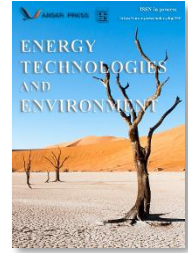




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## Investigating the Influence of Factors on Attitude Towards Organic Food

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### ABSTRACT

The purpose of the study is to determine the relationships between the factors, attitude towards food consumption and green purchase intention in organic food markets of Pakistan. A Total of 301 sample data was analyzed by SPSS and PLS-SEM. These statistical techniques were used to test the hypotheses. The study was supported the theories include theory of Reasoned Action, Planned Behavior, and expectancy-value model of attitude theory. It also enhances the intention of purchase to buy organic food. The study found that environment, consciousness of health, and safeties of food have significantly direct and indirect influence on Intention of purchase while, taste of food, and exposure of media only have significantly indirect effect on Intention of purchase. The study recommended that retailers should advertise organic food via social media or channels as media persuasively increase the chances to grab the consumer attention to buy the product.

### KEYWORDS

Attitude; Green Purchase Intention; Health Consciousness; Food Safety; Food Taste; Organic Food

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## 1. Introduction

Now a day world faces an issue of higher population growth and shortage of food (Ayyub, Asif, & Nawaz, 2021). The expert on the population growth estimates that in 2050 population cross the number 9.7 billion (Bagher, Salati, & Ghaffari, 2018). Population growth and food shortage interlinked. In order to provide food to this growing population and cover the food demand agriculture product, the use of different chemical pesticides led to increase the production of agriculture products (Fang, 2018). Chemical pesticides having adverse effect on the health of human being and natural ecosystem distraction. Chemical pesticides increased the per acre production but the environmental issues and number of diseased increased due to side effect of these chemicals (Ahmed et al., 2021). According to 2021 hunger index Pakistan ranked 92 out of 116 countries and score is 24.7 which indicate serious level of hunger. Due to unplanned colonies mafia in Pakistan the area of cultivated land decreased day by day (Ayyub et al., 2021). Food production need to increased 70 % to feed the grown population but limited land water resources which is only possible by use of chemical pesticides. to provide organic food to population challenge of every county (Chakraborty & Dash, 2022). This study considers the different factors (environmental concern, food taste, food safety, health consciousness and media exposures) Which contribute to green purchase intention of the population.

Environmental issues are the major concerns for several serious issues like global weather change, polluted air, the consumption of organic resources (Lee 2014, IPCC 2014). Considering the well-being of eco-friendly environment, purchasing and consumption of organic products is the key factor that may impart a positive impact on the health of environment. The organic global market has reached the value of US\$ 81.6 billion according to OA and IFOAM – Organics International Research Institute (Willer & Lernoud, 2017).

A combined consensus lies that the sustainable food growth is important to deal with upcoming environmental and social challenges in future such as the loss of natural resources and the continuous rural depopulation (Meyer-Höfer, Nitzko & Spiller 2015). The recent damage caused to environment has contributed to the increase in pollution of water and air has put up life of human in danger. Considering this, protective feelings have been developed among current consumer and they are more concerned about the environmental health and their health that is related to environment in future (Khan & Mohsin, 2017).

Due to rapid recent advancement in the modern times and rapid industrial development, many social and environment problems are taking place (Wang et al., 2014). These problems are related to global warming and natural resource depletion as well as economic disturbance in different segments of industry (Lee, 2014). Smith et al. (1999) stated that it has been evaluated that the extent of the global burden of disease approximately 23% to 30 % of hazards of environmental. Human tasks have been the major reason for environmental degradation. This arouses the need of human behavior modification (Joshi and Rahman, 2015). Tanner and Wölfling Kast (2003) suggest that sustainable organic consumption account for responsible consumption of organic resources, which empowers responsibility towards the community and the environment.

Pakistan is as lately endeavor varied real natural problems, that are of exceptional ecological concerns to such an extent as its reasonable monetary future. These join soil crumbling, pesticide misuse, deforestation, desertification, metropolitan corrupting, waterlogging and pungency, pure water contaminating and marine water contamination and a few of others. Due to these concerns of environmental, temperature in much of the places in Pakistan is rising. Specially in upper parts of Sindh, the temperature usually goes up to 45oC to 50oC. Keeping in view this environmental change, there is a dire need of shifting customer is buying behavior towards use of green/organic products. There is a huge number of young populations in the history, according to Dawn (Zafar, 2020). Due to this, we engaged young population to conduct this research. The respondents engaged in this research were young consumers (15 years–32 years) as they contribute to greater than 50 percent of population.

Considering these increasing environmental and social problems, use of organic food and green products is

thought to be the best possible solution to save the environment (Padel & Foster, 2005; Thøgersen, 2009). Organic food is referred to the products that are derived or made according to the organic agriculture standards to ensure the welfare of environment as well as humans (IFOAM, 2005; Vieira, De Barcellos, Hoppe, & da Silva, 2013).

The European countries have grown exponentially in organic food market (Willer & Lernoud, 2017). The leading countries of Europe related to retail sales were Germany (which contributes to 8.6 billion euros), France (which contributes to 5.5 billion euros), UK (which contributes to 2.6 billion euros), Italy, (which contributes to 2.3 billion euros), and Switzerland (which contributes to 2.2 billion euros). These European markets have now reached the stage of maturity, while other markets such as countries of Western Balkan still are in the initial developmental stages regarding retail sales (Petljak et al., 2017).

On the other hand, developing countries contributes to the environmental changes. They contribute to air pollution and climate changes because of their increasing growing economic market and extended customer base (Hsu, 2016). Similarly, these developing countries are the potential market for consumption of green products and organic food compounds (Yadav & Pathak, 2016). Studies suggest that many developing countries in Asia like Vietnam, India, China etc have a greater number of young populations, comparatively (United Nations, 2015) and these young population understand the use and importance of green products (Paco et al, 2013). These people know that green and organic products are the society future. These young population are the future of society (Lee & Tai, 2006)., They are well educated about sustainability and issues of environment of economy, hence this population is the right target to evaluate importance of eco-friendly products. There is limited knowledge regarding intention of purchase of green items.

The response of customers towards intention of purchase of green items has received very little acknowledgement in developing countries like Pakistan (Chakraborty & Dash, 2022). The major problem that exists in developing countries is that they have lack of awareness regarding use of organic products (Tandon, Dhir, Kaur, Kushwah, & Salo, 2020). Environmental degradation and health consciousness are two major concerns that arise while talking about consumption of food of organic (Iqbal et al., 2021). Main purpose of this study is to identify different factors (environmental concern, food taste, food safety, health consciousness and media exposures) which contribute to green purchase intention. This research study also consider does attitude toward consumption of organic food mediate this relationship.

RQ1: Are there any significant relationships between factors like safety of food, concern of environmental, consciousness of health, taste of food, exposure of media and attitude towards food of organic?

RQ2: Are there any significant relationships between factors like safety of food, concern of environmental, consciousness of health, taste of food, exposure of media and customer intention of purchase?

RQ3: Does attitude towards food of organic mediate the relation among factors like safety of food, concern of environmental, consciousness of health, taste of food, exposure of media and customer intention of purchase?

Study helps to evaluate understanding level of young population regarding increasing environmental issues and their concerns related to these issues. Secondly, we will be able to evaluate the level of interest and awareness among young population regarding use of green products. Thirdly, their opinion regarding purchase of green products. This study will identify the major gaps, including environmental and health related concerns in developing countries and will demonstrate their attitude towards intention of purchase of green and organic products.

## 2. Literature Review

### 2.1. Theoretical background

The Reasoned action and planned behavior theories have applied by the previous researchers, to determine

the consumption of food of organic attitude and intention to purchase. These theories evaluated that such behavior may be linked to a past antecedent of actual behavior (Teng and Wang, 2015). Companies use various target mechanisms to lure in customers. The trend of organic consumption has also been subjected to such conditions. Green products have been penetrated almost every market of the world. The marketing and sales operations are different and influence the customers about the value of sustainability and similar aspects.

### 2.1.1. Theory of Reasoned Action

According to TRA, individual's intentions are based on norms of subject and attitude. TRA has derived from the previous theories include attitude theories, persuasion models, and social psychology. In later, by expanded the concept of TRA, two theories derived from TRA named as theory of planned behavior and reasoned action approach. Fishbein and Ajzen (1975), proposed the theory of reasoned action TRA, which explained the association among behavior, attitude and intention. According to Fishbein and Ajzen (1980), the postulate of TRA model are following individual makes rational decisions, which based on the available information to them, and the sudden or unexpected decision determined the individual behavior, which based on psychological changes. In this context, researchers use the theory of reasoned action to assess the purchase behavior and intentions of various customers (Marvi et al., 2020). Kurniawan, Widowati, and Handayani (2022) looked at theory of reasoned action in hotel industry. The purpose of this investigation is to find out the relationship between the services quality, customer trust, perceived easiness to use services, and customer satisfaction on customer repurchase intention of hotel room. Results shows these factors can't contribute to customer repurchased intention in the hotel room booking. Saleem, Aslam, Kim, Nauman, and Khan (2022) conducted study in Pakistan context. Purpose of this study identifies the important aspects as perceived awareness of security, perceived usefulness, personal innovativeness, and perceived ease of use in purchasing, together with the effects of these factors on online purchasing intentions and the mediating role of consumer attitudes toward online purchasing. Jang and Cho (2022) tested the food value and customer purchase intention. Testing the theory of reasoned action results represent that the food positively effects on subjective norms and attitude toward purchase intention. It suggests that attitudes of consumers must be built towards environmentally friendly products by providing an accurate idea and features of the product.

### 2.1.2. Theory of Planned Behavior

Theory of Planned Behavior proposed by I. Ajzen (1991) stated that people have multiple types of behavior on which they do self-control. However, behavior depends on both ability to control behavior and motivation intentions. This theory used to understand and predict the individual behavior, which postulate that the behaviors of individual can identified by intentions of individual, perception of behavioral control under different circumstances. The theory of planned behavior was applied in this context as well to evaluate the factors and intention of purchase of customers towards acquiring organic and green products. In this way, the theories also lead to the fact that advertisements persuade the customers and change their perception and buying preferences. On the other hand, the researchers used the expectancy-value model of attitude theory to argue that customers will have a better attitude towards certain products if they perceive them as value attributions. The norms, attitudes, and behavior decisions are not made spontaneously as per the theory (Cheung & To, 2020). It suggests that ethical advertisements can lead to the betterment of both companies and customers. For instance, the right advertisement will signify the present features of the product and create a sense of trust among consumers. It is why this theory suggests that there should be relationships between the marketing mechanisms and the features of the products. Similarly, another research implicated crucial findings with the help of the theory of the attitude-behavior relationship. According to this theory, perceptions and attitudes arise from the perceptions and experiences of different people. Such aspects impact the behavior outcomes of the consumer and modify the buying perception (Ulusoy & Barretta,

2016). Therefore, this theory suggests that marketers must understand the vital concept of concern of environmental, and provide beliefs that fit accurately in the given context.

Most of the research found in such a manner was extensively based on two theories. These were mainly the theory of planned behavior and the theory of reasoned action (Zarei & Maleki, 2017). However, more complex theories were also integrated into the context to evaluate the theoretical background of attitude and intention to purchase. Brands may market products with features, such as freshness, natural content, nutritional value, and other benefits, which could lead customers to buy such organic foods. Researchers state that this is the most significant motivator of acquiring organic foods (Grzybowska-Brzezińska et al., 2017). Emotional value is the sense of positive or negative engagement with the product and plays a vital role in buying a product. It is hugely based on previous experiences with the product or brand. Inner satisfaction, pleasure, and joy are also the reason why customers consume organic foods (Ploeger & Ismael, 2020). The social factor is another important factor that hugely influences customers to opt for consumption of food of organic. The product concern, recommendation, approval from others, and reputation concerns are some of the most prominent variables of social factors that increase or decrease the possibilities of consumption of food of organic (Ploeger & Ismael, 2020).

## *2.2. Concern of Environmental and attitude towards consumption of food organic*

Environmental concern of consumer defined as the concern about the food packaging, ingredients, etc. Organic food refers to the item acquired or made as per the principles of organic agriculture that maintain and advance the welfare of soils, environments and people. Environmental issues are destructive effects of human activity on the biophysical climate. Environmental sustainability also plays a key role in driving the purchase behavior of consumption of food of organic. The food consumption not only impacts our health but also triggers an influential role on our environmental surrounding (Yue et al., 2020). To investigate the impact of individual and situational factors on purchase behavior of organic meat, a study was conducted. Organic meat has been an emerging trend as it has contributed towards sustainable food consumption practice (Nguyen et al., 2019). The study was limited to the population of Vietnam. A survey from 609 organic meat consumers was collected. The findings of the study showed that consumers have high concerns towards environmental sustainability, safety of food and health ((Nguyen et al., 2019). All the three factors positively relate to the purchase behavior of consumers in Vietnam. It also showed that the green and sustainable marketing practices can be a driving force to attract organic consumer's purchase.

Likewise, another research was conducted on green food consumption and concern of environmentalism as a driving force of purchase behavior (Švecová & Odehnalová., 2019). Nationwide panel-based research was conducted and the daily food items were incorporated in the study. The results showed that organic consumers purchase organic food as they mirror their concern of environmentalism on their purchase behavior. The social norms also play a vital role in influencing purchase behavior of consumption of food of organic. Research has shown that humans are social beings, hence the impact of surroundings, family members, family values, closes friends and colleagues tend to be influential (NGUYEN, 2021). Thus, the purchase behavior of consumer is a mixture of several factors and considerations. The opinions of surrounded people and their actions are interlinked with the purchase behavior of consumers. A study was conducted on the Czech consumers to evaluate their purchase behavior towards organic food. The study showed that the purchase behaviors of Czech consumers were indirectly influenced by their family members and opinion of others. It also highlighted that consumers tend to look for opinions as they rely and trust on their surrounded people experiences. In the case of young consumers, the opinions are considered as they have lack of proper and complete information of products (Rana & Pau., 2017). Hence it concluded that the purchase behavior of families who haven't bought organic food were significantly negative. On the contrary, such families who have positive purchase behavior towards organic food tend to prioritize its buying. Following hypothesis can be

generated:

H1: The influence of environmental concern is significant on attitude towards consumption of food organic.

### *2.3. Safety of Food and attitude towards consumption of food organic*

It refers to handling, preparing and storing food in a way to best decrease the risk of people getting debilitated from foodborne diseases. The amount of health conscious and environmental conscious consumers is increasing with time (Chekima et al., 2017). Now the job of marketers is not confined to transactional exchanged only but to produce and market environmentally friendly products. Moreover, the marketers are shifting their focus from hedonic food to healthy food promotions to captivate more and more organic consumers. The following customer driven tactic can help in boosting the purchase behavior of consumers. As per research purchase behavior is not limited to consistent buying only; instead, it is a commitment towards a product in future as well. The research has very limited and restricted literature on the emerging topic of consumption of food of organic and purchasing behavior.

The two variables; consumption of food of organic and purchase behavior are associated by virtue of several latent factors. A study has shown that the shift of consumers towards organic food has occurred as the respective consumption fulfill their expectation of a healthy lifestyle (Chekima et al., 2017). The organic food consists of several practices such as use of organic fertilizer, use of natural seeds, organic ways of pest control, legumes and much more. The scholar proposed the findings that the affordability of consumers to buy organic food is one of the core factors that drives their purchasing behavior. When consumers earned good then they tend to opt for a better and healthy lifestyle.

Another study was conducted on the shift of consumer purchase towards organic food. The study stated the findings that health consciousness is one of the major factors that bridges the association between consumer purchasing behavior towards organic food (Irianto, 2015). The study conducted survey-based research and showed that consumers prefer organically grown food more than the conventional one. The respective study concluded that high purchase behavior towards organic food is due to the growth in the lifestyle diseases such as depression, blood pressure, cardiac issues etc. Hence the consumers tend to stick with the organic food to improve their hedonic lifestyle. Following hypothesis can be made based on this:

H2: The influence of food safety is significant on attitude towards consumption of food organic.

### *2.4. Health Consciousness and attitude towards consumption of food organic*

It refers as the Behavior and attitude, which considers wellbeing considerations in an individual's diet or lifestyle. The association of purchase behavior and consumption of food of organic can also be understood in terms of consumer's attitude towards green consumption. To analyze the respective association, research was conducted. The research was based on the concept of attitude and behavioral gap in the organic food market (Janssen, 2018). The study illustrated that the attitude of consumers towards organic food and their organic purchase behavior is associated with core factors i.e. consciousness of health being attached to nature and protecting nature. Other factors demonstrated by the respective study were preference for healthy food and desire for quality food. The notion of affordability, pleasure in eating, and convenience were also included in the other factors. The research showed that other factors were negatively and significantly related with purchase behavior of organic food whereas the core factors have positive relation ((Janssen, 2018).

The purchase behavior of consumers also varies with the residential or socio-economic gap. A study was conducted on consumers belonging to different regions of Germany. The aim of the study was to show willingness of purchase towards organic food. The respective study demonstrated that the consumers living in rural and eastern

regions of Germany are less willingly to purchase the organic food (Hempel & Hamm., 2016). The urban consumers on the other hand were readily purchasing the organic food in Germany. The reasons as illustrated in the research were social norms, lack of knowledge about organic product, lack of resources to pay premium price of organic product and unconscious attitude towards health (Hempel & Hamm., 2016). Following hypothesis can be made based on this:

H3: The influence of consciousness of health is significant on attitude towards consumption of food organic.

### *2.5. Taste of food and attitude towards consumption of food organic*

Taste of food has been noted to be an important factor affecting the consumption of food of organic. Studies have reported that consumers perceive the taste of organic as the major reason to buy it especially the organic fruits and vegetables (Feil et al., 2020). Moreover, the promoters of organic food claims it to have a better taste of food as compared to non-organic ones (Gallar et al., 2019). There are also some studies that have reported that organic products are stored in a better way that results in making their shelf life longer (Yousuf et al., 2018). Another reason noted behind this is also the lower nitrate levels in the organic food. Such as organic apples are noted to have superior storage properties and organic potatoes tend to have more vitamin C. As per the scholars, the lower nitrate cause better tastes and higher antioxidant level (Eyinade et al., 2021).

Likewise, another study showed that health orientation and sensory appeal i.e. appearance, taste etc. including the product specific attitude, leads to purchase behavior of organic food. The study was conducted on such consumers only who were committed to organic food and had future purchase plans for it. It regarded consumption to be an involvement with the product and a motivating factor (Nguyen et al., 2019). Approximately 133 consumers were incorporated in the study. The results showed that sensory appeal, health orientation and attitude towards organic product helps in purchase behavior. The above stated factors were positively related to consumption of food of organic. It also concluded that the influence of health orientation is higher than other factors (Nguyen et al., 2019). Following hypothesis can be made based on this:

H4: The influence of food taste is significant on attitude towards consumption of food organic.

### *2.6. Media Exposure and attitude towards consumption of food organic*

Media exposure is defined as the extent to which audience members have encountered specific messages or classes of messages/media content. Consumers tend to form opinions based on what they hear. In this view exposure of media plays a role by reshaping customer views on consumption of food of organic (McGregor et al., 2018). A study in this context stated that food label plays a role over here (Kizgin et al., 2020). As per the scholar, providing information through labels enables the consumer to decide about whether the food is healthier or not. Moreover, Television has been the preferred medium for food manufacturers to reach their audience. A study reported in this view that communication via media in the form of conventional ads and digital ads have positively impacted the consumption of food of organic by creating a positive view and awareness about healthy eating (Apoalaza et al., 2018).

Social norms are also linked with consumption of food of organic. The planned behavioral theory has been extensively discussed in the research to elaborate the purchase decision of organic consumers. The theory also incorporated social norms to be an influential purchase behavior factor. It states that consumers tend to witness pressure from their surroundings to comply with a certain behavior. As per the theory, norms are also regarded as moral considerations that can pressure the consumers to comply with a certain behavior (Švecová & Odehnalová., 2019). In purchase behavior the personal norms tend to have positive impact. For instance, consumers are buying organic food as their personal norms have suggested them to do so. Moreover, the perception of consumers

concerning a certain product tends to get influenced with the dynamics of the norms. Favorable changes are made in the belief systems to comply with the norms and look for personal benefit as well (Švecová & Odehnalová, 2019). Following hypothesis can be made based on this:

H5: The influence of media exposure is significant on attitude towards consumption of food organic.

### *2.7. Environmental concern and green purchase intention*

Environmental concern of consumer defined as the concern about the food packaging, ingredients, etc. Brick and Lai (2018) argued that individual has explicit behavior regarding environmental concerns. Thus, it can be observed in the context of environmental degradation. Society plays their role in creating environmental concerns, reinforcing and awareness among the public (Lou and Li, 2021). Zameer and Yasmeen (2022) investigated the relationship between environment concern, awareness, green innovation and green purchase. Following hypothesis can be made based on this:

H6: The influence of environmental concern is significant on green purchase intention.

### *2.8. Food safety and green purchase intention*

Food safety refers to routines in the storage, handling and preparation of food meant to prevent foodborne injury and illness. The food safety is important because it protect individuals from food poisoning (Hsu, Chang and Lin, 2018). Previous researchers investigated the effect of food safety on green purchase intention (Liu et al., 2022). Wong and Tzeng (2022) examined the mediating role of food safety attitudes and organic labelling awareness between green product awareness and purchase intention. The study argued that food safety is the concept of food and nutrition security that significantly rise the purchase intention of the customers. Following hypothesis can be made based on this:

H7: The influence of food safety is significant on green purchase intention.

### *2.9. Health consciousness and green purchase intention*

Health consciousness is defined as the degree to which a person cares about his/her health. More health conscious people have more healthy habits. They like to eat healthy food and have a healthy life (Su et al., 2022). Chakraborty et al. (2022) investigated the relationship between consumer purchase intentions and buying behaviors of ayurveda products by using SOBC framework. Following hypothesis can be made based on this:

H8: The influence of consciousness of health is significant on green purchase intention.

### *2.10. Food taste and green purchase intention*

Taste defined as the sensory cells' perception in the taste buds. When compounds of food activate these sensory cells, the brain detects a taste, like bitterness, sweetness of foods etc. (Najib et al., 2022). Le and Nguyen (2022) examined the factors effect on green purchase intention. The study found good taste of organic foods increase the intention of customer to buy organic food. Wongsachia et al. (2022) found that utilitarian eating value of food influences the decision process of customer to buy organic food or not. Following hypothesis can be made based on this:

H9: The influence of food taste is significant on green purchase intention.

### *2.11. Media exposure and green purchase intention*



Media exposure is the extent to which audience members have encountered specific messages or classes of messages/media content (Yang, Jiang and Chen, 2022). Previous researchers found significant influence of media exposure on intention of purchase (Hazaea et al, 2022). The media exposure plays the most important role to identify major health issues problems (Qadeer and Ziauddin, 2011). Following hypothesis can be made based on this:

H10: The influence of media exposure is significant on green purchase intention.

### *2.12. Attitude toward purchase attention and green purchase intention*

Attitude of customer is a feeling of favorableness or unfavorableness that customer has towards a goods or services. Purchase intention is a measure of each customer propensity to buy a service or product (Wang et al., 2022). It is characterized as a proportion of the strength of one's aim to perform a particular behaviour or settle on the choice to purchase an item or service. Moslehpour et al. (2022) argued that negative moods such as anxiety and depression have negative effect on purchase intention. However, attitude plays the most important because it guides human behavior. Lavuri et al. (2022) examined green factors effect on the purchase intention of innovative luxury organic beauty products. Following hypothesis can be made based on this:

H11: The influence of attitude towards food of organic is significant on green purchase intention.

### *2.13. Attitude towards food of organic (Mediation)*

Previous researchers have found significant effect of attitude as a mediator between factors and purchase intention (Cabuk et al., 2014). Chu (2018) examined the mediating influences of attitude on internal and external factors influencing consumers' intention to purchase organic foods in China. Li, Wang and Lio (2021) investigated the relation between consumer innovativeness and organic food adoption. Moreover, the study also examined the mediation effects of consumer knowledge and attitudes between consumer innovativeness and organic food adoption. Nagaraj (2021) examined the role of consumer health consciousness, food safety & attitude on organic food purchase in emerging market. Following hypothesis can be made based on this:

H12: Attitude towards food of organic mediates the relation of environmental concern with green purchase intention.

H13: Attitude towards food of organic mediates the relation of food safety with green purchase intention.

H14: Attitude towards food of organic mediates the relation of consciousness of health green purchase intention.

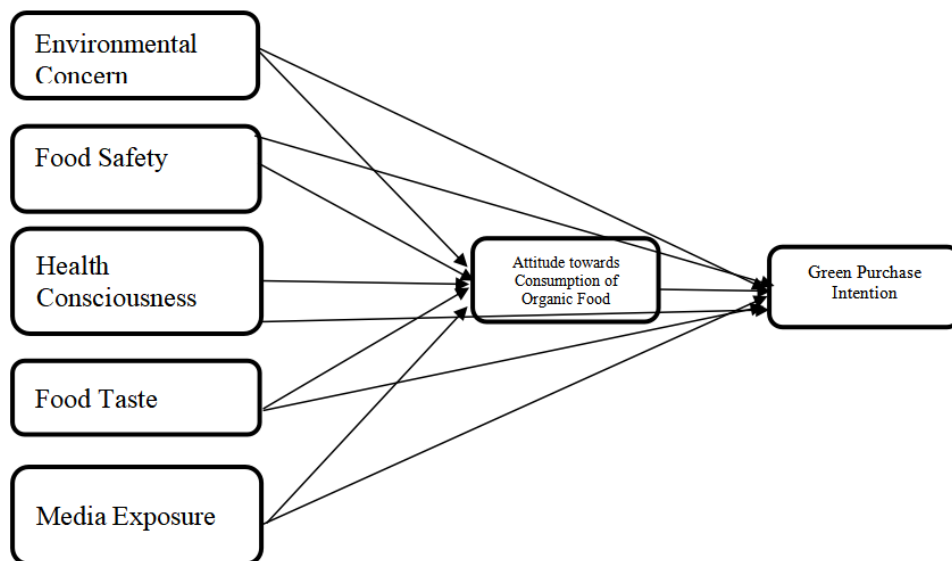
H15: Attitude towards food of organic mediates the relation of food taste with green purchase intention.

H16: Attitude towards food of organic mediates the relation of media exposure with green purchase intention.

### *2.14. Conceptual Model*

This study aims to explore the effect of factors on ATOFC and green purchase intention. The study contains five independent variables; dependent variable of the study refers to consumption of food of organic. The theory of reasoned action (TRA) by Ajzen and Fishbein (1980) and the theory of planned behaviour (TPB) by Ajzen (1985) were two main theories that determined the relationship between attitudes, behaviors and purchase intention of the customers. TRA determined the individual behaviors that include social norms and attitude. TPB (Ajzen, 1988) added one more factors include perceived behaviors that determined purchase intention of the customer to buy or not to buy the product. As the market, consumers are changing and shifting towards organic living and healthy food consumption, a new market trend has emerged globally. The purchase behaviors are two crucial factors that can regulate consumption of food of organic choices. As per research purchase behavior is not limited to consistent

buying only; instead, it is a commitment towards a product in future as well. There are several latent factors that drive purchase behavior such as health concerns, socio economic gap, healthy life style, convenience, social norms, safety of food health consciousness and much more.



**Figure 1.** Conceptual model.

### 3. Research Methodology

#### 3.1. Research Purpose

This study has applied explanatory research purpose, to identify the relationship between the dependent and independent variable. Moreover, this research is conducting to solve the problem, which did not properly conducted before in the particular context (Zikmund, D'Alessandro, Winzar, Lowe, & Babin, 2014). The objective to conduct this study is to understand different aspects that impact of factor on ATOFC and intention of purchase.

#### 3.2. Research Approach

According to Aliaga and Gunderson (2002), quantitative research defined as a scientific method by using mathematical techniques or numerical analysis of data to identify the cause or effects of various problems. In quantitative research always used questionnaire as the data collection method. Moreover, this study has collected data through questionnaire and data is in numeric form. This research will help to generate strong information's about the purchasing behavior of consumers and provide knowledge based on factors which lead to and persuade consumers to consumption of food of organic. The hypotheses for and of the variables are developed for information on the buying behavior in consumption of food of organic. These hypotheses will be evaluated to assess the effects in any of these variables. The analysis is of a quantitative nature. The participants would gather accurate data and facts.

#### 3.3. Research Design

In this study, correlation research design has used to determine whether two variables are correlate. Moreover, this study involves two or more quantitative variables in order to determine the relationship between dependent

and independent variables (Samuel & Okey, 2015).

### *3.4. Sampling Design*

The sampling design method for this study is a non-probability sampling that consists of convenience sampling due to the limited resources available because of the current situation in the market.

### *3.5. Population and sampling*

This study has collected the data from the target population by using primary data source and the target population of this study are young respondents within the age limit of 18-to 28 years. As these people are more conscious about green purchasing and their purchasing patterns are shifting with time, their responses are expected to help the researcher with accurate findings.

### *3.6. Sampling Procedure*

The majority of customers are those whom like to buy green product, from the major city Karachi. However, this study has focused in the particular and largest city of Pakistan that is Karachi. In Karachi, customers were the maximum number of our target sample population.

### *3.7. Sampling technique*

The sampling technique being used for this study was the non-probability sampling in which the convenience sampling technique was being conducted due to the limited resources and time for the current situation in the city.

### *3.8. Sample Size*

The sample size was needed for this analysis was focused on the suggestion of (Hair et al., 1998) for 10–20 observations per variable tested. Our analysis consists of variables (32 items for total variables), which result in an optimal sample size of people (32 x 10). Nevertheless, 320 answers were considered. This study used Kline method to estimated maximum sample size. However, this study's sample size is composed of youth of Pakistan who engages in green product buying. The sample range covers females between the ages of 18 and 28 years.

### *3.9. Unit of analysis*

The unit of research means who or what is being studied. The participants of this study were the customers, who are regularly or have intention to buy green products. The major city (Karachi) population was participated to fill the online questionnaires.

### *3.10. Data Collection Method/Procedure*

Two types of data collection techniques are usually available. The first is primary and the secondary. The present thesis is based on the analysis of Primary data. One explanation for choosing the primary data is that the research subject of the analysis will receive the most important information. Therefore, primary data obtained by survey method have been used in this study. This is also an important way to gather data while the use of resources will be saved. In addition, secondary analysis techniques from the existing database are used to review literature in the present study. Moreover, several surveys, journals, academic papers and books examine the effect of buying behavior and green cynicism in the use of organically grown foods.

### 3.11. Research Instrument

The scale selected is Likert for the questionnaire that has been developed (Hair et al., 2019). This research will contribute to the collection of information on the correlations between these variables and their impact on the purchasing behavior of customers. The explanation is to know the influence of the above mentioned variables. This research will provide the strongest data on both of these causes and on how the buyer purchases for consumption of food of organic.

The primary set of information for this study is chosen to examine the role of purchasing behavior and green cynicism in organic food consumption. Because of, there are some drawbacks to secondary data collection methods, such as that they do not seem suitable for every product; however, this research subject can be studied well. The items of the questionnaire in this research were adapted from different sources in existent literature. Moreover, measures mostly adopted from past research papers with acceptable reliability (Cronbach's alpha). The questionnaire has five-point Likert-scale ranging from (1) "strongly disagree" to & 5) "strongly agree" was employed to measure all variables.

### 3.12. Techniques of Data Analysis

The obtained data were analysis by the using the two software that includes SPSS and PLS-SEM). The initial analysis on the given data sample assessed by using SPSS software. However, PLS-SEM software used to assess both the structural and measurement models (Salem & Salem, 2019; Soomro, 2019).

### 3.13. Statistical Package for Social Science SPSS

IBM Corporation designed the software named as SPSS, It is a statistical package, which used by academicians or researchers worldwide. This statistical package is truly amazing, individual user friendly and many statistical tests could be conducting by SPSS software.

### 3.14. Partial Least Squares Structural Equation Modeling PLS-SEM

SmartPLS was the first designed by Ringle, Da Silva, and Bido (2015), a software developers team in Germany. It used to test the structural and measurement models, to determine the relationships between constructs mentioned in the proposed model, to test the theory in an efficient and effective manner. Furthermore, PLS-SEM has the statistical properties of model of robust estimation and provides accurate results with non-normal data and distribution (i.e., kurtosis and skewness). Moreover, it has the quality of handling the measurement error in the variable scores and reflecting it in the path coefficients, assesses the reliability and validity of the items, estimated biased in a model. PLS-SEM has more statistical power in testing or confirmation of a theory in contrast to CB-SEM.

### 3.15. Ethical Consideration

Given the criticality of ethical principles and the importance of the science, all ethical guidelines are strictly observed, so that they can gain the trust of readers and comfortably accept the study. Necessary directives will be implemented during secondary data collection. In the study, the use of derogatory, racist and immoral terms is specifically prohibited, and all of the earlier investigators are properly cited. In addition, only for scholarly reasons and not for commercial purposes are the data gathered for the study (Mikalef et al., 2019).

## 4. Data Analysis

#### 4.1. Response Rate

Table 1 presents 330 questionnaires were distributed among the customers from Karachi. 318 were filled questionnaire, which have returned. 301 questionnaires were usable for analysis. 17 questionnaires were excluded from returned questionnaire. 12 questionnaires were not returned out of 330 distributed questionnaires on which analysis have been performed. The valid response rate was 91.2%.

**Table 1.** Response Rate.

Questionnaires	Response
Distributed	330
Returned	318
Usable	301
Excluded	17
Not Returned	12
Response Rate	96.3%
Valid Response Rate	91.2%

#### 4.2. Profile of Participants' Demographics

The table 2 presents that there were total 301 respondents, in which 209 were male and 92 were females. 151 were single and 150 were married. 47 participants age group was below 25, 81 participants age group was 26-30, 100 participants age group was 31-40 and 48 age group was 41-50 and 25 respondents were above 50. Total 12 participants have done diploma, 134 have done bachelors, 140 participants have done masters, and 15 participants have done PhDs. the salary of 85 participants were Rs 30,000 to 45,000, 49 participants' salary were Rs 46,000 to 60,000, 56 participants' salary were Rs 61,000 to 75,000, and 111 participants' salary were above Rs 75,000. The frequency of buying organic food were 96 (once in a week), 73 (twice in a month), 96 (once in a month) and 35 (once in a year).

**Table 2.** Profile of Participants.

Demographics	Category	Frequency	Percentage (%)
Gender	Male	209	69.4
	Female	92	30.6
Marital Status	Single	151	50.2
	Married	150	49.8
Age Group	Below 25	47	15.6
	26-30	81	26.9
	31-40	100	33.2
	41-50	48	15.9
	Above 50	25	8.3
Education	Diploma	12	4.0
	Bachelors	134	44.5
	Masters	140	46.5
	Phd	15	5.0
Salary	30,000 - 45,000	85	28.2
	46,000 - 60,000	49	16.3
	61,000 - 75,000	56	18.6
	75,000 and Above	111	36.9
Frequency of Organic Food	Once in a week	96	31.9
	Once in a month	73	24.3
	Twice in a month	96	31.9
	Once in a year	36	12.0

### 4.3. Statistics of Descriptive

Table 3 presents the mean scores of the variables ranging from 3.44 to 4.03 and the standard deviation ranging from 0.717 to 0.844. In table 4.4, N denotes the numbers of total questionnaires. The minimum value in questionnaire scale was (i.e. 1 = strongly disagree). While, the max level value was 5 (i.e. strongly agree). The mean denotes questionnaires that are above 3 is strongly agree towards the questionnaires whereas below 3 denotes the strongly disagree with the questions developed according to the variables.

**Table 3.** Statistics of Descriptive.

Variable	N	Minimum	Maximum	Mean	Std. Deviation
EC	301	1	5	3.91	0.753
FS	301	1	5	4.03	0.785
HC	301	1	5	4.00	0.749
FT	301	1	5	3.94	0.746
ME	301	1	5	3.44	0.935
PI	301	1	5	3.89	0.750
ATOFC	301	1	5	3.74	0.717

Notes: EC = Environmental Concern; FS = Food Safety; HC = Health Consciousness; FT = Food Taste; ME = Media Exposure, ATOFC = Attitude towards Organic Food Consumption; PI = Purchase Intention.

### 4.4. Assessment of PLS-SEM Path Model

Sarstedt, Hair, Ringle, Thiele, and Gudergan (2016) stated that retaining modeling constructs as composites is good methodology to capacity. The PLS-SEM comprises of two major dimensions that include assessment of measurement model by Algorithm to check the reliability and validity. However, structural model by bootstrapping determines the relation of variables.

### 4.5. Assessment of Measurement Model

The study was assessed first the model of measurement for validity and reliability of items. Second, the model of structural was assessed for the hypothesized relationships of structural, using PLS-SEM. Before determining the structural model, the reliability of internal consistency, reliability of individual items, discriminant validity, and convergent validity are tested (J. F. Hair, Ringle, & Sarstedt, 2013).

#### 4.5.1. Convergent Validity

The criteria of validity of convergent is, each items factor loading should be above 0.7 and no single items loading from other construct is higher than the construct being measured (Al-Marouf & Al-Emran, 2018; J.F. Hair, Sarstedt, Hopkins, & Kuppelwieser, 2014). Therefore, to improve the quality of the data, the items were deleted, which has lower loading (J.F. Hair, Sarstedt, & Ringle, 2019). The results presensts in table 4.5, two items were deleted, because the value of loading were less than 0.7 include EC4 and ATOFC1, retaining 30 items that had loading between 0.706 and 0.916.

The acceptable value for reliability of composite should be greater than the value of threshold that is 0.7, and the value of acceptable of AVE should be at least 0.5 ((J.F. Hair, Ringle, & Sarstedt, 2011). The value of alpha of Cronbach classified as greater than 0.9 (excellent), 0.8 (good) and 0.7 (acceptable). Table 4.4 presents the values of alpha of Cronbach are above 0.7, CR (reliability of composite) of all variables are above 0.7 demonstrated variables were highly reliable, and the each variable AVE were above than the cutoff point of 0.50, which present that the model of measurement was reliable.

**Table 4.** AVE, Reliability of Composite, Cronbach's Alpha and Loadings.

Construct (Source)		Items	Loadings	Cronbach's Alpha	CR	AVE
Environmental Concern (Pham et al., 2018)	EC1	I care about the environment	0.833	0.767	0.866	0.684
	EC2	The environment condition has an effect on the quality of my life	0.883			
	EC3	I like to make sacrifices to protect the environment	0.76			
	EC4	I am psychologically involved in the environmental protection issues. (Drop)	0.521			
Food Safety (Pham et al., 2018)	FS1	Nowadays most vegetables contain residues from chemical sprays and fertilizers	0.862	0.805	0.884	0.718
	FS2	I am very concerned about the amount of artificial additives and preservatives in vegetables	0.882			
	FS3	The quality and safety of vegetables nowadays concerns me	0.795			
Consciousness of Health (Pham et al., 2018)	HC1	I choose vegetables carefully to ensure good health	0.738	0.756	0.858	0.669
	HC2	I think of myself as a health-conscious consumer	0.883			
	HC3	I think often about health issues	0.827			
Food Taste (Pham et al., 2018)	FT1	When making purchases I would primarily buy vegetables which taste good	0.818	0.717	0.834	0.627
	FT2	When making purchases, I am guided by what I like	0.761			
	FT3	When making purchases I am guided by my taste of gourmet cooking	0.797			
Media Exposure (Pham et al., 2018)	ME1	I often come across vegetable topics/ issues on TV.	0.916	0.939	0.953	0.803
	ME2	I often come across vegetable topics/ issues on advertisements.	0.906			
	ME3	I often come across vegetable topics/ issues on radio.	0.913			
	ME4	I often come across vegetable topics/ issues on the Internet.	0.875			
	ME5	I often come across vegetable topics/ issues on social media like Facebook, YouTube.	0.871			
Attitude towards Organic Food (Zahan et al., 2020; Chen, Chang and Chen, 2020)	ATOFC1	Most people I know buy green products.(Drop)	0.567	0.846	0.886	0.564
	ATOFC2	Most people I know are concerned about issues related to the environment.	0.742			
	ATOFC3	Most people I know think it's important to buy green products.	0.735			
	ATOFC4	Most people I know recycle those items that can be recycled.	0.727			
	ATOFC5	Most people who are important to me support my effort to use green products for environmental reasons.	0.712			
	ATOFC6	Most people who are important to me think I should use green products for environmental reasons.	0.802			
	ATOFC7	Most people who are important to me take	0.784			

Purchase Intention (Syadzwina & Astuti, 2021; Nguyen et al., 2019)		steps to use green products for environmental reasons.				
	PI1	I want to buy eco-friendly products in the time ahead because of my concern to environment	0.706			
	PI2	I look forward buying the products of green personal care in the time ahead because of the condition of environment	0.763			
	PI3	I am pleased to buy products that are related to environmentally friendly in the future	0.797			
	PI4	I will consider buying green vegetables because they are less polluting in coming times.	0.799	0.885	0.91	0.591
	PI5	I will consider switching to environmental friendly green vegetables for health reasons.	0.757			
	PI6	I definitely want to purchase green vegetables in the near future.	0.751			
PI7	I would also recommend others to buy green vegetables	0.807				

#### 4.5.2. Discriminant Validity

Table 5 presents that the square root of AVE was greater than the correlation between the variables of latent, which indicates adequate discriminant validity (Fornell & Larcker, 1981). After performing factor loading, no any variable was dropped but deletion of two items occurred due to less factor loading.

**Table 5.** Criterion of Fornell-Larcker.

	ATOFC	EC	FS	FT	HC	ME	PI
ATOFC	0.751						
EC	0.206	0.827					
FS	0.119	0.400	0.847				
FT	0.636	0.214	0.236	0.792			
HC	0.341	0.321	0.490	0.251	0.818		
ME	0.327	-0.173	0.136	0.216	0.214	0.896	
PI	0.440	0.375	0.362	0.337	0.413	0.111	0.769

Notes: EC = Environmental Concern; FS = Food Safety; HC = Health Consciousness; FT = Food Taste; ME = Media Exposure, ATOFC = Attitude towards Organic Food Consumption; PII = Purchase Intention.

Table 6 presents results of cross loadings; All loadings are greater than 0.7 or around the threshold value. Therefore, discriminant validity using cross loadings is achieved.

**Table 6.** Cross Loadings.

	ATOFC	EC	FS	FT	HC	ME	PI
ATOFC2	0.742	0.213	0.122	0.439	0.221	0.177	0.363
ATOFC3	0.735	0.218	0.063	0.407	0.199	0.153	0.345
ATOFC4	0.727	0.175	0.045	0.372	0.265	0.236	0.333
ATOFC5	0.712	0.047	0.039	0.384	0.186	0.365	0.225
ATOFC6	0.802	0.130	0.107	0.545	0.300	0.294	0.345
ATOFC7	0.784	0.147	0.138	0.652	0.331	0.257	0.359
EC1	0.128	0.833	0.306	0.069	0.272	-0.204	0.337
EC2	0.148	0.883	0.339	0.181	0.240	-0.171	0.357
EC3	0.247	0.760	0.352	0.296	0.291	-0.043	0.226



FS1	0.108	0.346	0.862	0.196	0.375	0.094	0.343
FS2	0.124	0.371	0.882	0.252	0.418	0.098	0.316
FS3	0.062	0.293	0.795	0.142	0.475	0.173	0.247
FT1	0.641	0.143	0.226	0.818	0.249	0.238	0.328
FT2	0.404	0.192	0.131	0.760	0.120	0.107	0.212
FT3	0.396	0.192	0.185	0.797	0.202	0.132	0.230
HC1	0.208	0.301	0.354	0.192	0.738	0.141	0.240
HC2	0.340	0.202	0.487	0.248	0.883	0.264	0.341
HC3	0.272	0.303	0.357	0.177	0.827	0.114	0.406
ME1	0.308	-0.169	0.153	0.220	0.196	0.916	0.080
ME2	0.339	-0.145	0.075	0.224	0.226	0.906	0.127
ME3	0.235	-0.201	0.133	0.146	0.152	0.913	0.029
ME4	0.290	-0.172	0.057	0.182	0.168	0.875	0.121
ME5	0.271	-0.099	0.207	0.177	0.202	0.870	0.118
PI1	0.238	0.309	0.379	0.287	0.401	0.197	0.706
PI2	0.229	0.269	0.328	0.204	0.361	0.180	0.763
PI3	0.353	0.334	0.361	0.263	0.300	0.124	0.797
PI4	0.386	0.247	0.203	0.325	0.292	0.037	0.799
PI5	0.332	0.247	0.147	0.238	0.285	0.085	0.757
PI6	0.396	0.266	0.215	0.232	0.248	-0.022	0.751
PI7	0.415	0.329	0.291	0.259	0.334	0.010	0.807

Notes: EC = Environmental Concern; FS = Food Safety; HC = Health Consciousness; FT = Food Taste; ME = Media Exposure, ATOFC = Attitude towards Organic Food Consumption; PII = Purchase Intention.

Table 7 shows that all the values are below 0.9. Hence, the discriminant validity has been achieved by HTMT, which indicated the values for inter-construct ratio were below 0.90 and that the confidence intervals did not contain the value of 1.0 (J.F. Hair et al., 2011; Henseler, Hubona, & Ray, 2016).

**Table 7.** Heterotrait-Monotrait Ratio.

	ATOFC	EC	FS	FT	HC	ME	PI
ATOFC							
EC	0.270						
FS	0.135	0.507					
FT	0.753	0.305	0.291				
HC	0.407	0.435	0.637	0.326			
ME	0.362	0.201	0.168	0.238	0.247		
PI	0.501	0.447	0.417	0.402	0.492	0.140	

Notes: EC = Environmental Concern; FS = Food Safety; HC = Health Consciousness; FT = Food Taste; ME = Media Exposure, ATOFC = Attitude towards Organic Food Consumption; PII = Purchase Intention.

#### 4.6. Assessment of Structural Model

Table 8 presents that R square value of ATOFC was 0.499 that is between moderate and substantial. The R square value of intention of purchase was 0.342 that is moderate. The minimum acceptable threshold of value of R2 is 0.10 (J. F. Hair, Celsi, Ortinau, & Bush, 2010). According to Chin (1998) R2 values assessment criteria is 0.19 consider as weak 0.33 as moderate and 0.67 as substantial.

**Table 8.** R2 of Latent Constructs of Endogenous.

Construct	R Square	Results
ATOFC	0.499	Moderate to Substantial
PI	0.342	Moderate

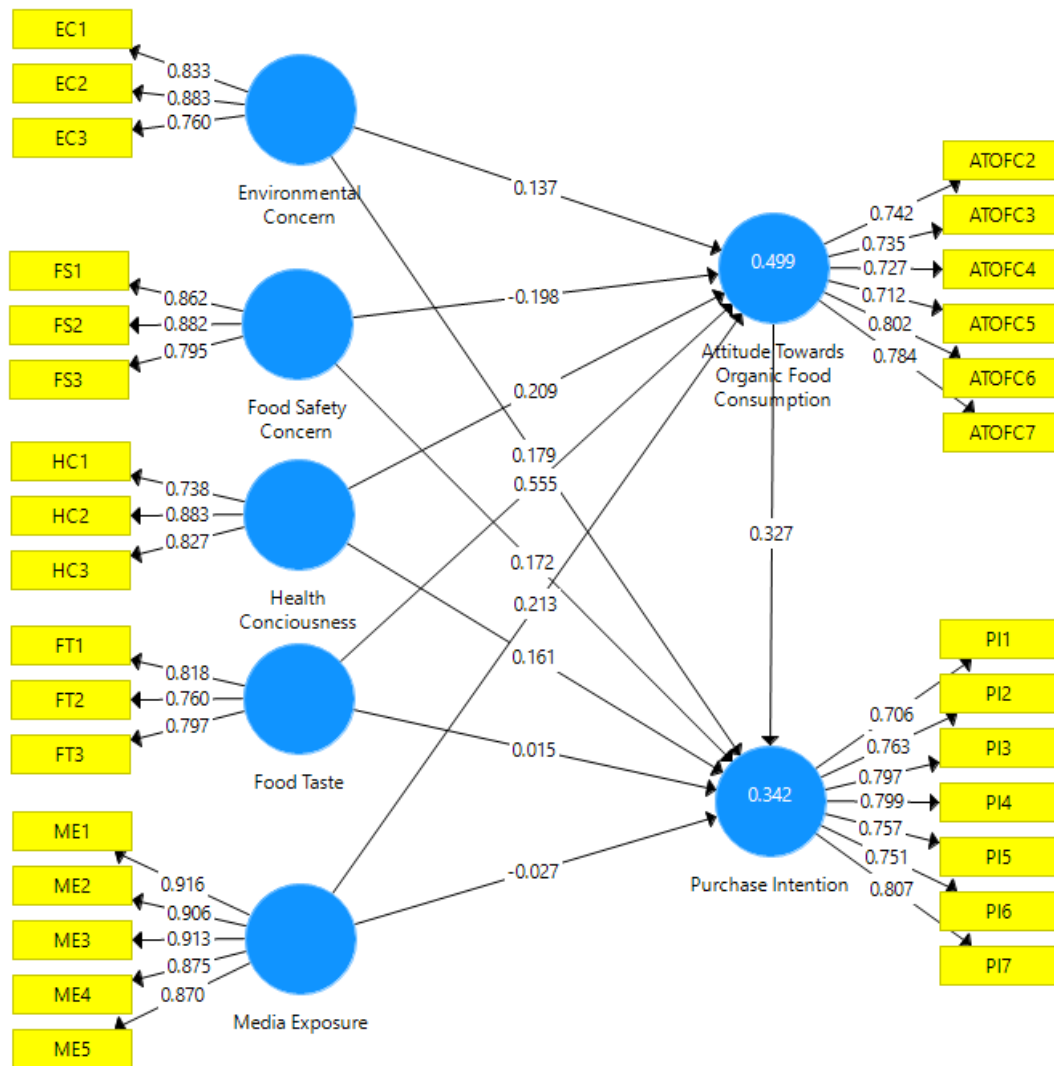


Figure 1. Results of Measurement Model (Algorithm)

Notes: EC = Environmental Concern; FS = Food Safety; HC = Health Consciousness; FT = Food Taste; ME = Media Exposure, ATOFC = Attitude towards Organic Food Consumption; PII = Purchase Intention.

Joseph F. Hair, Risher, Sarstedt, and Ringle (2019) stated that it analyze the inner model for the direct hypothesized relation among the variables by considering the t-values of each beta (coefficient of path). The value of beta presents the coefficient of regression and t-values that show the association among variables and level of significance (Henseler, Ringle, & Sinkovics, 2009). The significant t-value is 1.645 for one-tailed and 1.967 for 2-tailed (J. J. Hair et al., 2014). In present study, two-tailed t-values was considered. Figure 4.1 presents the results of algorithm, which shows coefficient of path. Figure 4.2 presents the results of bootstrapping which shows t-values.

The table 9 presents the results of direct relationships between concern of environmental, safety of food, consciousness of health, taste of food, exposure of media, attitude towards consumption of food of organic and intention of purchase. The Results show (beta) coefficients of path, t-values, p-values and deviation of standard. Based on these results, decisions were made to supported or not supported a hypothesis. The t-values were obtained from bootstrapping, with 500 sampling iterations for 301 cases. The results are as follows:

**Table 9.** Results of Hypothesis Testing: Direct Relationships.

Hypotheses	Relationship	Beta	SE	T-Value	P-Value	Decision
H1	EC -> ATOFC	0.136	0.047	2.932	0.004	Supported
H2	FS -> ATOFC	0.195	0.052	3.814	0.000	Supported
H3	HC -> ATOFC	0.210	0.067	3.128	0.002	Supported
H4	FT -> ATOFC	0.554	0.056	9.868	0.000	Supported
H5	ME -> ATOFC	0.213	0.048	4.466	0.000	Supported
H6	EC -> PI	0.177	0.064	2.801	0.005	Supported
H7	FS -> PI	0.174	0.075	2.284	0.023	Supported
H8	HC -> PI	0.166	0.067	2.414	0.016	Supported
H9	FT-> PI	0.022	0.074	0.206	0.837	Not Supported
H10	ME -> PI	0.024	0.066	0.405	0.685	Not Supported
H11	ATOFC -> PI	0.321	0.082	3.963	0.000	Supported

Notes: EC = Environmental Concern; FS = Food Safety; HC = Health Consciousness; FT = Food Taste; ME = Media Exposure, ATOFC = Attitude towards Organic Food Consumption; PII = Purchase Intention.

Hypothesis 1: Concern of Environment Significantly Related with ATOFC.

The result shows that the influence of concern of environment is significant on attitude towards consumption of food of organic ( $\beta = 0.136$ ,  $t = 2.932$ ). Hence, Hypothesis 1 was supported.

Hypothesis 2: Safety of Food Significantly Related with ATOFC.

The result presents that the influence of safety of food is significant on attitude towards consumption of food of organic ( $\beta = -0.195$ ,  $t = 3.814$ ). Hence, Hypothesis 2 was supported.

Hypothesis 3: Consciousness of Health Significantly Related with ATOFC.

The result presents that the influence of consciousness of health is significant on attitude towards consumption of food of organic ( $\beta = 0.210$ ,  $t = 2.128$ ). Hence, Hypothesis 3 was supported.

Hypothesis 4: Taste of Food Significantly Related with ATOFC.

The result presents that the influence of taste of food is significant on attitude towards consumption of food of organic ( $\beta = 0.554$ ,  $t = 9.868$ ). Hence, Hypothesis 4 was supported.

Hypothesis 5: Exposure of Media Significantly Related with ATOFC.

The result presents that the influence of exposure of media is significant on attitude towards organic food ( $\beta = 0.213$ ,  $t = 4.466$ ). Hence, Hypothesis 5 was supported.

Hypothesis 6: Concern of Environmental Significantly Related to Intention of purchase.

The result presents that the influence of concern of environmental is significant on intention of purchase ( $\beta = 0.177$ ,  $t = 2.801$ ). Hence, Hypothesis 6 was supported.

Hypothesis 7: Safety of Food Significantly Related to Intention of purchase.

The result presents that the influence of safety of food is significant on intention of purchase ( $\beta = 0.174$ ,  $t = 2.284$ ). Hence, Hypothesis 7 was supported.

Hypothesis 8: Consciousness of Health Significantly Related to Intention of purchase.

The result presents that the influence of consciousness of health is significant on intention of purchase ( $\beta = 0.166$ ,  $t = 2.414$ ). Hence, Hypothesis 8 was supported.

Hypothesis 9: Taste of Food Significantly Related to Intention of purchase.

The result presents that the influence of taste of food is insignificant on intention of purchase ( $\beta = 0.022$ ,  $t = 0.206$ ). Hence, Hypothesis 9 was not supported.

Hypothesis 10: Exposure of Media Significantly Related to Intention of purchase.

The result presents that the influence of exposure of media is insignificant on intention of purchase ( $\beta = -0.024$ ,  $t = 0.405$ ). Hence, Hypothesis 10 was not supported.

Hypothesis 11: Attitude Towards Organic Food Significantly Related to Intention of purchase.

The result presents that the influence of attitude towards consumption of food of organic is significant on intention of purchase ( $\beta = 0.321$ ,  $t = 3.963$ ). Hence, Hypothesis 11 was supported.

Hair et al. (2014) stated that a mediation test helps to know the mediating variable effect between IVs and DV. The re-sampling mediation technique bootstrapping was used in this study to test the indirect effect of each potential variable because this is one of the most powerful procedures for testing the mediation effect (Hayes, 2009). Hayes (2009) stated that assessing a relationship involves a few steps. In order to estimate the predictor relations, it needs to fit a model using SEM and the mediator, path “a” show mediator relation and the criterion variable and path “b” show association among variables. After that, the t-values were determined. Then, the (SE) errors of standard of effects of indirect were investigate. Table 10 presents the indirect relation of direct influence of concern of environmental, safety of food, consciousness of health, taste of food, exposure of media, and intention of purchase. The detailed results are as follows:

**Table 10.** Results of Hypothesis Testing: Indirect Relationships.

Hypotheses	Relationship	Beta	SE	t-value	P-value	Decision
H12	EC -> ATOFC -> PI	0.044	0.021	2.171	0.030	Supported
H13	FS -> ATOFC -> PI	0.063	0.025	2.567	0.011	Supported
H14	HC -> ATOFC -> PI	0.069	0.031	2.169	0.031	Supported
H15	FT -> ATOFC -> PI	0.176	0.043	4.213	0.000	Supported
H16	ME -> ATOFC -> PI	0.068	0.024	2.944	0.003	Supported

Notes: EC = Environmental Concern; FS = Food Safety; HC = Health Consciousness; FT = Food Taste; ME = Media Exposure, ATOFC = Attitude towards Organic Food Consumption; PII = Purchase Intention.

Hypothesis 12: ATOFC mediates the relation of Concern of Environmental and Intention of purchase.

The result presents that ATOFC mediates the relation of concern of environmental and intention of purchase. The mediation is partial. ( $\beta = 0.044$ ,  $t = 2.171$ ,  $p = 0.03$ ). Therefore, Hypothesis 12 was supported.

Hypothesis 13: ATOFC mediates the relation of Safety of Food and Intention of purchase.

The result presents that ATOFC mediates the relation of safety of food and intention of purchase. The mediation is partial ( $\beta = 0.06$ ,  $t = 2.56$ ,  $p = 0.01$ ). Therefore, Hypothesis 13 was supported.

Hypothesis 14: ATOFC mediates the relation of Consciousness of health with Intention of purchase.

The result presents that ATOFC mediates the relation of consciousness of health and intention of purchase. The mediation is partial ( $\beta = 0.069$ ,  $t = 2.169$ ,  $p = 0.03$ ). For that reason, Hypothesis 14 was supported.

Hypothesis 15: ATOFC mediates the relation of Taste of Food and PI.

The result presents that ATOFC mediates the relation of taste of food and intention of purchase ( $\beta = 0.043$ ,  $t = 4.21$ ,  $p = 0.00$ ). Hence, Hypothesis 15 was supported. Moreover, the mediation is full because taste of food does not directly effect on intention of purchase, it is mediated by ATOFC for that reason mediation is full.

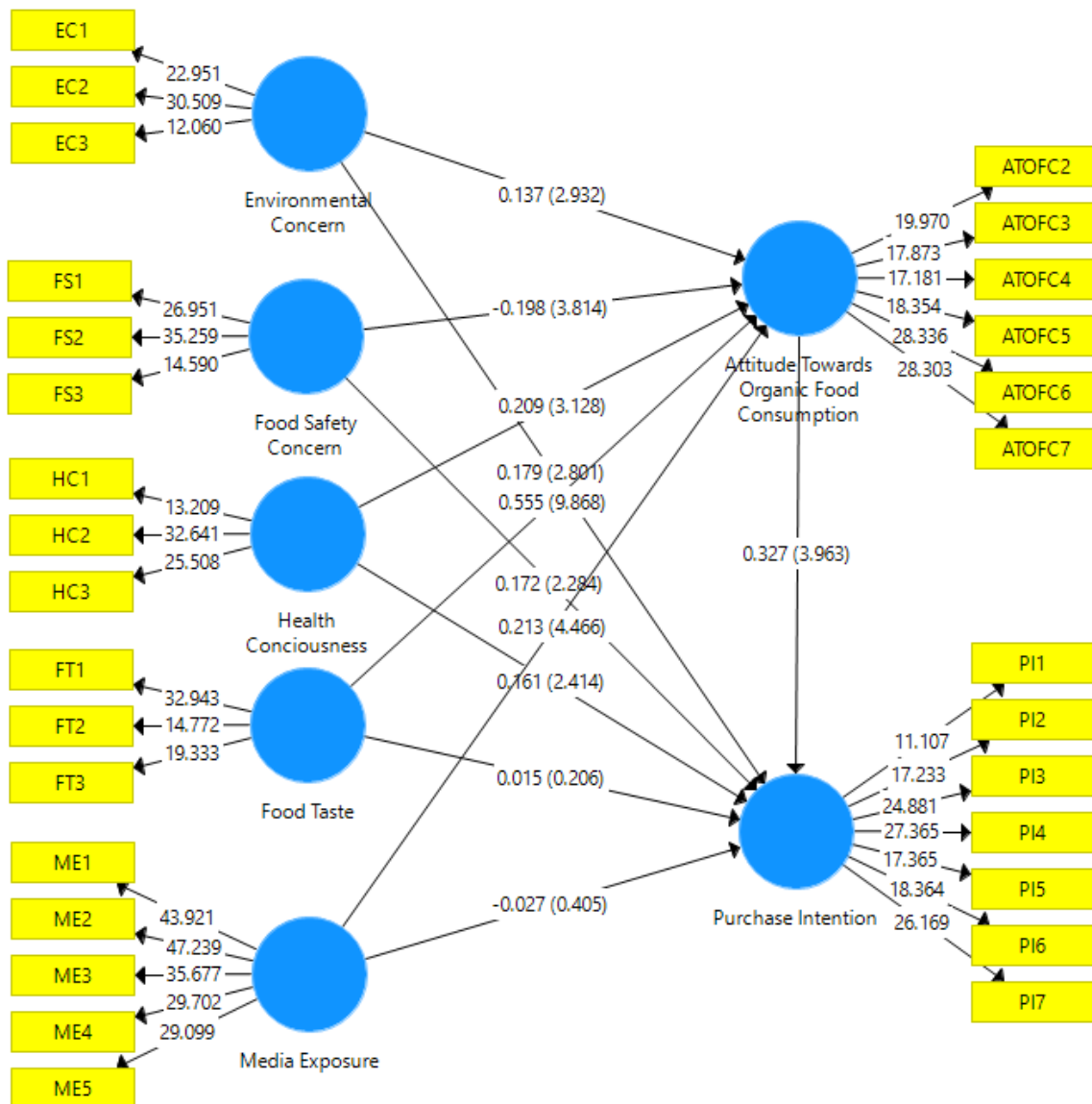
Hypothesis 16: ATOFC mediates the relation of Exposure of Media and PI.

The result presents that ATOFC mediates the relation of exposure of media and intention of purchase. The mediation is full ( $\beta = 0.068$ ,  $t = 2.94$ ,  $p = 0.00$ ). For that reason, Hypothesis 16 was supported.

**Table 11.** Testing of Hypotheses (Mediator).

Hypotheses	Relationship	Beta	Decision
H12	EC -> ATOFC -> PI	0.044	Partial Mediation
H13	FS -> ATOFC -> PI	0.063	Partial Mediation
H14	HC -> ATOFC -> PI	0.069	Partial Mediation
H15	FT -> ATOFC -> PI	0.176	Full Mediation
H16	ME -> ATOFC -> PI	0.068	Full Mediation

Notes: EC = Environmental Concern; FS = Food Safety; HC = Health Consciousness; FT = Food Taste; ME = Media Exposure, ATOFC = Attitude towards Organic Food Consumption; PII = Purchase Intention.



**Figure 2.** Direct path coefficient of the structural model (bootstrapping).

Notes: EC = Environmental Concern; FS = Food Safety; HC = Health Consciousness; FT = Food Taste; ME = Media Exposure, ATOFC = Attitude towards Organic Food Consumption; PII = Purchase Intention.

### 5. Discussion

The discussions on findings in detail are mentioned below. Firstly, discusses the direct relation among concern of environmental, safety of food, consciousness of health, taste of food, exposure of media, attitude towards consumption of food of organic and intention of purchase, and after that the study has discussed the results of mediation. The current study developed the hypotheses that concerns of environmental, safety of food, consciousness of health, taste of food, and exposure of media significantly effect ATOFC. The results show that H1 to H5 and previous studies finding were supported. Schaufele and Jansen (2021) found food related values include consciousness of health, domestic food, protection of environment and quality of food significantly influences the ATOFC in Global market of food of organic. The results indicated that health and environment related issues are more important for the consumers as todays' generation are more like to eat healthy and hygienic food, which

supported H1 and H3 (Tandon, Jabeen, Talwar, Sakashita, & Dhir, 2021). The reasons behind that are consumers to maintain healthy life style and diet, consumers dislike food that have more preservatives or flavor enhancers, carefully choose the healthy food, stop to purchase environmental polluted food and avoid unhealthy food (Rana & Paul, 2017).

Pham et al. (2018) found significant influence of concerns of environmental, safety of food, consciousness of health, taste of food, and exposure of media on ATOFC in emerging markets of organic food, supported H1 to H5. The study argued that exposure of media persuasively catches the consumer attention to buy the organic product, which leads to encourage attitude of consumer towards green product (Talwar, Jabeen, Tandon, Sakashita, & Dhir, 2021). Further, organic foods are chemical less, which have natural taste, high quality and genuine flavor that increase the attitudes towards consumption of food of organic (Shahabi Ahangarkolae & Gorton, 2020).

The study developed the hypotheses that concern of environmental, safety of food, consciousness of health, safety of food, exposure of media and ATOFC significantly affect intention of purchase. Hypotheses include H6, H7, H8 and H11 and previous studies finding were supported. While, taste of food and exposure of media do not has direct effect on intention of purchase. H9 and H10 were not supported. Qomariah and Prabawani (2020) argued that concern of environment significantly influence intention of green purchase in Semarang, which supported H6. Pino, Peluso, and Guido (2012) found positive influence of safety of food and consciousness of health on intention to purchase green product. The reason behind that organic food is considered as secure, safer and harmless to human health. Mostly consumers buy organic food for the sake of their children and family health, Further, consumer buy more organic food at any price when have serious illness, pregnancy, or the spread of diseases of food-borne, which supported H7 and H8.

Schaufele and Janssen (2021) found attitudes towards food of organic consumption significantly affect green purchase intention. The results indicated that consumers prefer to buy healthy food instead of inorganic food (Pino et al., 2012). The study (Rana & Paul, 2017) argued that consumers like to buy organic food regularly from stores of grocery, willing to pay high amount for organic food as considered that the latest trend and the part of luxurious life style, which supported H11.

The findings of this study showed that ATOFC mediates the relation of concern of environmental, safety of food, consciousness of health, taste of food, and exposure of media, with intention of purchase. Hypotheses from H11 to H16 and previous studies finding were supported. Pino et al. (2012) found that safety of food and consciousness of health significantly enhances the attitudes towards green product consumption that leads to increases intention to buy green food. The results indicated that food of organic prefer and buy by health conscious consumers because it does not contain artificial flavor or color or substances or aromatic, pesticides of chemical or fertilizer or preservatives, which supported H13 and H15. Pham et al. (2018) found that ATOFC mediates the relation of concern of environmental, safety of food, consciousness of health, taste of food, and exposure of media, with intention of purchase in emerging markets of organic food, which supported H11 to H16.

## 6. Conclusion

This study investigated the relation between concern of environmental, safety of food, consciousness of health, taste of food, exposure of media, attitude towards consumption of food of organic and intention of purchase organic food market of Pakistan. Further, the aims to examine the mediating role of attitude towards consumption of food of organic between concern of environmental, safety of food, consciousness of health, taste of food, exposure of media, and intention of purchase in organic food market of Pakistan. The study found that environment, consciousness of health, and safeties of food have significantly direct and indirect influence on Intention of purchase while, taste of food, and exposure of media only have significantly indirect effect on Intention of purchase. Further, the study found significant relationships between concern of environmental, safety of food, consciousness of health,

taste of food, exposure of media, and attitude towards consumption of food of organic. Based on the study findings, it is concluded that the factors include exposure of media and taste of food need improvement to enhance the purchase intention of consumers to buy the organic food.

### *6.1. Theoretical Contribution*

This study helps to understand the major factors that are responsible to influence the intention of purchase of customers and their attitude towards the use of organic food. Various environmental and health related factors are responsible to impact the intention of purchase of customers towards organic products. The influencer factors in this study can give a very clear idea on how the consumption of food of organic may generate a positive impact in customers as well as marketer's life. The aim of this research study is to build association between behavior of environmental and consumption of food of organic in multiple ways. It derives attention of the consumers, especially young consumers towards their attitude of intention of purchase regarding organic products. It also extends the understanding of knowledge about Asian population and their emerging markets regarding the intention of purchase of organic food. Therefore, this study adds new theoretical linkages and empirical evidences on the interaction between predictor variables, such as environmental concern, food safety, food taste, media exposure, health consciousness, attitudes and green purchase intention. In addition, this study explored the aspects of factors influence on attitude and green purchase intention by using theory of reasoned action (Fishbein & Ajzen, 1975), and theory of planned behavior (I. Ajzen, 1991).

### *6.2. Managerial Implications*

The understandings presented in this chapter, getting the marketing, farming and retailing together is a high priority that related to green (organic) food (Rana & Paul, 2017). Current study helps managers or retailers to know about the importance of organic food, which is become the latest trend and the part of healthy or luxurious lifestyle for consumers. As per study results, managers or retailers understand that the organic food availability at store will increase the chances to make huge profit and retailer/manager generates the large sales of the grocery or supermarket (Rana & Paul, 2017). Retailers must adopt a unique strategy of marketing to increase demand for organic food at their store, which also encourage retailers to have a large categories of fresh and high quality green food. The strategy will also help retailer to attract more customers towards store. The study helps marketers to develop eco-marketing by offer environmental friendly product to the consumer (Radojević, Tomaš Simin, Glavaš Trbić, & Milić, 2020).

In order to reduce consumer confusion about organic food or inorganic food, the study helps government to mention to organic certification and logos on organic product that help to develop healthy population. In order to ensure the quality and availability of organic vegetable products, it might be beneficial if organic food farmers and traders to form strategic alliances. The understandings presented in this chapter, resulting from a critical appraisal and comparison of the literature on existence and flow can help researchers, academic researchers such as managers, retailers, farmers, and organic food producers. Factors of green purchase enhances the attitude towards consumption of food of organic and intention to purchase green food. Creating a pleasant and convenient shopping experience is a challenge for retailers; this study helps retailers to advertise organic food via social media or channels as media persuasively increase the chances to grab the consumer attention to buy the product. Additionally, researchers enable to identify the appropriate factors that significantly affect the attitude and intention of purchase of organic food.

### *6.3. Future Recommendations*

For future research, the researchers may consider other food sector and its consumption include fast food, Italian, halal food etc. Moreover, due to covid-19 the rapidly change and shift the traditional market to online retail can be found around the world. Therefore, in future study may consider e-retail industry of Pakistan The study may consider collecting the data from other major cities in Pakistan such as Lahore Islamabad and Peshawar. The variables are also limited to the concern of environmental, safety of food, consciousness of health, taste of food, exposure of media, ATOFC and intention of purchase. However, other variables such as perceived barriers, consumer values, and green skepticism may include in future study. The data is only limited to 301 participants only due to the short period; the study is recommended that expand the data to obtain more reliable and accurate results. The present study was used quantitative data only. Future research may use qualitative or mixed mode methods to examine the effects of factors on intention of purchase of organic food. Lastly, this study used ATOFC as a mediator variable only. Therefore, Green skepticism, uncertainty, illness or covid-19 may also use in future study as a moderator.

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### Conflict of interest

The author claim that the manuscript is completely original. The author also declares no conflict of interest.

## Appendix A Questionnaire

### SECTION A:

#### Demographic information

The following information is strictly confidential and will only be used for research purpose. I will be grateful if you could kindly fill the required information.

1. Gender

a. Male  b. Female

2. Marital status

a. Married  b. Single

3. Age group

a. Below 25  b. 25-30   
c. 31- 40  d. 41-50



e. Above 50

4. Highest level of education

a. Diploma

b. Bachelors

c. Masters

d. PhD

5. Salary/pay in Rs. (Monthly)

a.30,000- 45,000

b. 46,000- 60,000

c.61,000- 75,000

d. 75,000 and above

6. Frequency of organic food purchase

a. Once in a week

b. Twice in a month

c. Once in a month

d. Once in a year

**SECTION B:**

Please read the following statements and TICK ( ) the response that closely represents your opinion. The statements are anchored on the following 5 point Likert Scale:

	1	2	3	4	5
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1 = Strongly Disagree					
2 = Disagree					
3 = Neutral					
4 = Agree					
5 = Strongly Agree					
Environmental concern	1	2	3	4	5
1.I care about the environment					
2.The environment condition has an effect on the quality of my life					
3.I like to make sacrifices to protect the environment					
4.I am psychologically involved in the environmental protection issues.					
Food Safety Concern	1	2	3	4	5

5. Nowadays most vegetables contain residues from chemical sprays and fertilizers					
6. I am very concerned about the amount of artificial additives and preservatives in vegetables					
7. The quality and safety of vegetables nowadays concerns me					
Health consciousness	1	2	3	4	5
8. I choose vegetables carefully to ensure good health					
9. I think of myself as a health-conscious consumer					
10. I think often about health issues					
Food taste	1	2	3	4	5
11. When making purchases I would primarily buy vegetables which taste good					
12. When making purchases, I am guided by what I like					
13. When making purchases I am guided by my taste of gourmet cooking					
Media Exposure	1	2	3	4	5
14. I often come across vegetable topics/ issues on TV?					
15. I often come across vegetable topics/ issues on advertisements?					
16. I often come across vegetable topics/ issues on radio?					
17. I often come across vegetable topics/ issues on the Internet?					
18. I often come across vegetable topics/ issues on social media like Facebook, YouTube?					
Green Purchase Intentions	1	2	3	4	5
19. I want to buy eco-friendly products in the time ahead because of my concern to environment					
20. I look forward buying the products of green personal care in the time ahead because of the condition of environment					
21. I am pleased to buy products that are related to environmentally friendly in the future.					
22. I will consider buying green vegetables because they are less polluting in coming times.					
23. I will consider switching to environmental friendly green vegetables for health reasons.					
24. I definitely want to purchase green vegetables in the near future.					
25. I would also recommend others to buy green vegetables.					

Attitude towards Organic Food Consumption	1	2	3	4	5
26. Most people I know buy green products.					
27. Most people I know are concerned about issues related to the environment.					
28. Most people I know think it's important to buy green products.					
29. Most people I know recycle those items that can be recycled.					
30. Most people who are important to me support my effort to use green products for environmental reasons.					
31. Most people who are important to me think I should use green products for environmental reasons.					
32. Most people who are important to me take steps to use green products for environmental reasons.					

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