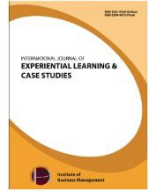




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Factors Influencing Consumers' purchase intentions toward Organic Food

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The fundamental drivers of sustainable consumer behavior are consumption ideals. This study examines the relationship between consumption values (functional, social, economic, and emotional), attitude toward buying, perceived behavioral control, and the intention to buy organic food by incorporating the theory of consumption approach. With a Google form survey, the data was collected from 156 organic food buyers in Karachi (Pakistan) because of limited resources. Using the PLS-SEM method, we discover that consumers' intentions to buy organic food are significantly positively influenced by economic value, emotional value, social value, and functional value quality. The structural relationship between consumption values and the intention to buy organic food is further found to be significantly mediated by attitude toward purchasing. In contrast, the relationship between attitude toward purchasing and the intention to buy organic food was moderated by perceived behavioral control. According to our findings, promoting treatments that address attitudes toward purchases is a potential method to encourage persistent purchase intentions. These findings significantly impact how the organic food business develops based on consumer preferences.

1 Introduction

Organic food consumption is expanding in developing nations as the quality of life improves. It has also increased dramatically in emerging economies battling severe environmental problems and unsustainable consumption practices (Yean et al., 2019). As people become more aware of the benefits of a healthy diet, they eat more organic food, especially in developing nations. In cultivating organic foods, herbicides, pesticides, antibiotics, synthetic fertilizers, and growth hormones are prohibited (X. Wang et al., 2019). More of the critical nutrients that people need are present in organic food. It has been proven that those who solely eat organic food see a decrease in their symptoms of

food allergies, preservative allergies, or chemical allergies. Thus, it should be considered when purchasing (Yean et al., 2019). This has made it more important for consumers to want and demand items that reflect this new viewpoint. They belong to a group of customers known as the “green market,” or the green consumer’s market, who are becoming more conscious of the effects of their buying decisions. The food market shows a noticeable rise in demand for organic goods. These buyers regularly include these products in their everyday diets (Yuan et al., 2020).

In the past, researchers concentrated on identifying the main benefits and barriers to consuming organic foods (Chiciudean et al., 2019). The organic food market is still expanding and has a long way to go. In Pakistan, although households spend 50% of their income on food, the highest percentage among the 84 countries surveyed by the US Department of Agriculture’s Economic Survey, organic food adoption remains low despite the advantages and future potential of organic foods. Whereas Americans only spend 6.6 percent of their income on food, consumers in Pakistan typically spend 47.7% of their money on food (Akbar et al., 2019). The consumption of organic foods has attracted more research attention because of a significant expansion of both the supply and demand sides. The marketing environment has undergone significant change with economic reforms, as have customer values, attitudes, and behaviors. It is argued that ancient norms, values, and beliefs from before the economic transition coexisted alongside contemporary norms, values, and beliefs imported from more developed nations due to economic reforms in growing Asian economies like Pakistan. It’s critical to examine the impact on consumer behavior (Nguyen et al., 2019).

Prior research has identified several critical factors associated with intentions to purchase organic food, including health consciousness, price, quality, notations, food safety, and availability (Chiciudean et al., 2019). Green product attributes, such as reduced pollution, resource economy, and recycling capability, may evoke feelings of environmental protection in consumers and impact their purchasing behavior (Wang et al., 2020). Consumers may be motivated to go green by environmental concerns or incentives for green products (Pacho, 2020). In a similar vein, socioeconomic factors and peer reviews may have an impact on customers’ green buying decisions (Akbar et al., 2019). Consumer education has been identified as another element that significantly influences how consumers make decisions (Wang et al., 2020). The need for novelty and thorough knowledge of a product’s value in terms of price and quality can affect consumers’ decisions to buy organic food (Nguyen & Truong, 2021). In conclusion, this research shows that consumers are most likely to purchase green items when exposed to certain consumption values.

An additional line of research has examined the importance of attitudes in people's sustainable consumption patterns (Le-Anh & Nguyen-To, 2020). According to attitude theory, consistent with self-perception theories, "a person acts on his own and others' expectations of him." How people feel about themselves may greatly influence their environmental preferences, intentions, and behavior (Wang et al., 2019). For instance, customers are more inclined to purchase a product if it aligns with their opinion of themselves (Watanabe et al., 2020). Consumer behavior research has since thoroughly examined customer self-identities, including brand associations, product-related identities, and consumer motivations (Le-Anh & Nguyen-To, 2020). It is debatable whether consumer attitudes and consumption values can significantly influence intentions and behavior (Prentice et al., 2019).

Earlier studies examined the connection between consumers' consumption preferences and their desire to buy organic food, with the organic food identity mediating function (Dangi et al., 2020). Findings show that organic food identity did not moderate the link between people's motivations and their organic food behavior. In contrast to earlier studies, ours examines consumer attitudes' role in mediating the relationship between consumption values and behavior related to purchase intentions. Previous research did not examine the mediating role of attitudes toward buying organic food between consumption values and purchase intention behavior using the Theory of Consumption Values (Qasim et al., 2019). Our study integrates the theory of consumption values with sustainable behavior to determine the relationship between consumption values and consumers' intention to consume organic food in Pakistan (Nguyen et al., 2019). Attitude towards purchasing plays an intervening role between consumption values and behavior intention. This study aims to evaluate the direct impact of consumer values on the intention to purchase organic food. Secondly, to evaluate the indirect impact of consumer values on the desire to purchase organic food through attitude toward consumption. Lastly, to evaluate the direct impact of purchasing mindset on the intention to purchase organic food.

This study was carried out in Karachi, Pakistan, to assess customers' intentions to purchase organic food. It explores the factors influencing people's attitudes toward buying organic food. To support the current research, the findings of previous studies conducted in various countries are reviewed while providing suggestions for additional research relevant to this study. In recent years, there has been a noticeable shift in consumer preferences toward organic food over commercially packaged products, driven largely by health-conscious individuals. The rising prevalence of lifestyle ailments like heart disease, diabetes, high cholesterol, and depression has significantly impacted modern consumers' attitudes. This research aims to answer the following questions:

1. How do social, emotional, functional, and economic values affect attitudes toward buying organic food?
2. What is the effect of attitude toward organic food on purchase intention?
3. What is the conditional effect of behavioral control on the relationship between attitude towards organic food and purchase intention?

This study focuses exclusively on four values regarding customers' consumption and purchase intentions for organic food. Also, the sample chosen includes people who primarily live in metropolitan regions. Google forms were used to contact the responders.

2 Literature Review

The organic food industry in Pakistan has undergone considerable change during the past ten years. The high incidence of lifestyle diseases, such as diabetes and heart disorders, raised an alarm that made consumers realize the importance of food quality and safety (Tarkiainen & Sundqvist 2019). In addition, sustainable consumption has drawn more attention from corporate decision-makers due to stricter environmental regulations (Misra & Singh 2021). On the other hand, it was also mentioned that certification and trust are important factors in persuading customers. Customers prefer to purchase at neighboring stores rather than travel further, so the availability of organic food is a major concern because these stores typically do not carry organic food (Cicia et al., 2021). People's eating habits and how they shop are influenced by their lifestyles, which create social value (Sriwaranun et al., 2021). While they are more affordable, buying organic products is a lifestyle choice for some customers. Organic goods are a status symbol, just like many other high-end goods. Because consumers are extremely price-sensitive and even a small price increase impacts how much food is consumed in lifestyle, which impacts economic values, the prices of organic food items are significantly higher than those of conventional food items. This is a significant barrier to the market's growth (Pandey et al., 2019).

Various safe food labeling options in China are available in the local food markets. Most Chinese consumers are aware of safe food but have limited knowledge, minimal ability to recognize proper labels, and little understanding of safe food (Xie et al. 2020). Customers are less likely to purchase organic foods if they are unfamiliar with the term "organic" or if they are not aware of organic certification or labeling. Most Chinese customers tend to believe the information that shops workers supply or lean toward purchasing organic food from stores that advertise selling such items. Researchers have discovered that gender,

one of the demographic factors influencing who purchases organic products, significantly affects organic food consumption, with women purchasing organic food more frequently and in larger quantities than males (Tsakiridou et al. 2021). If information about the contents is disclosed on the labels of the packages, consumers will trust organic goods. According to Teng and Wang (2020), information can include the food's nutritional value, manufacturer-guaranteed quality, health and environmental issues, and price. Trust acts as an attitude antecedent, significantly impacting the relationship between revealed and perceived information and purchase intention. Consumption of organic food is heavily influenced by consumer attitudes toward organic food, affecting the buyer's intention (Tarkiainen & Sundqvist 2019). These determining elements successfully demonstrate the contribution of the well-known theory of consumption values, which forecasts behavioral intention and actual action and serves as the basis for this study.

Table 1 Operational Definitions of Constructs

Construct	Definition	Proposed Relationship
Functional Value (FLV)	It has to do with the utility value the consumer sees while making a decision that will produce practical outcomes and involves elements like quality, availability, advantages to the environment and health, and safety.	FLV is suggested to have a positive impact on ATTP
Emotional Value (ELV)	The fact that organic food directly affects consumer welfare and combines organic qualities has something to do with feelings, affectivity caused by the product, and a particular customer's assessment of the worth of that product.	ELV is suggested to have a positive impact on ATTP
Economic Value (ECV)	The monetary worth and the cost-benefit analysis go into the trade of goods. The cost of organic food serves as a function of how good the product quality is about its functional aspects of being healthier, ecologically friendly, and pesticide-free.	ECV is suggested to have a positive impact on ATTP
Social Value (SLV)	Social acceptance that a particular reference group experiences because of the consumer's product selection or the social image the customer wants to project to that reference group.	SV is suggested to have a positive impact on ATTP
Attitude Toward Purchasing (ATTP)	The degree to which a person values buying organic foods favorably or unfavorably is thought to affect consumption intention, and the attitude toward buying organic foods is quite favorable.	ATTP is suggested to have a positive impact on PI.

Purchase Behavioral Control (PBCL)	Consumers' intentions to buy organic food are influenced by their perception of behavioral control, which they believe they have over whether they engage in the action issue. Perceived behavioral control is a key factor in this decision.	PBCL is suggested to have a positive moderating impact between ATTP & PI.
Purchase Intention (PI)	It is a powerful indicator of the present purchasing patterns of consumers.	All the variables are dependent on the PI.

2.1 Behavioral Intention to Consume Organic Food

Based on previous studies, this study emphasizes behavioral intention to consume organic food more than actual organic food consumption behavior (Wang et al., 2020). Future intentions to purchase or consume organic products are referred to as “behavioral intention to consume organic products” (Aitken et al., 2020). Behavioral intention is believed to narrate values more explicitly than past behavior, despite market circumstances like market distance and product availability being more likely to influence actual past behavior (Qasim et al., 2019). Some recent studies have used the concept of behavioral intention to investigate consumers' intent to purchase green items (Yean et al., 2019 & Pacho, 2020).

2.2 The Theory of Consumption Values

Values are shown as substantial psychological structures that have the power to affect a consumer's values, attitude, and desire to make a purchase. Values significantly influence decision-making (Taghikhah et al., 2020). The ultimate criterion for decision-making that drives consumer behavior is believed to be value (Akbar et al., 2019). Our assumptions are theoretically grounded in the theory of consumption values. Hwang and Chung (2019) define values as the intrinsic and extrinsic elements associated with purchase components (Nguyen & Truong, 2021). It focuses on three dimensions of consumer decision-making: (1) consumer choice between buying and not buying, (2) consumer preference for one type of product over another, and (3) consumer choice between different brands (Wang et al., 2020).

The idea holds that consumer choice behavior is influenced by four consumption values: functional, social, emotional, and economic. The consumer develops values by interacting with and using the product or service. These values affect the nature and course of the relationship between the product and the consumer (Taghikhah et al., 2020). In prior studies, the concept of consumption values was used, and it was found that consumption values impact customer behavior regarding buying intentions.

2.3 Functional Value

Functional value is the primary factor affecting consumer decision to purchase organic products. It means that consumers judge a product's performance based on its durability, dependability, food safety, and environmental protection. (Wang et al., 2020). Rather than extrinsic ideals like food safety and environmental protection, the association of the product is more focused on the intrinsic worth of the product. Food safety and environmental protection are the categories into which the functional value is divided based on its features (Pacho, 2020). While making a buying decision, consumers consider an organic product's potential to safeguard the environment and the safety of their food simultaneously (Pandey et al., 2019). Due to certain characteristics like the usage of natural components and organic nature, consumers may favor organic products (Wang et al., 2019). Also, customers assess the effectiveness of organic products based on their capacity to ensure food safety. If the cost of an organic product can be justified by its benefits (food safety and environmental protection), consumers will be prepared to pay a premium for it (Najib et al., 2021). Hence, customers purchasing organic products must consider food safety and environmental protection. Therefore, we propose the following hypothesis:

H1: Functional value significantly improves consumer attitudes toward organic products.

2.4 Social Value

Social pressure or peer reviews are important drivers of consumer behavior (Katt & Meixner, 2020). If a good or service is connected to one or more specific socioeconomic, cultural, or social groups, it is said to have social value (Le-Anh & Nguyen-To, 2020). When a product association is believed to improve consumers' social status, it concerns one's self-image (Pandey et al., 2019). In the context of organic products, social value refers to a perceived net benefit from using organic products based on feelings of social pressure or status enhancement. Social value has a considerable positive impact on sustainable consumption behavior. Hence, we propose the following hypothesis:

H2: Social value significantly influences attitudes toward favourably buying organic products.

2.5 Emotional Value

As compared to other conceptions, emotional value is distinct and is described as “the perceived net utility that is obtained from the product’s ability to evoke feeling or affective states” (Ashraf, 2021). Consumer emotional response is most closely tied to product utilization. Individuals with high emotional value’s future product consumption behavior can be predicted using experiences and emotions associated with prior product consumption (Saleki et al., 2019). Positive feelings about the goods lead to receptive and joyful green purchase decisions (Ashraf, 2021). Past studies claim that customers’ decisions to purchase green items are positively influenced by emotional worth (Katt & Meixner, 2020). Hence, we propose the following hypothesis:

H3: Emotional value significantly influences a person’s decision to buy and eat organic products.

2.6 Economic value

The economic value associated with the financial stake in the transaction also directly impacted consumers’ purchasing intentions in terms of the financial worth and cost-benefit ratio they perceived for organic foods (Nguyen, Vu, Phan, & Cao, 2019). According to consumers’ perceptions and studies, organic food positively affects health and personal well-being. As a result, they are prepared to spend more on its purchase (Ditlevsen, Sande, & Lassen, 2020). Hence, we propose the following hypothesis:

H4: Emotional value significantly influences a person’s decision to buy and eat organic products.

2.7 Attitude toward Purchasing

According to some studies, there is a noticeable discrepancy between customers’ perceptions of organic food and their buying behavior (Akbar et al., 2019). Consumers in Hong Kong had a poor opinion of organic food and had little intention of buying it. Consumers in Shanghai did not particularly favor it over organic products made elsewhere (Taghikhah et al., 2020). Individuals, who are more likely to purchase organic food, will do so because they feel that organic products are free of pesticide residue, common food additives, and excessive processing (Dangi et al., 2020). Also, earlier studies suggested that consumption values have more favorable attitudes regarding

buying organic food (Le-Anh & Nguyen-To, 2020). Hence, we propose the following hypothesis:

H5: Consumption values significantly increase the likelihood of consumers purchasing organic items through their attitude toward buying.

2.8 Perceived Behavioural Control

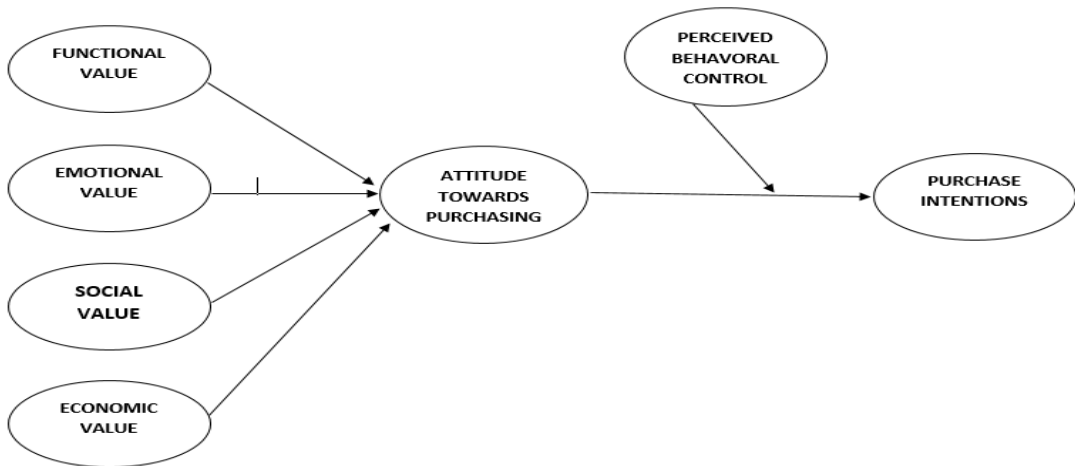
According to Katt and Meixner (2020), “perceived behavioral control” refers to “the perceived ease or difficulty of accomplishing the behavior” and considers both prior experiences and potential roadblocks. Behavioral control, or ability, was identified by Le-Anh & Nguyen-To, (2020). Numerous studies have demonstrated that PBC is positively correlated with intention in various research contexts, including recycling, conservation, green hotels, and organic foods (Moser, 2019). Our study examines whether PBCL has a favorable moderating influence on consumers’ attitudes toward buying and their intentions to buy organic food. Hence, we propose the following hypothesis:

H6: Perceived behavioural control positively moderates the impact of attitude towards purchasing on purchase intention to consume the organic product.

2.9 Conceptual Model

According to the literature, attitudes toward making purchases may mediate the interaction between consumer values and buying intentions for organic food (Pacho, 2020). Previous studies investigated how consumption values affected customers’ purchase intentions (Yean et al., 2019). Like how consumption ideals and purchase intentions are linked, attitude toward purchasing is also recognized to play a key mediating role (Nguyen & Truong, 2021). Recent research has centered on the interactions between consuming values, purchasing attitudes, and purchase intentions (Qasim et al., 2019). According to Wang., (2020) by incorporating the elements of the consumption values theory, this research identifies the factors that influence consumer purchase intentions for organic food consumption based on this body of literature. The study proposes that attitudes toward buying and perceived behavioral control (indirectly influence purchase intentions to consume organic food (Taghikhah et al., 2020). Table 24 provides a summary of the definitions of the variable.

Figure 1 Conceptual Framework



The study's model consists of seven variables, where FLV, ELV, SLV, and ECV are the independent variables and are based on findings from prior literature. Between consumption value factors and PI, ATTP acts as a mediating factor. The interaction between ATTP and PI is moderated by PBCL.

3 Methodology

The population for this study consisted of people who consumed organic foods. Judgment sampling was used to ensure appropriate participation in the study. A systematic self-administered questionnaire was used to gather empirical data and apply a quantitative technique to investigate the proposed hypotheses. The survey link was sent to through social media platforms. Before taking part in the study, respondents gave their informed consent.

Screening questions were posted at the opening of the questionnaire to ensure that respondents had sufficient knowledge about organic food products. Only those aware of organic foods accessed the questionnaire Via Google Forms. 200 survey questions in total were filled out, of which 156 questionnaires were filled entirely and useful for the study. This resulted in a response rate of 87.5%. Respondent participation was purely voluntary.

The scales were adopted from previous studies and modified to fit the context of organic food. These questions were scored on a five-point Likert scale, with the options "Strongly

Disagree” (1) and “Strongly Agree” (5). The appendix shows the scales adapted for this study.

4 Results

4.1 Data Screening

Two steps were taken in the data screening process. Initially, using a box plot in SPSS, examined for outliers in independent variables but discovered none. As a result, data met the requirements for univariate normality. The data were examined for multivariate outliers as the second stage of data screening (Tabachnick & Fidell, 2012). However, none were found in our data.

This study utilized SmartPLS to analyze the data. The measurement model analyzes the relationship between the item and the latent variable, and the structural model examines the relationship among the latent variables based on theory. These are the two stages of the PLS-SEM data analysis process (Hair et al., 2011).

Two steps were taken in the data analysis for this investigation. Firstly, using measurement model assessment, this study established the latent variables’ reliability and validity. Next, the structural model was used to assess the hypotheses.

4.2 Demographic Profile of Respondents

Respondent replies were examined after the outliers had been eliminated and the data had been determined to be normal. Fifty-six females and 100 males comprise the sample, or 64.1% and 35.9%, respectively. Most responders, who are between the ages of 21 and 30, and have a master’s degree, make between 41,000 and 60,000 Pak rupees monthly.

Table 2 Demographics of Respondents

Variable	Demographic	Frequency	Percent
Gender	Male	100	64.1
	Female	56	35.9
	Total	156	100.0
Age	20 and below	10	6.4
	21-30	73	46.8
	31-40	45	28.8
	41-50	21	13.5
	51 and above	7	4.5
	Total	156	100.0

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Education	Intermediate	11	7.1
	Bachelors	77	49.4
	Masters	55	35.3
	Ph.D. or above	13	8.3
	Total	156	100.0
Income level of respondents	Less than or equal to 20,000	25	16.0
	21,000 - 40,000	24	15.4
	41,000 - 60,000	42	26.9
	61,000 - 80,000	39	25.0
	81,000 or above	26	16.7
	Total	156	100.0

4.3 Descriptive analysis

Both the dependent and independent variables' descriptive statistics are displayed in Table 3. The variables' mean values fall between 3.35 and 4.18. The fact that the mean values of FLV, ELV, ATTP, and PI are greater than 4 indicates that respondents firmly agree that functional value, i.e., food safety and environmental preservation, favorably influence attitude toward purchasing and purchase intention. The average of SLV, ECV, and PBCL is greater than 3, indicating that respondents somewhat agree that peer recommendations, lifestyle choices, and the cost of organic food products influence their attitude toward consumption and, consequently, their intention to purchase. All the variables' standard deviations range from 0.40 to 0.77.

The seven variables' positive skewness indicates that respondents believe FLV, ELV, SLV, ECV, PBCL, and ATTP have an impact on PI. The range of kurtosis, which the data's tallness can explain, is 0.16 to 0.85. Although normality can be inferred due to the huge sample size, the kurtosis values between -1 and +1 further support this notion. All the variables' standard deviation statistics are smaller than 0.9.

Table 3 Descriptive Analysis of the Constructs

	Min	Max	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	S. E.	Statistic	S. E.
FLV	3.33	5.00	4.1827	.40374	.184	.194	.500	.386
ELV	3.25	5.00	4.1538	.41588	.179	.194	.234	.386
SLV	2.00	5.00	3.3568	.77424	.014	.194	.165	.386
ECV	1.75	5.00	3.4375	.71821	.115	.194	.856	.386
ATTP	2.33	5.00	4.1688	.49586	-.477	.194	.619	.386
PBCL	2.00	5.00	3.8167	.47435	-.444	.194	.236	.386
PIT	2.33	5.00	4.0150	.58944	-.473	.194	.187	.386

4.4 Measurement Model

Evaluation of the measurement model included a study of the validity and reliability of the constructs (Hair et al., 2010). The composite reliability (CR) measure, which has a criteria value of 0.7, was used to determine the reliability of latent variables (Tabachnick & Fidell, 2012). Additionally, outside loadings with a criterion value of 0.7 were used to evaluate the variables' dependability (Joseph Hair et al., 2010, Hair et al., 2011). Table 4 demonstrates that all items' outer loading and all structures' CR are greater than 0.70. The average Variance Extracted was used to evaluate the convergent validity of constructs, which is the degree to which an item correlates with other items in the construct (Hair Jr et al., 2016). The constructs have convergent validity if the AVE is greater than 0.5. (Tabachnick & Fidell, 2012). The AVE of all the variables in Table 4 is over 0.6, demonstrating the convergence validity of all the constructs.

Table 4 Reliability and Convergent Validity

Construct	Items	Outer Loading	CR	AVE
Functional Value (FLV)	FLV 1	0.758	0.896	0.798
	FLV 2	0.822		
	FLV 3	0.792		
	FLV 4	0.753		
	FLV 5	0.811		
	FLV 6	0.764		
Emotional Value (ELV)	ELV 1	0.784	0.849	0.845
	ELV 2	0.762		
	ELV 3	0.766		
	ELV 4	0.877		
Economic Value (ECV)	ECV 1	0.719	0.793	0.772
	ECV 2	0.715		
	ECV 3	0.700		
	ECV 4	0.702		
Social Value (SLV)	SLV 1	0.739	0.922	0.921
	SLV 2	0.710		
	SLV 3	0.906		
Attitude towards purchasing (ATTP)	ATTP 1	0.866	0.865	0.769
	ATTP 2	0.877		
	ATTP 3	0.759		
Perceived behavioral control (PBCL)	PBCL 1	0.831	0.988	0.864
	PBCL 2	0.765		
	PBCL 3	0.892		
	PBCL 4	0.799		
	PBCL 5	0.873		
Purchase intention (PI)	PI 1	0.897	0.870	0.832

PI 2	0.798
PI 3	0.743

If a given variable's square root of AVE is greater than its correlation with other factors, the latent variable's discriminant validity is proven (Fornell & Larcker, 1981). All the variables in Table 4 have larger square roots than their correlations with other constructs. The Hetrotrait Monotrait ratio (HTMT), which should be less than 0.90 for each construct, is a newly developed and more trustworthy measure of discriminant validity (Henseler et al., 2015). The HTMT ratios for all the variables above the diagonal line are summarized in Table 5. These numbers fall significantly from the benchmark value, between 0.107 and 0.632. As a result, the measurement model assessment confirms the validity and reliability of all the items and constructs used in this study.

Table 5 Discriminant Validity of Latent Variables

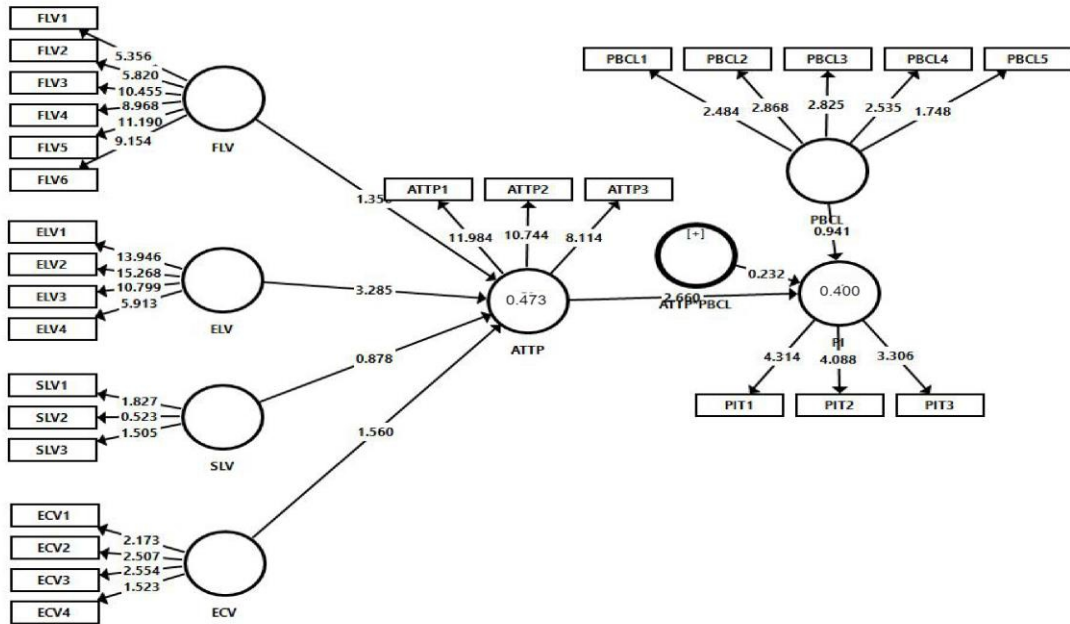
	FLV	ELV	SLV	ECV	ATTP	PBCL	PI
FLV	0.864	0.548	0.483	0.257	0.62	0.474	0.436
ELV	-0.651	0.852	0.31	0.569	0.469	0.569	0.386
SLV	0.389	-0.273	0.800	0.107	0.281	0.591	0.471
ECV	-0.089	0.436	-0.082	0.820	0.205	0.632	0.569
ATTP	0.275	-0.386	0.574	-0.129	0.891	0.331	0.142
PBCL	-0.365	0.471	-0.105	0.476	-0.245	0.880	0.63
PI	0.439	0.390	0.107	-0.192	-0.077	0.046	0.862

Note: values in the diagonal in bold are the square root of AVE, whereas values below the diagonal line are correlations and above the diagonal line are HTMT.

4.5 Structural Model

Structural model evaluations were conducted after measurement model assessment demonstrated sufficient construct and item reliability and validity Figure 2. R² and F² values were used to evaluate the prediction ability and model fit as a first step. R² for endogenous variables ATTP is 0.76, PBCL is 0.72, and PI is 0.74, According to Table 6. R² values above 0.20 are generally regarded as high for complicated models explaining consumer behavior, but the findings indicate that the model can substantially explain the variables' fluctuations. (Hair et al., 2016).

Figure 2 Partial Least Square – Structural Equation Model



The standard root mean square (SRMR) in PLS-SEM was used to evaluate how well the models fit the data. Models with SRMR less than 0.05 exhibit good model fit (Hooper et al., 2008). In addition to SRMR, the Goodness of Fit index (GoF) can be calculated as the geometric mean of the arithmetic means of R² and AVE of all dependent variables. The GoF index should be more than 0.36 if the R² value of endogenous variables is greater than 0.26 (Akter et al., 2011). The endogenous variables' R² value is more than 0.33, which indicates that our model has moderate explanatory power. The GoF index for the study's model is 0.615 points higher than the benchmark value Table 6. Hence, SRMR and GoF both demonstrate the goodness of model fit. As proposed by Lee and Hong (2016), the VIF was used to check for multicollinearity in this model, and it was found to be less than 3.3, indicating that all of the constructs employed in this study are distinct from one another.

Table 6 Goodness of Fit

	R ²	AVE	GoF	SRMR
ATTP	0.473	0.769	0.615	0.019
PBCL	0.522	0.864		
PI	0.400	0.832		

Average	0.465	0.821
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4.6 Direct Effects

Ten thousand subsamples of the inner model were used in bootstrapping analysis to evaluate the hypotheses. The predicted indirect effect path coefficients, T values, P values, and decisions are summarized in Table 7. The results confirm H1 [T (270) = 5.841, $p < 0.05$ and $f^2 = 0.196$], and state that functional value significantly improves attitudes regarding buying and consuming organic products. Like the previous hypothesis, the H2 was also supported [T (289) = 6.168, $p < 0.05$ and $f^2 = 0.118$], which stated that social value had a significant positive impact on attitudes about acquiring and consuming organic products. However, H3 was also in favor of the idea that emotional value significantly improves attitudes about buying and consuming organic products [T (285) = 0.013, $p < 0.05$ and $f^2 = 0.114$]. Finally, H4 was further supported by the finding that economic value significantly improves attitudes toward buying and consuming organic products [T (295) = 0.013, $p < 0.05$ and $f^2 = 0.281$]. This model has a statistically significant association between each supported hypothesis.

Table 7 Direct Effects

Path	Path Coefficient	S. E.	T Statistic	P-values	Decision
H1: FLV -> ATTP	0.196	0.004	5.841	0.004	Supported
H2: SLV-> ATTP	0.118	0.000	6.168	0.000	Supported
H3: ELV -> ATTP	0.114	0.021	4.918	0.001	Supported
H4: ECV -> ATTP	0.281	0.003	4.646	0.002	Supported

4.7 Mediation effects

The suggested model comprises four straightforward mediation routes Table 8 . All the basic mediations have statistically significant indirect effects. Functional value positively influences purchase intention through attitude towards purchasing [T(301)= 7.12 $p < 0.05$ and $f^2 = 0.207$], social value positively influences purchase intention through attitude towards purchasing (T=6.17 $p < 0.05$ and $f^2 = 0.185$), emotional value to positively influence purchase intention through attitude towards purchasing [T(302)= 6.24 $p < 0.05$ and $f^2 = 0.186$], and economic value to positively influence purchase intention through attitude towards purchasing [T(303) = 5.60 $p < 0.05$ and $f^2 = 0.119$].

Table 8 Indirect Effects

Path	Path Coefficient	S. E.	T Statistic	P-values	Decision
H _{5A} : FLV -> ATTP-> PI	0.207	0.004	7.121	0.000	Supported
H _{5B} : SLV -> ATTP-> PI	0.185	0.000	6.178	0.010	Supported
H _{5C} : ELV -> ATTP-> PI	0.186	0.003	6.248	0.002	Supported
H _{5A} : ECV -> ATTP-> PI	0.119	0.020	5.606	0.000	Supported

4.8 Moderation Effect

Prior research has not examined the moderating impact of perceived behavioral control on attitudes toward purchase intentions and eating organic food (by taking consumption values as independent variables). The findings in Table 9 are consistent with the prediction that perceived behavioral control modifies attitude toward buying and intention to buy organic products positively [$T(287) = 5.34$, $p < 0.05$, and $f^2 = 0.118$].

Table 9 Moderating Effect

Path	Path Coefficient	S. E.	T Statistic	P-values	Decision
H6: ATTP*PBCL -> PI	0.118	0.003	5.34	0.043	Supported

4.9 Discussion

This study has furthered our understanding of how consumers' intentions to buy organic foods are influenced by their consumption values (functional, emotional, social, and economic values) and attitude toward consumption, which are controlled by perceived behavioral control constructs. Karachi is a growing city, and the study discovered a consistent association between consumption preferences, shopping attitudes, and consumers' propensity to buy organic goods. These findings imply that regardless of the level of development, consumer values and attitudes influence their inclination to purchase organic goods. The Theory of Consumption values constructs is shown to interact in the literature (Watanabe et al., 2020). As a result, both the statistical analysis and the literature supported hypotheses H1, H2, H3, H4, and H5. Using the Theory of Consumption Values, it also examined the relationship between attitude toward buying and purchase intention. Findings show that the effect of perceived behavioral control was significant, and the hypothesis was validated statistically. This study did not discover any direct effects of perceived behavior control on customers' purchase intention, in contrast to the study by (J. Wang et al., 2020). Despite there being a need, most organic food

produced in Pakistan is exported (Ashraf, 2021). As a result, the Pakistani food industry must make organic products more accessible to consumers. So, when clients are exposed to a variety of organic foods in the market, the degree of PBC may rise. When attitude toward purchasing acts as a mediator between customer preferences for organic foods, this study made a significant contribution. To our knowledge, Pakistan did not have literature on emerging economies that addressed the mediating effect of attitude toward purchasing. Previous research has demonstrated that consumers were drawn to processed, non-organic foods because of cultural shifts that impacted their way of life (Pacho, 2020). Yet, rising non-communicable disease rates have prompted customers to buy organic food in response to a favorable attitude toward consumption. This study discovered that consumers' attitudes toward buying were positively connected with and mediated the links between consumption values and their intention to buy organic goods. Similarly, it was discovered that perceived behavioral control affected customers' positive attitudes toward purchasing organic foods and purchase intentions.

Thus, the moderation results show that, although consumption values may be the underlying mechanism between attitude toward buying and purchase intention, other factors, such as perceived behavioral control, influence the relationship in emerging economies.

5 Conclusion

To better understand how consumption values, attitudes, and PBC affect consumers' intentions to purchase organic food, the theory of planned behavior was applied in this study. This study also looked into the mediating and moderating impacts of ATTP and PBCL to determine consumers' intentions to buy organic food. We suggest a campaign to inform people about the health advantages of eating organic foods in light of the study's findings (Le-Anh & Nguyen-To, 2020). To promote the purchase of genuinely organic products, it is important to incorporate information regarding food safety and health on the labels of organic foods. This strategy might help increase the local demand for organic food products. The study's findings indicate that consumers who are more price sensitive are less likely to develop a desire to purchase organic food than consumers who are less price sensitive. Hence, retailers should attempt to alter consumers' perceptions of premium prices into attainable prices by applying various marketing methods, such as discounts, promotions, and new product innovations, to alter consumers' beliefs that they can buy organic food. Also, the government might take the initiative to reduce the cost of organic food by exempting retailers from paying taxes, making organic food affordable and competitive for local consumers. The intention of consumers to buy organic food was also found to be significantly shaped by attitude and perceived behavioral control.

Educating people about the significance and advantages of consuming this food can positively influence consumer attitudes about organic food. Marketers and policymakers must identify effective channels to convey these messages to consumers. As a result, customers may feel more comfortable buying organic items. Also, greater product accessibility through channels like Internet sales, well-stocked grocery shops, and department stores could raise customer demand for organic food.

5.1 Limitations and future research directions

Future research may use alternative theories in addition to the ones used in this study, which were done using the theory of consumption values. In this study, perceived behavioral control was employed as a moderating variable. Future research on purchase intentions for organic food may include additional variables as moderators as well. This study employed functional value, emotional value, economic value, and social worth; in the future, more factors may be used. Future studies may consider other green products, such as expensive and energy-efficient products, and evaluate the relationship between the suggested model and consumer choice in developing nations.

Moreover, this study only included regular users of organic foods; hence, future studies should consist of regular and sporadic organic food consumers. Finally, the scope of this study was restricted to a sample of Karachi, Pakistan, residents who regularly eat organic food. Collecting a sample from various provinces and cities, especially smaller cities, will be essential to fully understand the scope and depth of Pakistani consumers' intent for organic food.

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Appendix

Constructs	Items	Items Measurement	Citation
Functional value (FLV)	FLV 1	Organic food is beneficial to your health.	(Watanabe, Alfinito, Curvelo and Hamza, 2019)
	FLV 2	The production of organic food is efficient.	
	FLV 3	Organic food is trustworthy.	
	FLV 4	Organic food meets approved safety standards.	
	FLV 5	Organic food is consistently of high quality.	
	FLV 6	The quality of organic food is adequate.	
Emotional value (ELV)	ELV 1	When I eat organic food, I feel good.	(Watanabe, Alfinito, Curvelo and Hamza, 2019)
	ELV 2	I feel more motivated to use more when I eat organic cuisine.	
	ELV 3	Organic food is something I like to eat.	
	ELV 4	I feel peaceful after eating organic foods.	
	SLV 1	Eating organic food makes me feel respectable.	
Social value (SLV)	SLV 2	My family members view me positively because I eat organic food.	(Watanabe, Alfinito, Curvelo and Hamza, 2019)
	SLV 3	Eating organic food is consistent with my social circle's traditions and culinary culture.	
Economic value (ECV)	ECV 1	The cost of organic food is affordable.	(Watanabe, Alfinito, Curvelo and Hamza, 2019)
	ECV 2	Organic food is cost-effective.	
	ECV 3	For the money, organic food is a good purchase.	
	ECV 4	Compared to other products, organic food is more affordable.	
Attitude towards purchasing (ATTP)	ATTP 1	I enjoy the concept of buying organic food.	(Watanabe, Alfinito, Curvelo and Hamza, 2019)
	ATTP 2	Buying organic food is a smart move.	

Perceived behavioral control (PBCL)	ATTP 3	I've got a positive mindset toward buying organic food.	(Watanabe, Alfinito, Curvelo and Hamza, 2019)
	PBCL 1	I think I could afford to buy organic food.	
	PBCL 2	I am confident that I would buy organic food if it were fully up to me.	
	PBCL 3	I believe I will be able to buy organic food in the future.	
	PBCL 4	I have the means, the time, and the desire to buy organic food.	
Purchase intention (PI)	PBCL 5	I believe I have some control over some aspects of my decision to buy organic food.	(Watanabe, Alfinito, Curvelo and Hamza, 2019)
	PIT 1	I would buy organic foods if they were offered in stores.	
	PIT 2	Despite the greater cost of organic food, I am willing to purchase it.	
	PIT 3	The likelihood of me purchasing organic food is pretty high.	



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