ATT 2	0.963	***			
	• ATT 3	0.989	***			
Sensory (SEN)				0.968	0.957	0.686
	• SEN 1	0.845	***			
	• SEN 2	0.705	***			
	• SEN 3	0.918	***			
	• SEN 4	0.861	***			
	• SEN 5	0.797				
Quality (QUL)				0.956	0.940	0.817
	• QUL 1	0.845	***			
	• QUL 2	0.864	***			
	• QUL 3	0.886	***			
	• QUL 4	0.954	***			
	• QUL 5	0.965	***			
Safety (SFTY)				0.952	0.808	0.762
	• SFTY 1	0.865	***			
	• SFTY 2	0.732	***			
	• SFTY 3	0.806	***			
	• SFTY 4	0.798	***			
Health (HLT)				0.958	0.878	0.645
	• HLT 1	0.943	***			
	• HLT 2	0.864	***			
	• HLT 3	0.816	***			
	• HLT 4	0.961	***			
Price (PRC)				0.877	0.746	0.495
	• PRC 1	0.893	***			
	• PRC 2	0.907	***			
	• PRC 3	0.925	***			
Availability(AVL)				0.914	0.870	0.628

	• AVL 1	0.872	***			
	• AVL 2	0.875	***			
	• AVL 3	0.938	***			
	• AVL 4	0.856	***			
Environmental concern (ENV)				0.909	0.730	0.574
	• ENV 1	0.856	***			
	• ENV 2	0.934	***			
	• ENV 3	0.875	***			
Ecological Concern (ECO)				0.968	0.821	0.634
	• ECO 1	0.883	***			
	• ECO 2	0.888	***			
	• ECO 3	0.865	***			
Trust (TRT)				0.955	0.824	0.541
	• TRT 1	0.834	***			
	• TRT 2	0.771	***			
	• TRT 3	0.783	***			
	• TRT 4	0.896	***			
Product information(PINF)				0.928	0.813	0.669
	• PINF 1	0.887	***			
	• PINF 2	0.779	***			
	• PINF 3	0.738	***			
	• PINF 4	0.862	***			
	• PINF 5	0.894	***			
Purchase Intention (PI)				0.911	0.923	0.626
	• PI 1	0.879	***			
	• PI 2	0.998	***			
	• PI 3	0.836	***			
	• PI 4	0.814	***			
Consumption (CON)				0.826	0.959	0.914
	• CON 1	0.969	***			
	• CON 2	0.923	***			
	• CON 3	0.929	***			
	• CON 4	0.945	***			
	• CON 5	0.868	***			
*** Significant at $p \leq 0.01$ Measurement model fit indexes: CFI= 0.932; TLI= 0.926; GFI=0.912; RMSEA= 0.071; SRMR=0.040						

4.2 Measurement Model

The factor loadings for various aspects related to processed organic foods (knowledge, attitude, sensory appeal, etc.) were all significant ($p \leq 0.01$), exceeding the threshold of 0.70, indicating strong internal consistency (Cronbach's alpha: 0.826 to 0.968) and reliability (composite reliability: 0.730 to 0.959). Average Variance Extracted (AVE) confirmed convergent validity (ranging from 0.495 to 0.914). Discriminant validity was supported as diagonal AVE values exceeded inter-construct correlations. Fit indices (CFI, TLI, GFI, RMSEA, SRMR) all fell within acceptable ranges, demonstrating a good fit between the measurement model and the data.

Table 3. Discriminant validity of the measurement model

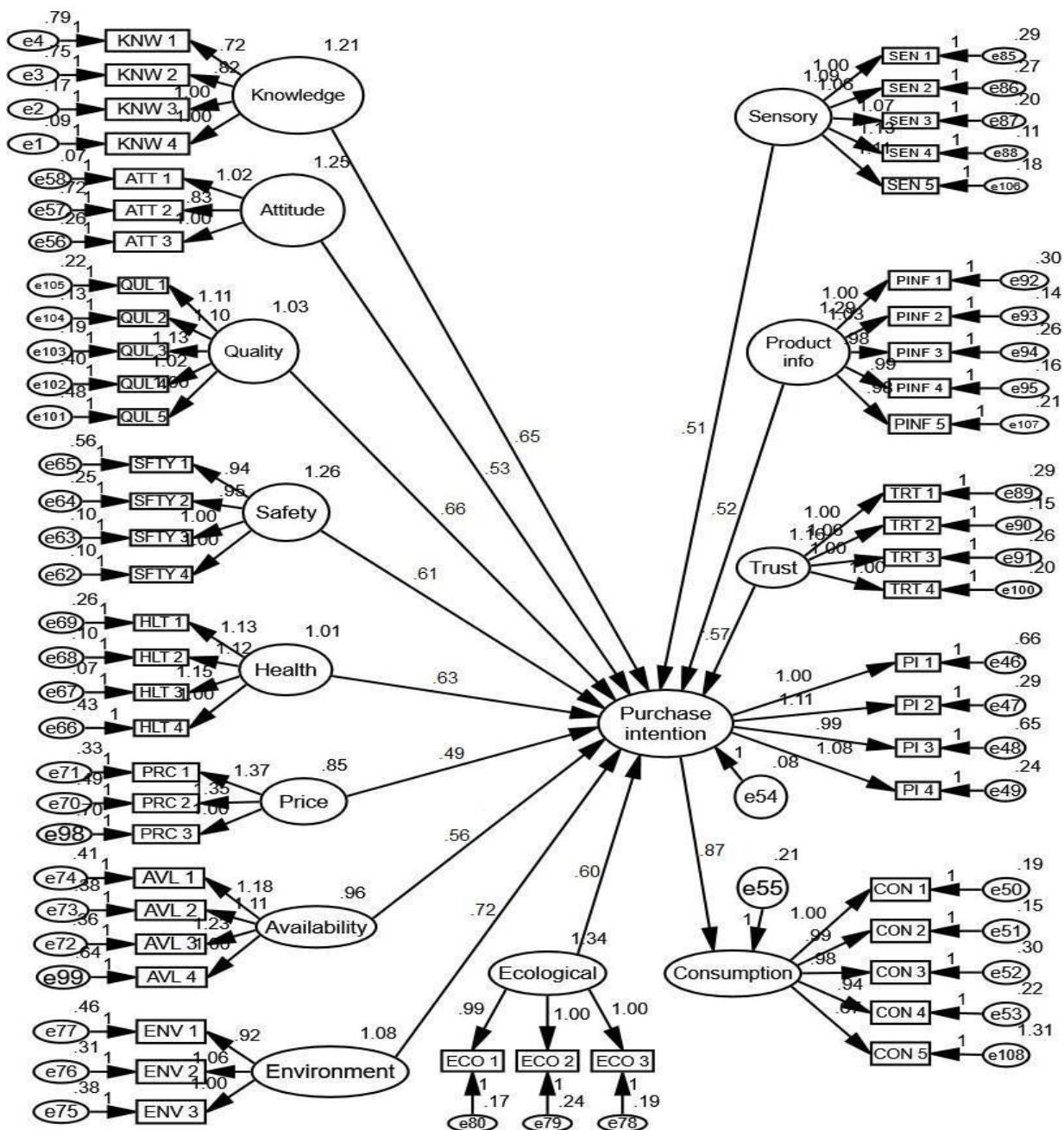
construct	KNW	ATT	SEN	QUL	SFT	HLT	PRC	AVL	ENV	ECO	TRT	PIF	PI	CON
KNW	.730													
ATT	.582**	.763												
SEN	.644**	.695**	.828											
QUL	.660**	.677**	.733**	.814										
SFT	.688**	.720**	.566**	.578**	.717									
HLT	.543**	.609**	.540**	.688**	.487**	.803								
PRC	.685**	.702**	.404**	.589**	.602**	.624	.703							
AVL	.536**	.567**	.714**	.778**	.623**	.450	.647**	.792						
ENV	.722**	.708**	.808**	.797**	.538**	.676**	.563**	.701**	.788					
ECO	.632**	.533**	.794**	.682**	.640**	.682**	.647**	.682**	.717**	.760				
TRT	.629**	.755**	.804**	.768**	.671**	.649**	.478**	.652**	.701**	.735**	.735			
PIF	.585**	.461**	.662**	.516**	.542**	.415**	.596**	.526**	.596**	.714**	.632**	.771		
PI	.615**	.578**	.781**	.684**	.697**	.429**	.685**	.699**	.626**	.703**	.737**	.705**	.744	
CON	.638**	.713**	.763**	.648**	.615**	.584**	.691**	.769**	.735**	.643**	.677**	.760**	.670**	.842

4.3 Structural model

The study employed structural equation modeling (SEM) to analyze determinants of processed organic food. The structural model assessed these determinants' impact on consumer purchase intention and consumption. Fit indices, including CFI, TLI, GFI, RMSEA, SRMR, and χ^2/df , demonstrated strong model fit: CFI: 0.936, TLI: 0.928, GFI: 0.917, RMSEA: 0.043, SRMR: 0.066, and χ^2/df : 4.8 (all within acceptable ranges). These indices support the model's adequacy (Rezai et al., 2014; Singh and Kathuria, 2016; Contini et al., 2018; Hena et al., 2021a, b).

The results of the structural model presented in Figure 2 and Table 4 demonstrate the magnitude of association between all the determinants of processed organic food.





Structural model fit indexes: CFI: 0. 936; TLI: 0. 928; GFI: 0. 917; RMSEA: 0.043; SRMR: 0.066; $\chi^2/df = 4.8$

Figure 2. Structural equation modelling

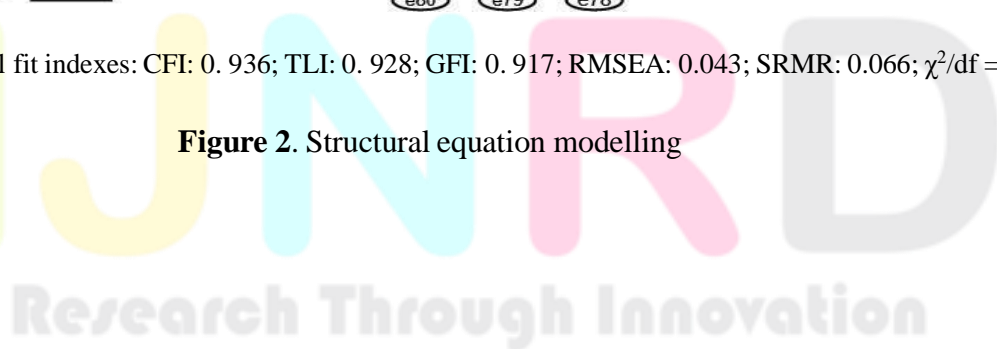


Table 4. Structural model results

Hypothesis	Structural Path	Standardized estimate (β)	Standard error(SE)	t-value	p - value	Results
H1	Knowledge → Purchaseintention	0.654	.033	24.26	***	Accepted
H2	Positive attitude → Purchase intention	0.536	.032	22.49	***	Accepted
H3	Sensory appeal → Purchase intention	0.519	.030	27.47	***	Accepted
H4	Nutritional quality → Purchase intention	0.765	.028	26.32	***	Accepted
H5	Safety attribute → Purchase intention	0.611	.020	24.42	***	Accepted
H6	Healthiness → Purchaseintention	0.632	.014	25.85	***	Accepted
H7	Competitive price → Purchase intention	0.493	.031	22.26	***	Accepted
H8	Easy availability → Purchase intention	0.569	.012	25.21	***	Accepted
H9	Environmental concern →Purchase intention	0.726	.024	26.81	***	Accepted
H10	Ecological Concern → Purchase intention	0.609	.025	32.25	***	Accepted
H11	Trust → Purchaseintention	0.571	.031	57.12	***	Accepted
H12	Product Information → Purchase intention	0.527	.034	32.13	***	Accepted
H13	Purchase intention → Consumption	0.878	.016	21.91	***	Accepted

*** Significant at $p \leq 0.01$

5. Discussion

Processed organic foods are gaining popularity in India for their nutrition, health benefits, and eco-friendliness. However, research on factors driving their consumption is lacking. We analyzed data from 500 consumers using SPSS and AMOS, employing descriptive stats, confirmatory factor analysis, and structural equation modeling. Questionnaire reliability was assessed via factor loading, Cronbach's alpha, composite reliability, and average variance extracted. Model fit was evaluated with CFI, TLI, GFI, RMSEA, SRMR, and X^2/df . We studied the impact of factors (knowledge, attitude, sensory appeal, nutritional quality, safety, health, price, availability, environmental/ecological concern, trust, and product info) on processed organic food purchase intention and consumption. Our results, including confirmatory factor analysis, model fit indices, and path analysis, showed strong internal consistency and reliability of the questionnaire. We confirmed the impact of knowledge, attitude, sensory appeal, nutritional quality, safety, health, price, availability, environmental and ecological concern, trust, and product information on consumer intention to purchase and consume processed organic food in an academic environment. Convergent and discriminant validity of the measurement model were also confirmed.

6. Conclusion

The following Conclusion are drawn from the present study

1. Cronbach's alpha (≥ 0.70), factor loading (≥ 0.50), composite reliability (≥ 0.70), average variance extracted (≥ 0.50) and inter-Correlations showed higher reliability of questionnaire and Validity of

measurement model.

2. The model fit indices i. e. CFI (≥ 0.90), TLI (≥ 0.90), GF1 (≥ 0.90), RMSEA (≤ 0.08), SRMR (≤ 0.08) and χ^2/df (≤ 5.0) revealed good fit of measurement and structural models.

3. The path analysis of the structural model revealed that nutritional quality was the key determinant that positively influenced consumer's purchase intention and consumption of processed organic food.

7. Theoretical and practical implication

The findings of this research offer valuable insights in processed organic food choice:

1. First comprehensive study in India on determinants of processed organic food choice.
2. Emphasis on nutritional quality and environmental concern in purchasing processed organic food.
3. Call for insecticide, pesticide, chemical, and artificial ingredient-free processing.
4. Advocacy for strict food laws and organic certification for consumer trust.
5. Validity and reliability of determinant assessment.
6. Encouragement for companies to produce processed organic foods focusing on nutritional quality and environmental concerns.

8. Limitations and directions for future research

The present study has covered wide range of determinants towards purchase intention and consumption of processed organic foods and it has some limitations. Due to time and resource constraints, this study was carried out in five state universities located in Andhra Pradesh, southern India, which limit the generalization of the results in context of determinants influencing purchase intention and consumption of processed organic food. Therefore, it is recommended to carry out similar study across the cities of India in order to obtain more generalized and representative results. Further the present study concentrated on specific group consumers, which also limit the applicability of the results. Therefore, future studies should include a wide range of consumers to enhance the overall applicability of results.



Appendix A

Description of the questionnaire

Section 1 - Socio-Demographic characteristics

Gender Age

Marital Status Education Qualification Occupation

Type of family Annual family income Food Preferences

Frequency of purchasing processed organic food

Section 2 - Knowledge

KNW1 - I know the food is organic or non-organic KNW2 - I know the process of organic food products

KNW3 - I know that organic food is good for health KNW4 - I know that organic food products is safe to eat

Section 3 - Attitude

ATT1 - Purchasing organic food is a good idea ATT2 - Purchasing organic food is a Wise choice

ATT3 - Organic food can be pleasant

Section 4 - Sensory

SEN1 - It has a pleasant appearance SEN2 - It has a good texture

SEN3 - It has good taste SEN4 - It smells nice

SEN5 - It has pleasant flavour

Section 5 - Quality

QUL1 - It is nutritive

QUL2 - It has high vitamin and mineral content. QUL3 - It has high Fiber content

QUL4 - It has quality certification

QUL5 - I prefer RTE foods because it has necessary quality certification.

Section 6 - Safety

SFTY1 - It contains no hormones

SFTY2 - It does not contain any non-perishable additives

SFTY3 - It contains no insecticides

SFTY4 - It has food safety certification

Section 7 - Health

HLT1 - It makes me feel good HLT2 - It is healthy

HLT3 - Contains natural ingredients HLT4 - It helps to control my weight

PRC1 - It is not expensive

PRC2 - It is cheap

PRC3 - Good value for money

Section 8 - Price

AVL1 - It is easily available

AVL2 - It is available in supermarkets and grocery stores AVL3 - It is available in my locality

AVL4 - It is available in online

Section 9 - Availability

ENV1 - I choose organic product to improve the state of the environment ENV2 - I choose organic food to reduce pollution of the soil

ENV3 - I choose organic food because it does not use herbicides and pesticides

Section 10 - Environmental concern

ECO1 - Organic food preserves the biodiversity ECO2 - Organic food reduces the risk of animal health

ECO3 - Organic food reduces the risk of air and water pollution

Section 11 - Ecological concern

TRT1 - I buy organic food because it is the best choice for me and my family TRT2 - I will keep on

buying organic food rather than other type of food TRT3 - I will keep on going to places that sell organic food

TRT4 - I will keep on buying organic food in the future

Section 12 - Trust

PINF1 - Ingredients printed on packet PINF2 - Nutritive value printed on packet

PINF3 - Additives, preservatives and colour printed on packet PINF4 - Organic food certification printed on packet

PINF5 - Organic brand name printed on packet

Section 13 - Product information

PI1 - I buy organic food to reduce environmental damage PI2 - I am willing to pay higher price for

organic food PI3 - I continue to buy organic food because it is healthy

PI4 - I continue to buy organic food due to high quality and safety

Section 14 - Purchase intension**Section 15 - Consumption**

CON1	- I consume organic food because it is healthy	
CON2	- I consume organic food due to high quality and safety	CON3 - I consume organic food due to good taste
CON4	- I consume organic food due to competitive price	
CON5	- I price consume organic food because it does not cause environmental damage	

References

1. Akaichi, F., Nayga Jr, R. M., & Gil, J. M. (2012). Assessing consumers' willingness to pay for different units of organic milk: evidence from multiunit auctions. *Canadian Journal of Agricultural Economics/Revue canadienne d'agroeconomie*, 60(4), 469-494.
2. Al-Swidi, A., Mohammed Rafiul Huque, S., Haroon Hafeez, M., & Noor Mohd Shariff, M. (2014). The role of subjective norms in theory of planned behavior in the context of organic food consumption. *British Food Journal*, 116(10), 1561-1580.
3. Amyx, D. A., Dejong, P. F., Lin, Chakraborty, G. & Wiener, J. L. (2014). Influencers of purchase intentions for ecologically safe products: an exploratory study, in Park, C. W. et al. (Eds). *AMA Winter Educators' Conference Proceedings*, American Marketing Association, Chicago, IL, Vol. 5, pp. 341-7.
4. Aschemann-Witzel, J., & Zielke, S. (2017). Can't buy me green? A review of consumer perceptions of and behavior toward the price of organic food. *Journal of Consumer Affairs*, 51(1), 211-251.
5. Ashraf, M., Joarder, M. and Ratan, S. (2018). Consumers' anti-consumption behavior toward organic food purchase: an analysis using SEM. *British Food Journal*. 121 (1): 104-122.
6. Bandura A (2007) Impeding ecological sustainability through selective moral disengagement. *Int J Innov Sustain Dev* 2: 8-35.
7. Basha, M., Mason, C., Shamsudin, M., Iqbal-Hussain, H. and Salem, M. (2015). Consumers Attitude Towards Organic Food. *Procedia Economics and Finance*, 31: 444- 452.
8. Basha, M.B., Lal, D., 2019. Indian consumers' attitudes towards purchasing organically produced foods: an empirical study, *J. Clean. Prod.* 215, 99-111.
9. Batte, M. T., Hooker, N. H., Haab, T. C., & Beaverson, J. (2017). Putting their money where their mouths are: Consumer willingness to pay for multi ingredient processed organic food products. *Food Policy*, 32(2), 145-159.
10. Bernues, A., Ripoll, G. and Panea, B. (2012). Consumer segmentation based on convenience orientation and attitudes towards quality attributes of lamb meat. *Food Quality and Preference*, 26: 211 – 220.
11. Brown, C. (2013). Consumers' preferences for locally produced food: A study in southeast Missouri. *American Journal of Alternative Agriculture*, 18(4), 213-224.
12. Cecilia, G., Adriana, B., Monica, M., Mihaela, A.T., Mark, S., Mironescu, I. D. and Tita, O. (2016). Consumer perceptions of nutrition and health claims from food labels in Romania. *Journal of Hygienic Engineering and Design*, 16: 13 - 18.
13. Chekima B, Igau A, Azizi S, et al. (2017) Narrowing the gap: Factors driving organic food consumption. *J Clean Prod* 166: 1438-1447.
14. Dasari.Pandurangarao, Dr.K.Chiranjeevi, Prof.D.Suryachandra Rao (2017). Factors Affecting Consumers to Buy Organic Food Products in Hyderabad and Secunderabad. *International Journal of Business and Management Invention*, 6(3), 24-30.
15. Davies, A., Titterington, A. J. & Cochrane, C. (2015). Who buys organic food? A profile of the purchasers of organic food in Northern Ireland. *British Food Journal*, 97 No.10, pp. 17-23.
16. De Barcellos, M. D., Kugler, J.O., Grunert, K> G., Wezemaal, L. V., Perez-Cueto, F, J.A., Ueland, O. and Verbeka, W. (2010). European consumers' acceptance of beef processing technologies: A focus group study. *Innovative Food science and emerging Technologies*, 11 (4): 721-732.
17. De-Magistris, T. and Gracia, A. (2018). The decision to buy organic food products in Southern Italy. *British Food Journal*, 110(9): 929–947.
18. Dettmann, R. & Dimitri, C. (2017). Who's buying organic vegetables? Demographic characteristics of US consumers. *Journal of Food Distribution Research*, pp. 49-62.
19. Diaz, F. 1. M. et al. "Consumer knowledge, consumption, and willingness to pay for organic tomatoes." *British Food Journal* 114 (2012) 318-334.
20. Drexler, D., Fiala, J., Havlickova, A., Potuckova, A. and Soucek, M. (2017). The effect of organic food labels on consumer attention. *Journal of Food Product Marketing*, 24: 441-455.
21. Effendi, I., Ginting, P., Lubis, A. N. and Fachrudin, K. A. (2015). Analysis of Consumer Behavior of Organic Food in North Sumatra Province, Indonesia. *Journal of Business and Management*, 4(1):

44–58.

22. Feil, A.A., da Silva Cyrne, C.C., Sindelar, F.C.W., Barden, J.E., Dalmoro, M. 2020. Profiles of sustainable food consumption: consumer behavior toward organic food in southern region of Brazil. *J. Clean. Prod.* 258, 120690.
23. Fink, A. (2013). *How to conduct surveys: A step-by-Step guide*. Thousand Oaks, CA: sage Publications.
24. Gellynck, X., Kuhne, B., Van Bockstaele, F., Van de Walle, D. and Dewettinck, K. (2009). Consumer perception of bread quality. *Appetite*, 53(1): 16-23.
25. Gracia, A. and Magistris, T. De. (2018). Organic food product purchase behavior: a pilot study for urban consumers in the South of Italy. *Spanish Journal of Agricultural Research*, 5(4): 439–451.
26. Gracia, A., & de Magistris, T. (2018). The demand for organic foods in the South of Italy: A discrete choice model. *Food Policy*, 33(5), 386-396.
27. Grimm, P. Pretesting a Questionnaire. In *Wiley International Encyclopedia of Marketing*; Sheth, J., Malhotra, N., Eds.; Wiley-Blackwell: Hoboken, NJ, USA, 2010.
28. Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2010). *Multivariate data analysis (7th Ed.)*. NJ: Prentice Hall.
29. Hena, I., Soni, P. and Yukongdi, V. (2021). Investigating the Role of Psychological, Social, Religious and Ethical Determinants on Consumers' Purchase Intention and Consumption of Convenience Food. *Foods*, 10 (2), 237.
30. Hena, I., Soni, P. and Yukongdi, V. (2021). Role of Sensory Appeal, Nutritional Quality, Safety, and Health Determinants on Convenience Food Choice in an Academic Environment. *Foods*, 10 (2): 345.
31. Higuchi, A., & Avadi, Á. (2017). Socio-economic characteristics and attitudes of organic and non-organic consumers in Lima, Peru. *Revista de la Facultad de Agronomía*, 34(4), 518-541.
32. Hsu, S.-Y.; Chang, C.-C.; Lin, T.T. (2016). An analysis of purchase intentions toward organic food on health consciousness and food safety with/under structural equation modeling. *Br. Food J.* 2016, 118, 200-216.
33. J. Thøgersen, Psychological Determinants of Paying Attention to Eco-Labels in Purchase Decisions: Model Development and Multinational Validation. *Journal of Consumer Policy*, Vol. 23(3), p.285-313 (2017).
34. J.Padmathy, R.Saraswathy (2016). A study on the consumer's buying behaviour towards organic food products in Thanjavur district. *Intercontinental Journal of Marketing Research Review*, 4(2), 42-49.
35. Janssen, M. (2018). Determinants of organic food purchases: Evidence from household panel data. *Food Quality and Preference*, 68: 19–28.
36. Januszewska, R., Pieniak, Z., & Verbeke, W. (2011). Food choice questionnaire revisited in four countries. Does it still measure the same? *Appetite*, 57(1), 94-98.
37. Konuk, F. A. (2019). The impact of retailer innovativeness and food healthiness on store prestige, store trust and store loyalty. *Food Research International*, 116: 724-730.
38. Kumar, S., All, J., 2011. Analyzing the factors affecting consumer awareness on organic food in India. In: *Proceedings of the 21st Annual IFAMA World Forum and Symposium on the Road to 2050: Sustainability as a Business Opportunity*, Frankfurt, Germany.
39. Lea, E. and Worsley, T. (2015). Australians' organic food beliefs, demographics and values. *British Food Journal*, 107: 855-869.
40. Lee, H. J., & Yun, Z. S. (2015). Consumers' perceptions of organic food attributes and cognitive and affective attitudes as determinants of their purchase intentions toward organic food. *Food quality and preference*, 39, 259-267.
41. Ling, C.Y. (2013) Consumers' purchase intention of green products: an investigation of the drivers and moderating variable, Malaysia.
42. Lusk, J. (2011). External validity of the food values scale. *Food Quality and Preference* 22: 452-462.
43. M. Radman. Consumer consumption and perception of organic products in Croatia. *British Food Journal*, Vol. 107 No. 4-5, p. 263-273 (2016).
44. Marian, L., Chrysochou, P., Krystallis, A., & Thøgersen, J. (2014). The role of price as a product attribute in the organic food context: An exploration based on actual purchase data. *Food Quality and Preference*, 37, 52-60.
45. Massey, M., O'Cass, A. and Otahal, P. (2018), "A meta-analytic study of the factors driving the purchase of organic food", *Appetite*, Vol. 125, pp. 418-427.

46. Mohamed B, B., Cordelia M., Mohd F, S., Hafezali I, H., Milad A, S. (2015). Consumers attitude towards organic food. *Procedia Economics and finance* 31 (2015) 444-452.
47. Mohamed, M.A., Chymis, A. and Shelaby, A.A. (2012). Determinants of organic food consumption in Egypt. *International Journal of Economics and Business Modeling*. Vol.3(3),pp.183-191.
48. Muhammad, S., Fathelrahman, E. and Ullah, R.U. (2015), "Factors affecting consumers' willingness to pay for certified organic food products in United Arab Emirates", *Journal of Food Distribution Research*, Vol. 46 No. 1, pp. 37-45.
49. Müller, C.E. and Gaus, H. (2015), "Consumer response to negative media information about certified organic food products", *Journal of Consumer Policy*, Vol. 38 No. 4, pp. 387-409.
50. Nagy-Pércsi, K. and Fogarassy, C. (2019). Important Influencing and Decision Factors in Organic Food Purchasing in Hungary. *Sustainability*, 11: 6075.
51. Olsen, N. V., Menichelli, E., Sørheim, O. and Næs, T. (2012). Likelihood of buying healthy convenience food: An at-home testing procedure for ready-to-eat meals. *Food Quality and Preference*, 24: 171–178.
52. Ozguven, N. (2012). Organic foods motivation factors for consumers. *Procedia - Social and Behavioral Sciences*, Vol.62, pp.661-665.
53. Padel, S. and Foster, C. (2015). Exploring the gap between attitude and behavior understanding why consumers buy and do not buy organic food. *British food Journal*, 107(8):606-625.
54. Paul, J., Rana, J., 2012. Consumer behavior and purchase intention for organic food, *J. Consum. Mark*, 29 (6), 412-422.
55. Phellas, C. N., Block, A. and Seale, C. (2012). Structured methods: Interviews, questionnaires, and observation. In C. Seale (Ed.), *Researching society and culture* (3rd edition) (pp. 181– 205). Thousand Oaks, CA: Sage Publications.
56. Pieniak, Z., Verbeke, W., Vanhonacker, F., Guerrero, L. and Hersleth, M. (2009). Association between traditional food consumption and motives for food choice in six European countries. *Appetite*, 53: 101-108.
57. Popa, M.E., Mitelut, A.C., Popa, EE, Stan, A. and Popa, V.L. (2018), "Organic foods contribution to nutritional quality and value", *Trends in Food Science and Technology*, Vol. 84, pp. 15-18
58. Pope, P., Boleman, C. and Cummings, S (2005). Questionnaire design: Asking questions with a purpose. College Station, TX: Texas A and M Agri-LIFE Extensions Service.
59. Prentice, C., Chen, J. and Wang, X. (2019). The influence of product and personal attributes on organic food marketing. *Journal of Retailing and Consumer Services*, 46: 70–78.
60. Rana, J. and Paul, J. (2017). Consumer behavior and purchase intention for organic food: A review and research agenda. *Journal of Retailing and Consumer Services*, 38: 157–165.
61. Raza, Giuseppina, Massimiliano Borrello, Giovanni Dara Guccione, Giorgio Schifani, and Luigi Cembalo. (2019). Organic food consumption: The relevance of the health attribute. *Sustainability* 12: 595.
62. Rezai, G., Teng, P. K., Mohamed, Z. and Shamsudin, M. N. (2014). Structural equation modeling intention toward synthetic functional foods. *Journal of food Products Marketing*, 20:13-34.
63. Salleh, M.M., Ali, S.M., Harun, EH., Jalil, M.A., Shaharudin, M.R., 2010. Consumer's perception and purchase intentions towards organic food products: exploring attitude among academicians. *Can. Social. Sci.* 6 (6), 119-129.
64. Schifferstein, H. N. J., & Oude Ophuis, P. A. M. (2015). Health-related determinants of organic foods consumption in the Netherlands. *Food Quality and Preference*, 9, 119-133.
65. Schleenbecker R, Hamm U (2013) Consumers' perception of organic product characteristics. A review. *Appetite* 71: 420-429.
66. Singh, A. and Kathuria, L.M. (2016). Understanding drivers of branded food choice among low-income consumers. *Food Quality and Preference*, 52: 52-61.
67. Singh, A. and P. Verma (2017). Factors influencing Indian consumers' actual buying behaviour towards organic food products. *Journal of Cleaner Production*, 167: 473-483.
68. Tang, C. and Lu, C. (2016). Organic food consumption in Taiwan: Motives, involvement, and purchase intention under the moderating role of uncertainty. *Appetite*, 105: 95–105.
69. Thomas, T., Gunden, C., 2012. Investigating consumer attitudes toward food produced via three production systems; conventional, sustainable and organic. *J. Food Agric. Environ.* 10 (2), 132-135.
70. Ting, H.; Tan, R.S.; John, N.A. (2017). Consumption intention toward ethnic food: Determinants of dayak food choice by Malaysians. *Journal of Ethnic Foods*, 4: 21–27.

71. Tsakiridou, E., Boutsouki, C., Zotos, Y., & Mattas, K. (2008). Attitudes and behaviour towards organic products: an exploratory study. *International Journal of Retail & Distribution Management*, 36(2), 158-175.
72. Tshuma, P., Makhathini, S., Siketile, P.N., Mushunje, A., & Taruvinga, A. (2011). Consumer perceptions on organic products in the Eastern Cape; The case of East London: South Africa. *Electronic Journal of Environmental, Agricultural and Food Chemistry*, 9(3), 458-467.
73. Van Huy, L., Chi, M.T.T. Lobo, A., Nguyen, N., Long, P.H., 2019. Effective segmentation of organic food consumers in Vietnam using food-related lifestyles. *Sustainability* 11(5), 1-16.
74. Van Loo, E., Diem, M.N., Pieniak, Z., Verbeke, W., 2013. Consumer attitude, knowledge and consumption of organic yogurt. *J. Dairy Sci.* 96 (4), 2118-2129.
75. Vindigni, Organic food consumption: A multi theoretical framework of consumer decision-making. *British Food Journal*, Vol.104 (8): p.624-64, (2016).
76. Wang, L., Yang, H., Wang, Y. and Zhang, M. (2015). Consumer perceptions and attitudes of organic food products in Eastern China. *British Food Journal*. 117: 1105- 1121.
77. Xie, B., Wang, L., Yang, H., Wang, Y., & Zhang, M. (2015). Consumer perceptions and attitudes of organic food products in Eastern China. *British Food Journal*, 117(3), 1105-1121.
78. Yangui, A., Costa-Font, M. and Gil, J.M. (2016), The effect of personality traits on consumers' preferences for extra virgin olive oil", *Food Quality and Preference*, Vol. 51, pp. 27-38.
79. Young, W., Hwang, K., McDonald, S. and Oates, C.J. (2010). Sustainable consumption, green consumer behaviour when purchasing products. *Sustainable Development*, 18(1): 20-31.
80. Zanolli, R. & Naspetti, S. (2012). Consumer motivations in the purchase of organic food: A means-end approach. *British Food Journal*, 104(8), 643-653.

