

T.C.
ISTANBUL AYDIN UNIVERSITY
INSTITUTE OF GRADUATE STUDIES



**THE FACTORS AFFECTING ORGANIC FOOD PURCHASE INTENTION
WITH MODERATION EFFECT OF ORGANIC FOOD AWARENESS**

MASTER'S THESIS

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Department of Business
Business Administration Program

AUGUST, 2021

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DECLARATION

I hereby declare with the respect that the study “The Factors Affecting Organic Food Purchase Intention with Moderation Effect of Organic Food Awareness”, which I submitted as a Master thesis, is written without any assistance in violation of scientific ethics and traditions in all the processes from the project phase to the conclusion of the thesis and that the works I have benefited are from those shown in the Bibliography. (.../.../2021)

ABDULFATTAH AHMED



FOREWORD

First, I would like to express my endless gratitude to God for being who I am right now and helping me to find patience, strength within myself to complete this thesis.

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ABBREVIATIONS

BA	: Brand Awareness
CFA	: Confirmatory Factor Analysis
CFI	: Comparative Fit Index
CMIN/DF	: Chi-Square Mean/ Degree of Freedom
DEFRA	: Department of Environment, Food & Rural Affairs
EC	: Environmental Concern
EFA	: Exploratory Factor Analysis
FAO	: Food and Agriculture Organization
GMOs	: Genetically Modified Organisms
HC	: Health Consciousness
OFC	: Organic Food Characteristics
PCLOSE	: Root Mean Square Error of Approximation Associated P-value
PN	: Purchase Intention
RMSEA	: Root Mean Square Error of Approximation
SEM	: Structural Equation Modeling
SN	: Subjective Norms
TPB	: Theory of Planned Behavior
TRA	: Theory of Reasoned Action
USDA	: United States Department of Agriculture

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THE FACTORS AFFECTING ORGANIC FOOD PURCHASE INTENTION WITH MODERATION EFFECT OF ORGANIC FOOD AWARENESS

ABSTRACT

Organic agriculture is considered the best alternative to traditional agriculture, but it is the most attractive one due to consumers' awareness of the increasing positive benefits of organic foodstuffs, and this has led marketers to devise new strategies to produce these foods. There is a global trend to promote organic food production methods that are considered less threatening to the environment compared to other traditional foods. Which include many additives harmful to the environment and public health, as we notice good growth signs for organic foods in many of the developed countries of the world. Recently, people have become increasingly interested in buying organic products as the intention to purchase these products has increased by consumers as a kind of response to concerns about the implications of traditional farming on human health, the environment and food safety.

This study emphasizes indulging the factors affecting organic food purchase intentions with moderation effect of organic food awareness. The factors include organic food characteristics, subjective norm, health consciousness, and environmental concern that accelerates customer purchase intention concerning organic food products from the theory of reasoned action and the theory of planned behavior. The study additionally elaborates the role of awareness as a moderating approach on organic food purchase intention. A total of 418 responses were collected, 119 responses outside our study due to they don't know what organic foods are, as the study focused on people who had prior knowledge of organic food, and the rest which are 299 responses are taken for analysis.

The results were analyzed by using structural equation modeling, while for validation confirmatory factor analysis was used. Finding shows that health consciousness, subjective norm, environmental concern impact organic food products purchase intention but organic food characteristics doesn't have a role in purchasing organic foods. Additionally, shows that awareness doesn't have effect on the relationship between purchase intention and other factors. Lastly this study provides a framework for understanding the customer's approach concerning their aim in purchasing organic products, which will assist stakeholders such as producers, retailers, and marketers in attaining marketing approaches for these product's growth.

Keywords: *Purchase Intention, Organic Food, Subjective Norm, Health Consciousness, Environmental Concern*

ORGANİK GIDA TERCİHİ NİYETİNİ ETKİLEYEN FAKTÖRLER İLE ORGANİK GIDA FARKINDALIĞININ DÜZENLEYİCİ ETKİSİ

ÖZET

Organik tarım geleneksel tarımın en iyi alternatifi olarak kabul edilmektedir. Ancak, tüketicilerin organik gıdaların olumlu faydaları hakkında gittikçe artan farkındalıkları sebebiyle oldukça ilgi görmektedir. Bu ise pazarlamacıları organik gıda üretimi için yeni stratejiler geliştirmek durumunda bırakmaktadır. Organik gıdalara dönük yükselen küresel eğilim bu besinlerin üretim tekniklerinin diğer geleneksel gıdalara göre çevreyi daha az olumsuz etkilediğini düşündürmeye sevk etmektedir. Bu görüşün temelinde ise geleneksel gıdaların çevre ve halk sağlığı açısından daha fazla zararlı katkılar içerdiği görüşü bulunmaktadır. Dünyanın gelişmiş ülkelerinde organik tarımın yükselişe geçtiğine dair güçlü işaretler gelmektedir. Tüketicilerin geleneksel tarımın insan sağlığı, çevre ve gıda güvenliği üzerindeki endişeleri yüzünden organik gıdalar ile daha fazla ilgilendikleri bilinmektedir.

Bu çalışmada organik gıda tercihi niyetini etkileyen faktörler ile organik gıda farkındalığının düzenleyici etkisi araştırılmıştır. Organik gıda tercihi niyetini belirleyen başlıca faktörler arasında gıdanın karakteristikleri, subjektif norm, sağlık bilinçliliği ve çevresel kaygılar bulunmaktadır. Bu faktörlerin tüketicilerin organik gıda ürünlerine yönelik tercih niyetlerini algılayan davranışsal kontrol ve planlanmış davranışsal kontrol teorileri bağlamında hızlandırmaktadır. Bu çalışma aynı zamanda farkındalık rolünü organik gıdaları tercih niyetini düzenleyici bir yaklaşım olarak ta detaylandırmaktadır. Bu bağlamda, toplam 418 katılımcı ile bir araştırma gerçekleştirilmiştir. Atılımcılardan 119'unun organik gıdaları bilmedikleri ve 299'unun organik gıdalar hakkında yeterli bilgi sahibi oldukları belirlenmiştir. Veri analizine 299 kişiden toplanan yanıtlar dâhil edilmiştir.

Elde edilen bulgular yapısal eşitlik modellemesi ile analiz edilmiş olup, geçerlik doğrulama faktör testi uygulanmıştır. Sonuçlara göre, sağlık bilinçliliği, subjektif norm ve çevresel kaygıların organik gıda tercihi niyetini etkiledikleri bulunurken, diğer taraftan organik gıda karakteristiklerinin organik gıda Satınalma eğilimi üzerinde etkisi olmadığı tespit edilmiştir. İlaveten, sonuçlar farkındalık ile satınalma niyeti ve diğer faktörler arasında anlamlı ilişki olmadığını göstermiştir. Özetle, araştırmamız tüketicilerin organik gıdaları tercih etmeleri sürecinde yaklaşımlarını anlamak açısından bir çerçeve oluşmasını sağlamış olup, organik gıda tedarik zincirindeki paydaşların (üreticiler, perakendeciler ve pazarlamacılar) bu ürünlere dönük pazarın büyümesi amaçlı yeni stratejileri geliştirmeleri için yeterli ve doyurucu bilgi sağlamıştır.

Anahtar kelimeler: *Tercih niyeti, Organik gıda, Subjektif norm, Sağlık bilinçliliği, Çevresel kaygı*

1. INTRODUCTION

Organic production is an ecological agriculture growth management system that enhances and promotes soil biological activities, biological cycles, and biodiversity. Organic agriculture is based on the least utilization of off-farm inputs and controlling approaches that maintain and restore, thereby improving the ecological accord. Organic stands for the product yields under the law of the organic food production act. Various guidelines are used for organic production, such as using practices or materials that improve the farming schemes' integration into an entire ecological system and biological balance of natural resources. Organic agriculture approaches may not ensure that the yields are entirely free from residues. Therefore, the methods are used to decrease pollution from water, soil, and air. Organic food retailers, processors, and handlers observe the values that maintain the quality, safety, integrity, nutrition, and true nature of organic agricultural yields (Ueasangkomsate et al., 2018).

The main aim of organic production is to increase the productivity and health of mutually dependent communities of animals, plants, people, and soil life. Organic foods are increasingly gaining popularity in developing and developed countries. For instance, some European regions and North America are reported to consist of over ninety percent of organic products sale. More so, various African region countries were also stated to have increased the organic farming plot from 52000 ha to 1 million ha (Abram et al., 2017). The total worldwide trade of organic food yields has also indicated an inspiring development, which is reported to be around 80 billion United States Dollars as per a report conducted in 2014. This development in African regions' organic food agriculture is related to the rising alarm of organic food usage in growing countries due to the positive progress in living standards. The motive behind the increased utilization of organic food in developing countries is the rise in awareness of a healthy diet (Carl &Fedor, 2016).

Currently, organic food customers have considered natural yields because they are produced without using farming-related supplies dangerous to human beings' health and pesticides. Through social media channels such as WhatsApp, Facebook, Instagram, and Twitter, information spreads faster on several warnings about inorganic foods. Food scandals have accelerated consumers embrace of organic foods consumption. For instance, according to a research study conducted on milk powder samples, it was contaminated with melamine, which was hazardous (Ayaz et al., 2019). The milk was contaminated due to the absence of effective food investigation techniques. Therefore, the increasing demand for natural foods has coerced many farmers to shift from inorganic to organic food production. Several years ago, the organic food farming efforts began through authorized organic farming for export by managing small-scale farmers into societies (Ritota &Manzi, 2018).

The readiness to pay the finest for natural foods in evaluated outlets and education level facilitates organic products' consumption. Consumption of organic foods has various significances such as individuals can avoid harmful chemicals in food, getting more nutrients, enjoying tastier food, human beings will avoid harmful food hormones, eliminates antibiotics from the food, and individuals will not ingest genetically modified organisms. More so, they will avoid antibiotics in their food, purchasing organic foods promotes organic agriculture, promotes long-term sustainability, improves the children's health, and helps avoid drugs that may be added to the food (Gallar Hernández et al., 2019). For instance, consuming organic foods helps individuals not eat hazardous drugs that may be added to different food types. For a long time, Aspartame has been acknowledged as the worst sweetener ever. Aspartame is found in all kinds of drinks and diet food. The drug makes conditions and destructive diseases worse, such as chronic fatigue syndrome, multiple sclerosis, Alzheimer's, and epilepsy. Therefore, Aspartame may also cause symptoms and signs in healthy people such as anxiety attacks, fatigue, irritability, and insomnia (Acero, 2019).

When human beings consume organic foods, they promote long-term sustainability. Long-term sustainability means individuals are staying ahead of the curve. Understanding the unmet wants and making products to discourse

them. When individuals begin to consume natural foods, they become a section of something much more significant than themselves. It indicates how people care about what is happening now. Therefore, individuals creating conscious efforts in sustaining the Earth's resources. A desirable ecological balance is achieved through organic farming and decreasing things like inorganic fertilizers. Therefore, there will be a decrease in water supply, air, and soil pollution for many years to come (Willett et al., 2019).

Consumption of organic products increases the health levels of children. The children's body keeps growing; thus, it is vital to administer them biologically yielded food. Despite guarding the children against eating items consisting of cancer-inducing pesticides, you set a good family background as a parent. When the children are given information on the importance of purchasing organic products early in their childhood, it becomes natural for them to continue with desirable eating habits. Moreover, eating organic foods eliminates antibiotics. Antibiotics are commonly used in restricted and scheduled doses to hinder poultry and livestock from attracting diseases as they are being raised. Many are the times, and farmers use antibiotics to hasten the livestock growth process. These are why known food chains try to make themselves look in public to consume that only support their meat from non-antibiotic places (Mie et al., 2017).

Consumption of organic products assists in avoiding harmful chemicals in food. Many people do not know how many insignificant ingredients are added to their meals to have excess features such as attracting them. For instance, food coloring may lead to an increase in a child's hyperactivity. Hyperactivity is restlessness, pathological or excessive movement. Other additives that may be harmful to an individual's health are sodium nitrate, sodium benzoate, monosodium glutamate, and high fructose corn syrup. More so, organic products' consumption helps avoid harmful food hormones. It is well known that hormones in daily food supplements make children grow faster than usual. According to AlterNet, instances of some kids reaching puberty at the age below eight years have increased. For example, estrogen may have been integrated into many kinds of diseases in the past, such as gall bladder, ovarian, lung, and skin cancer. Estrogen is usually contained in the pesticides that farm

produce is sprayed. The hormone contributes largely to complicated health issues such as obesity (Zanetti et al., 2018).

Through eating organic food, individuals receive more nutrients. Each individual's main objective is having an overall healthy lifestyle, although many types of food in restaurants and grocery stores do not offer what the body naturally requires. Therefore, it makes individuals feel they require to take all kinds of over-the-counter vitamins and supplements that they would not probably need to consume more organic food (Schränk & Running, 2018). According to information collected from over 300 studies by the LA times, organic products have healthier standards, such as many antioxidants, more than inorganic grown products. More so, when purchasing organic products, individuals enjoy tastier food. When organic products are developed and the natural growing process is disturbed by substances such as pesticides, the food is more likely not to taste good as it should. The local and national governments have been dedicated to promoting research and organic agriculture training. This has made both the developing and developed countries attain a degree of authority and legitimacy in the eyes of agro-scientific institutions and donors, and small-scale farmers. Organic food agriculture in developing countries has dramatically developed according to cross-border buying requirements and consumption inclination changes (Vigar et al., 2020).

Several competitive studies indicate the clarity of organic food consumption behavior. Some of the research conducted aimed at developed countries because of the rise in demand in the developed world. The information brought through the literature on the effort exerted globally stated the significance of assessing the forthcoming approaches to organic food demand. The question enacted is, "what are the factors that drive consumer's organic food purchasing intention." Therefore, the paper aims to explore the factors that define consumer's intention to buy organic foods. Factors such as environmental concern, subjective form, and health consciousness were designated for the research (Massey et al., 2018).

Some countries lack empirical studies that precisely explore the relationship between consumers and organic products. In exploring consumer's enthusiasm to pay the finest for organically yielded products, it was revealed that consumer's main objective is food security. Other research to explore the factors

affecting consumer's intention to buy organic foods showed that users prefer organic foods grown in certified quality farms. Moreover, the information collected provided research gaps on factors affecting consumer intention to purchasing organic products. Users benefit from social media information from channels such as YouTube, Twitter, WhatsApp, Instagram, and Facebook, which is asymmetric information about food safety and organic products. Although the information offered funds the enrichment of customer purchase intention, consumers may not differentiate the characteristics of inorganic and organic products (Aertsens et al., 2009) This situation may negatively affect the continuity of organic product demand in the marketplace and consumer's purchase intention. Efforts have been exerted to encourage organic food farming and consumption to benefit the market by developing linkages, building capacity, and offering market information. However, these efforts may be insufficient without considering factors influencing consumer's purchase intention of organic products. The aspects may be advantageous to stakeholders to help create suitable market approaches for the growth of long-run demand for organic products (Anisimova, 2016).

The research used countries well-identified as agricultural producers, and they share a number of their yields and struggle towards an organic marketplace. The countries have promoted organic agriculture projects such as promoting trade opportunities and products for organic products. Involvement in organic movements through the country's associations indicates cooperation and harmony. Therefore, exploring customer's behavior towards organic product consumption offers valuable insights collectively and individually. To achieve the research, the SEM approach was used. The test was also used in other studies with the same aims. The paper's remainder is structured as follows, literature review, characteristics of organic foods, health consciousness, subjective form, environmental concern, and organic food awareness as a moderating effect on the factors influencing consumer purchase intention for organic products (Hair et al., 2017).

The literature describes intention as an individual's decision, commitment, or plan to achieve a specific objective or carry out an action. The intention is the direct originator of individual behavior. The customer's intention to make a

behavior is regarded as the critical determinant of its future behavior. When behavior is under an individual's control, the intention may predict behavior with vital accuracy. Therefore, behavior may be measurable if the intention to achieve is solid. If a particular behavior inspires a person, they may decide and eventually intend. Consumption decision, commitment, or plan is an individual's action towards a particular variety (Belk et al., 2005). In return, the intention exposes a person's conduct toward a specific product. This decision may be affected by various factors such as perception of the manufacturing country, perception of other countries, and product features, which frequently coins from quality alarms. The dependent variable of the research is purchase intention. Purchase intention is the inclination of consumers to acquire services or products. More so, purchase intention has another feature: consumers will buy a product after assessment (Zaharia et al., 2016).

In general, people's consumption of organic food products in the world tends to grow each year as well as raising public awareness of health. However, understanding the factors that affect organic food purchase intention is very important due to the significant growth in organic food sales every year. Most of the agriculture in the world is done through traditional agriculture in which the use of chemical fertilizers, which ultimately affect the health of people. Therefore, it is necessary to clarify the importance of organic food to consumers in order to move towards buying more organic products (Asif et al., 2018).

In this study, we will study the factors that affect organic food purchase intention, so we will study some determiners which have an effect on organic food purchase intention such as product characteristics, Health consciousness, Environment concern, Subjective norm, and other demographic factors like gender, age, education, occupation, and income level. Also, this study will explain the moderation role of awareness in the factors which effecting organic food purchase intention. Will these increase people's awareness of the importance of organic foods compared to traditional foods and thus increase the intention to buy them, which increases their consumption of organic food, or does not have a significant impact in organic food purchase intention because of other factors that control the popularity of people such as price and taste and people's trust and other factors Make consumers tend to consume traditional

foods instead of organic food products? So, the aim of this paper is to study or investigate factors that affect organic food purchase intention and also explain the moderation effect of awareness in organic food purchase intention.

1.1 Objectives and Rationale

1. To analyze consumer perspective on organic food products
2. To analyze the impact of organic food characteristics, health consciousness, subjective norms, and environmental concern on the intention of consumers to buy these products.
3. To analyze the moderating role of organic food brand awareness on the factors that affect organic food purchase intention.

1.2 Statement of Problems

There are many factors that affect the intention to buy organic food by consumers, but the impact of these factors varies from one place to another. Many studies have been conducted in other countries, but this study may be the first on this issue in Yemen, which people do not give great importance there. The main research problem is:

- Is there a relationship between purchase intention and organic food characteristics
- Is there a relationship between purchase intention and health consciousness
- Is there a relationship between purchase intention and subjective norms
- Is there a relationship between purchase intention and environmental concern
- Is there a relationship between purchase intention and organic food awareness as a moderating affect.

1.3 Research Questions

- Is there a significant relationship between organic food characteristics and the intent to purchase these products?

- Is there any other factors that control consumer intent to buy organic food products?
- What are the consumers opinion on organic food products compared to conventional food?

1.4 Research Hypotheses:

H1. Organic food characteristics will positively affect the purchase intention of organic food products.

H2. Health consciousness will positively affect the purchase intention of organic food products.

H3. Subjective norm will positively affect the purchase intention of organic food products.

H4. Environment concern will positively affect the purchase intention of organic food products.

H5. Awareness moderates the effect of Organic food characteristics on purchase intention of organic food products.

H6. Awareness moderates the effect of Health consciousness on purchase intention of organic food products.

H7. Awareness moderates the effect of Subjective norm on purchase intention of organic food products.

H8. Awareness moderates the effect of Environment concern on purchase intention of organic food products.

1.5 Research Terminology

The research terminology describes the most important expressions and phrases that need precise and scientific definition, and the most important ones. This would give readers more explanation and concept and make a clear understanding of the purpose of research, so I have listed some outstanding terminologies

2. LITERATURE REVIEW

The objective of this study was to investigate some factors which affecting organic food purchase intention such as food characteristics, health consciousness, environmental concern, subjective norms. also, we will examine the moderating role of brand awareness on purchase intention for these products.

2.1 Purchase Intention

2.1.1 Concept of purchase intention

purchase intention demonstrates probability that shoppers will design or buy a specific item or service later on. Purchase intention is generally characterized as the likelihood of a purchaser to buy an item or service. The purchase intention notion is established in psychological and is widely utilized in behavioral investigations. Purchase intention is being described as a behavioral inclination that the customer will purchase the item. and as a significant pointer for the actual buying choice. This statement is then additionally upheld by Li, Davies, Edwards, Kinman and Duan (2002), expressed that purchase intention is a regular measure that for the most part utilized to evaluate effectiveness of purchase conduct (Martins et al., 2019).

Purchase intentions get utilized and commonly restrained by promotion administrators to make decisions about existing, new services and products. Buying motives predict forthcoming sales and evaluate how the actions will be significant on consumer's purchasing behavior. Clients use market research supplies in measuring and in purchase intentions. To assess consumer's choice, organizations evaluate customer's samples and inquire them to reply to purchase intention questions. In some instances, purchase intentions get used to determine consumer's demand for new services and products using product and concept tests. The studies evaluate whether enough customers will purchase new services or goods to validate their launch. Therefore, determining how to utilize

the approaches of the marketing mix to increase sales. Managers in charge of marketing may utilize purchase intentions to gauge the coming demand for the organization's services and products and evaluate how marketing activities may be vital for prospect sales. Although the manager's perverse utilization of ordering intention methods proposes, the directors consider good representations aimed at whatever customers may carry out at the open market. The measures are interrelated but are deficient forecasters of upcoming consumer behavior. Customers have every target of buying goods in a given time gap (Shang et al., 2017). For instance, consumers may have a strategy to be purchasing organic foods within the coming period; however, they may lack to accomplish their plans. These will transpire if the consumer's issues are reformed, for instance, due to lack of money. It could also occur due to general economic or market-related reasons. For example, organic products may not be available at the marketplace during the purchasing period. Nevertheless, although the proof shown is not likely to occur, there may be customers while inquiring about authenticating their buying motives and lack the purpose of purchasing organic products in the coming months, but they will do so. These could occur if the consumers finally got the money to buy organic foods (Teng& Lu 2016).

In this theoretical study, we will discuss many factors affecting the intent to buy these foods, such as the attitude, subjective norm, perceived behavioral control, environmental concern, health consciousness and organic food characteristics but we will focus in the questionnaire by taking a survey about specific factors we believe That they have a greater impact on the intention to buy these products, these factors are organic food characteristics, health consciousness, environmental concerns, and finally subjective norms with studying the moderate role of awareness and its relationship to increase or decrease the correlation of those factors with the intention to buy the organic products.

2.1.2 Importance of purchase intention

Marketing grounded on purchasing intention results in rising in return on investment concerning marketing activities. Having an idea of a consumer's intentions may help design the marketing activities to grasp the targeted customers and produce the wanted outcomes that are vast higher return on

investment and customer involvement. These occur due to the lack of the want to develop awareness about a service or product offered by a brand in the customer's mind before advertising it. Purchase intentions as an approach may be recorded or predicted grounded on the interaction data or behavioral data captured when the consumers try to buy a service or product, and the purchase does not occur. Some purchase intention approaches may come from search marketing, widely recognized as search engine optimization and search engine marketing (Ferraris et al., 2019). However, various other resolved data sources may be customer relationship managers, point of sale, off-site web activity, or site data. The data acquired from social networks identified as social data may also be significant. Content consumption patterns or data are essential. The resolved data obtained from them perform as digital footprints as they plotted through specific binding head terms on a search engine. These are achieved from the engagements when customers visit a website or interact on social media channels. The information gathered gives the marketing director brief measurements or idea of the consumer's present and future purchase intentions. These resolved approaches elaborate on how interactive activities may get made operative so that the channels may become more fruitful and engaging (Chen et al., 2016).

2.1.3 Relationship between purchase intention and purchasing

There exists a strong relationship between an individual's behavior and purchase intention. Purchase intention calculates the possibility of the actual purchase. That is, higher purchase intention designates a higher likelihood of an accurate investment. Purchase intention is influenced by several factors, continually differentiating customer objectives and having various characteristics in different circumstances. Consumer's intention to purchase is considered a positive motive of actual user behavior. However, several factors can influence the power of the relationship existing among actual purchase and intention. Consumer's intention is a good forecaster for the upcoming purchasing behavior (Dong et al., 2015) Consumer's purchase intention may not serve as an influential forecaster of actual conduct. Marketers use purchase intentions as input for making decisions relating to existing and new products. Therefore, creating purchase intentions makes the customer make the actual purchase.

Customers are more likely to contemplate a brand and develop intentions to buy it when the product becomes more credible. For instance, organic food consumers are more likely to purchase the consequences when their significance is well known (Sreen et al., 2018).

2.2 Factors Influencing Purchasing Intention

Several factors may influence the purchasing power of the consumers. For instance, the economic factor is the framework of any purchasing intention. Consumers purchase commodities that they can afford. If the organic product prices are very high, and the consumers cannot afford them, they may not be able to purchase. Functional factors may also influence the purchasing intention of consumers. The element mainly focuses on wants to be supported by a rationality that what makes sense and hysteries the most significant interests of the consumers. Functional factor plays a vital role in the purchasing decision (Ramya& Ali, 2016).

Marketing mix factors influence consumer's purchase intention. The marketing mix consists of four components: place of distribution, promotion, pricing, and product. Customers consider different things like the product's availability at the required location, the price charged, and its characteristics. For instance, when the organic food is available in the consumer's place, the fee charged is affordable, and their meet characteristics such as high quality, good taste, no pesticide, and good health, the customers are likely to purchase the products. Personal factors such as gender, economic and social aspects, lifestyle, occupation, and age may also influence consumer's intentions (Idrees et al., 2020). These factors may collectively or individually influence the customers' purchasing decisions. For instance, when infants are growing and fed organic foods, they tend to grow stronger and healthier, unlike when they consume inorganic products. Conventional food may be hazardous as it brings chronic and heart diseases and obesity. Psychological factors such as attitudes, beliefs, learning motivation, and perception may also influence consumers purchasing conception. If the consumers have the perception that organic foods are vital in an individual's health, they are more likely to buy them because they have a positive attitude toward them (Khan, 2018).

Social factors such as social status, family, and groups influence consumer's purchasing intentions. If consumers value organic products with vast nutrients and free from pesticides and food colors, they will purchase more products. Cultural factors also significantly impact customer's buying decision practices. Ever since, each human being exists in a composite traditional and societal atmosphere. Therefore, the types of services or products they intend to ingest may be indirectly or directly impacted by the broad traditional background they propagate and live. The traditional factors include ethical values, background, culture, conviction, and race. For instance, if individuals practice consuming organic foods, they are more likely to purchase them. Consumer behavior may explore various things like how clusters or individuals opt to devour, buy and dispose of services or goods to satisfy their requests and wants (Ramya& Ali, 2016).

2.3 How Should a Marketing Manager Best Use Purchase Intentions to Forecast Future Sales

Marketing directors often utilize purchase intention statistics to create tactical resolutions regarding existing and fresh goods and the marketing approaches that care for them. For the latest products, purchase intentions get utilized in notion assessment to help marketing managers evaluate if a concept requires further creation and sound tests to direct attention if a new product reaches the qualifications to get launched. More so, in strategizing the launch of a new product, buying motives help the marketing managers decide which consumers segment and geographic markets the product may be launched. For existing products, purchase intentions get utilized in predicting future demand. The predictions are significant inputs to decreasing or increasing production levels, initiating price differentiation, or changing the sales force's size. Furthermore, purchase intentions are substantial in evaluating and advertising anticipated promotions for existing and new products (McDaniel & Gates, 2018).

The present study explores factors, environmental concern, subjective norms (Personal form), and health consciousness. These factors contribute to customer's purchase intention in organic products. The theories used in the research are reasoned action and planned behavior. The Theory of reasoned

action main objective is to elaborate the relationship among behaviors and attitudes within an individual's performances. The Theory is utilized in forecasting how humans will act based on their pre-existing behavioral and perspectives intentions. A person's decision to involve in a precise performance is based on the consequences the individual's forecast will come from accomplishing the behavior (Paul et al., 2016). Reason action theory was derived from prior research in attitude theories, persuasion models, and social psychology by Fischbein and Martin. The theories recommended an engagement between behaviors and attitude. However, decriers projected that it did not demonstrate attitude theories to be suitable gages of good behavior. The Theory of reasoned action was later expanded and revised by the theorists in the coming decades to astound any disagreements in the relationship between behavior and attitude. The Theory is also applicable in a communication dissertation as a theory of understanding (Marshall et al., 2010).

2.4 Theories of Purchase Intention

2.4.1 Theory of reasoned action (TRA)

Ajzen and Fishbein (1975) created TRA to clarify client conduct intention. The model was initially evolved and worried about foreseeing expectations to make reasoned action in customary life encounters, for example, utilizing conception prevention pills. theory of reasoned action tends to study the effects of cognitive parts (Ajzen and Fishbein, 1975). Fishbein and Ajzen (1980) supposed that expectations are the absolute main significant indicator of human conduct and that people are judicious in utilizing any accessible data. TRA serves to break down nonroutine thinking choices. TRA's central principle is people's expectation to participate in given conduct. In this unique circumstance, "intention" alludes to willingness or preparation to take part in conduct under consideration. Under this theory, organic food purchase intention demonstrates the degree to which customers are willing/prepared to buy organic items or adopt organic choices/alternatives (Fishbein and Ajzen, 1980).

The reasoned action theory sees a purchaser's conduct as controlled by the customer's behavioral intention, So the behavioral expectations is a component of attitude toward the conduct (for example the overall sensation of positivity or

on the other hand unfavorableness for that conduct) and subjective norm (for example the apparent assessment of others according to the conduct being referred to) (Hill, Fishbein and Ajzen, 1977).

The primary reasoned action theory recognizes a person's intended behavior by assessing the underlying primary inspiration to act. The Theory of reasoned action states that an individual's intention to achieve behavior is the prominent forecaster of performing that behavior. Moreover, the social rules surrounding the action may contribute to whether an individual will achieve the behavior. Bestowing to the Theory, the intention to achieve a certain behavior leads to authentic behavior. This intention is called behavioral intention, and it is a consequence of a belief that performing the behavior will cause a precise outcome. Behavioral intention is significant to the Theory of reasoned action as attitudes to subjective norms and behaviors assess these intentions (Paul et al., 2016).

2.4.1.1 Behavior and Attitude

Intention is seeming as precursor to and best pointer of conduct (Ajzen, 2002). TRA has been comprehensively examined in social psychology. Various analysts have inspected and approved Fishbein and Ajzen's model in different settings, including health practices, voting, online mediums, regular food, liquor use, etc. Having phenomenal ability to anticipate, TRA has been very helpful to anticipate behavioral expectations and practices in the territories of promoting and buyer behavior (Lam and Hsu, 2004). All the more explicitly, TRA was used to foresee the expectations in green marketing zones, for example, analyzing energy preservation, reusing conducts (Davies et al. 2002), and green buy practices (Ha and Janda, 2012). however, TRA tends to simply volitional control and neglects to address possessing of essential opportunities and resources (Mahyarni, 2013)

The Theory of reasoned action tries to explain and predict an individual's intention of performing a specific behavior. Behavior is the mannerism or actions made by human beings in union with themselves or their surroundings, consisting of organisms or other systems and the physical environment. The Theory of reasoned action needs behavior to get elaborated in terms of target, time, context, and effort. Behavioral intention is the main inspiration of

behavior, while behavioral intention's vital elements are norms and people's attitudes. Researchers can explain whether an individual will perform the intended action (Kwasnicka et al., 2016).

According to the Theory of reasoned action, attitude is a significant behavioral intention element. Attitude is defined as how human beings feel toward a specific behavior. Attitudes are affected by two factors: assessing the possible outcome and power of behavioral beliefs concerning the achieved behavior. Perspectives of a particular behavior can either be negative, positive, or neutral (Tandon et al., 2020). The Theory of reasoned action specifies a direct correlation between outcomes and attitude. Therefore, if an individual believes that a particular behavior will result in a favorable or desirable outcome, then a person is more expected to have a positive attitude concerning the behavior. If an individual believes that a particular behavior will result in an unfavorable or undesirable outcome, they are more likely to have a negative attitude towards the behavior (Ertz et al., 2016).

2.4.1.2 Behavioral Belief

Behavioral belief permits individuals to understand people's inspirations for their behavior consequences. This notion dictates that individual apt to involve the performance of a particular behavior with a specific set of outcomes. For instance, some individuals believe that consuming organic products makes them healthier. Individuals are assessed on what they perceive and the probable results of the performed conduct. Sellers may evaluate customers on the outcome of purchasing organic food products as positive if the behavior increases their health levels. Personal norms are also primary determinants of behavioral targets (Konuk, 2019). The perception of different groups of people, family members, and colleagues may influence consumer's behavioral intentions. They are social pressures of whether to perform conduct. Normative beliefs influence individual's conduct which shapes their conduct. If it is the family member's habit or colleagues to purchase organic products, it will affect the individual's behavior, and eventually, they will buy the products (Shin & Hancer, 2016).

2.4.2 Theory of planned behavior (TPB)

the planned behavior theory (TPB) "is an expansion of the reasoned action theory (TRA). and, quite possibly the most broadly model for social psychologists to anticipate behavioral intention (Yadav and Pathak, 2016). The TPB is the relative of a comparable model known as TRA" (Ajzen and Fishbein, 1975). Where the difference was because the behavior could not be controlled and it was not voluntary. Therefore, the perceived behavioral control was added to this model and thus this theory was called TPB (Yara Arafat, 2018).

The two models depend on the reason that people make coherent, contemplated choices to participate in explicit practices by surveying the information accessible or available to them. The performance of behavior is directed by the individual's intend to partake in, it influences by the value the individual places on the behavior, the simplicity with which it will in general be performed and the points of view on basic others and the knowledge that the conduct is inside his/her control (Ryan & Carr, 2010).

The planned behavior Theory is a psychological theory that connects conducts to beliefs. The intended behavior theory observes three main components: perceived behavioral control, subjective norms and, attitude, guiding a person's behavioral targets. The view of planned behavior was enacted to increase the predicting capability of reasoned action. The Theory is applied in advertising, sustainability, relations on behavioral targets, attitudes, and beliefs. Therefore, self-efficacy is an extension of personal norms, attitudes, and perceived behavioral control. However, self-efficacy is defined as the individual's confidence or expectations to achieve an objective or master particular conduct (Ajzen 2020). People have distinct self-efficacy stages, varying on the pursuit or conduct in question. Perceived behavioral control may be evaluated through the assistance of elements from a self-efficacy scale. Individuals may successfully eliminate the conduct required to yield the results. Perceived behavioral control is connected to control beliefs. The beliefs are about the occurrence of elements that may influence the conduct's performance. For instance, there are beliefs that health consciousness, subjective norms, and environmental concerns influence organic food product's purchasing intentions (Paul et al., 2016).

This Theory keenly elaborates the nature of the engagement between attitude and beliefs. Their reachable beliefs determine a person's assessment of an attitude towards behavior about the conduct. Belief refers to the unique possibility that the conduct will yield particular results. Remarkably, each result's assessment contributes to the attitude with the unique chance that the conduct produces the products in question. Expecting the results may be an expectation, opinion, perspective, or belief. A person's upbeat assessment of their specific conduct performance is similar to perceived impacts (Artiola et al., 2019). A positive evaluation is a belief concerning the probable conduct's effects in decreasing the negative results' vulnerability. Consumers may have a positive evaluation that purchasing organic food products increases their health levels, thus reducing their capabilities of contracting diseases such as heart failure, cancer, and chronic problems. The social influence approach has also been evaluated in the Theory of planned behavior and the Theory of reasoned action. Human being's thoughts on personal norms are perceptions of society, family, and colleagues expect them. Therefore, social influence is measured by assessing the attitudes of social groups. If certain family members, social groups, or colleagues purchase organic products, they will influence consumers' buying intentions to buy organic food products (Alsaffar, 2016)

The TBP states that three variables, in particular; attitude toward the behavior, subjective norm, and perceived behavioral control; all together prompts the development of a conduct expectation. On the whole, this model has proven to be applicable in many studies on consumer purchase intention and those that seek to determine consumer's actual behavior (Ajzen, 1985). attitude toward behavior alludes to how much an individual has an ideal or negative assessment or examination of the behavior in the inquiry. subjective norm is characterized as seen prevalent burden to perform or not play out the behavior. perceived behavioral control is an individual seen ease or trouble or playing out the specific behavior Individuals having a more significant level of command over them are bound to have solid aim to play out a specific behavior. Behavioral intention is characterized as person's availability to play out a specific conduct and it is expected as a quick precursor of the real conduct (Yadav and Pathak, 2016).

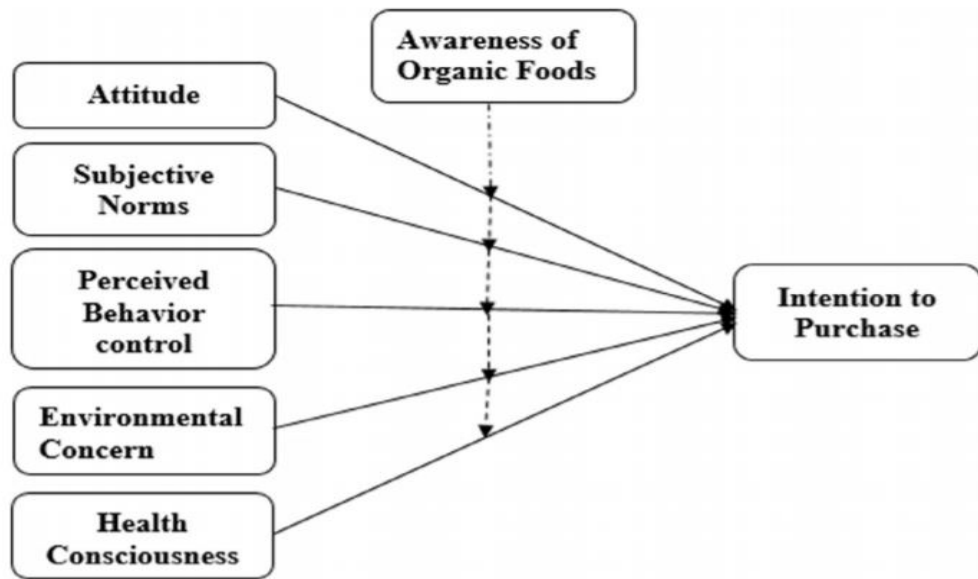


Figure 2.1: Theory of Planned Behavior (Yadav and Pathak, 2016).

The theory of TPB is considered very useful in various fields in knowing and anticipating the intention and behavior of the consumer (Mathieson, 1991). It is also considered useful in knowing the behavior and intent of the consumer in purchasing organic food. as this theory has been used in many countries, but despite that, the effect of the variables varies from one country to another (Dowd and Burke, 2013). Similar studies were conducted by Smith and Paladino (2010) in Australia and by Zegata (2012) in the Czech Republic using TPB as the theoretical framework. The outcome demonstrated the applicability of TPB in determining organic food purchase intention across different culture (Zegata 2012). Also, this theory was considered a widely applied behavioral model as it helped in understanding changes in people's behavior about purchasing a specific product (Ajzen, 1991).

There are several studies that have been done on the applicability of TPB on the purchase intention for organic food products. For example, we find that Arvola et al. (2008) has studied the possibility of applying this theory in the intention to buy organic food in three different countries, namely the United Kingdom, Italy and Finland, and he concluded that it is suitable for predicting the intention to buy these foods in the three countries, but the effect of the variables varies from country to country (Arvola et al., 2008). The TPB theory was used as a theoretical framework. The results showed the applicability of this theory in

determining and knowing the intent to buy organic food in different countries (R. Yadav, G.S. Pathak, 2016).

Ajzen suggested modifying the TPB theory by adding new variables or by changing the course of the existing variables. Although this theory assumes that the attitude, subjective norm and perceived behavioral control are the ones that determine the intention to buy organic products, there are many studies that have shown that there are many other factors not present in this model also affect the intention to buy organic food products, and these factors are the characteristics of the organic product, health consciousness, subjective norm and environmental concerns (Ajzen, 1991). Theory of planned behavior incorporated to explain the intent to buy organic food product by consumers in the retail market and Use as a model for understanding consumer preferences in the food industry due to its wide application, Therefore, this theory was used with the addition of two other variables, namely health consciousness and environmental concerns to study the intent to purchase organic food (Asif, Xuhui, Nasiri and Ayyub, 2018)

In the field of ecological protection expectations, numerous specialists additionally utilize the TPB as a significant hypothetical premise to comprehend whether purchasers plan to follow environmental protection practices. A portion of these studies link the theory of planned behavior with different determinants and extend them to their exploration models. For instance, Chen and Tung 2010 set up an extended TPB research model that consolidates the morals and results of recycling to clarify buyers' recycling intentions and tracked down that the extended TPB research model can accomplish this. (Chen and Tung 2010).

The health worried (particularly in families with youngsters and newborn children) of customary produced food come to the foreground, With a positive attitude of purchasers towards natural food. Other than that, ecological awareness and consciousness are different sources to motivate and share into the positive attitude of buyers. product quality (tangible characteristics like great appearance and smell, and being tasty, healthy and safe) is among the variables that increment the positive attitude. It has been resolved that lady have more positive attitude towards organic food than male shoppers (Paul and Rana, 2012). Expanding in education and income levels are different sources of

stimulation that positively influence the attitude towards organic food. Besides, the way that purchasers are older expands the positive attitude. It has been resolved that utilization of organic food is found in some shopper groups as an image of style and status and such gatherings show a positive attitude towards organic utilization. It has been resolved that living territories affect organic food utilization, and in such manner, individuals living in urban communities have come forward (Chen et al., 2016)

Subjective norm straightforwardly affects customer's buying goals and behaviors. Especially the attitudes and behaviors of people in monetarily and socially created nations are profoundly identified with subjective norm. Purchaser's families, family members, companions, and partners decide the subjective norms. Hence, individuals around the customers shape the attitude of the individual. Therefore, subjective norms are a significant determinant of organic buying expectation and a significant factor (Du et al., 2017).

perceived ease and troubles about behavioral control and past experiences are powerful in the development of conduct expectation and behavior. Additionally, in theory, the perceived behavioral control should happen before the intention is framed. Along with the perceived troubles and facilitates in buying organic food items, past experiences are factors that decide behavioral aim and behavior. In numerous investigations, it has been proposed that there is a positive connection between the capacity to control customer behavior individually and the intention to buy (Asif et al., 2018).

2.5 Organic Food:

2.5.1 Defining organic agriculture:

A general definition of organic farming is that organic creation systems are those cultivating rehearses that manage without the utilization of artificial manures and chemicals and have a serious level of ecological sustainability. Organic food agriculture is an approach to livestock and crop production that consists of more than choosing not to apply growth hormones, antibiotics, genetically modified organisms, inorganic fertilizers, and pesticides. Organic food agriculture is designed to increase the fitness and productivity of different

communities with the agroecosystem. The agroecosystem comprises human beings, livestock, plants, and soil-living organisms (Bach et al., 2020). Several principles guide how organic food agriculture should be carried out. Organic farming aims to decrease soil erosion and degradation, increasing biological productivity, preserving the surroundings and, encouraging a good state of health. Soil erosion and degradation are minimized through crop rotation and mulching, which reduces the running water's speed. Organic farming also preserves long-term soil fertility by increasing the conditions of biological mechanisms within the soil. The living organisms in the soil help mix the ground, thus the crops having enough air, which may lead to an increase in productivity. Organic agriculture enhances careful handling and processing approaches and prepares organic products to preserve the organic significance and integrity qualities at all production levels. Organic food agriculture is also guided by the principle of depending on renewable resources and recycling resources and materials within the agricultural fields (Mie et al., 2017). In Australia organic agriculture is defined in the Australian National Standard for Organic and Biodynamic Produce (OPEC) as “management practices that create soils of enhanced biological activity, as determined by the humus level, crumb structure and feeder root development”. to such an extent that plants are taken care of through the soil biological system and not basically through soluble fertilizers added to the soil. Plants filled in organic systems take up supplements that are delivered gradually from humus colloids, at a rate represented by warmth. In this system, the digestion of the plant and its capacity to absorb nutrients isn't overemphasized by exorbitant take-up of solvent salts in the soil water (like nitrates). Natural cultivating frameworks depend to the greatest degree doable upon crop rotation, crop manures, legumes, green fertilizers, mechanical cultivation, endorsed mineral-bearing rocks and parts of biological pest management to keep up soil efficiency and tilth, to supply plant supplements and to control infections, bugs, weeds and different nuisances”. organic farming needs the sustaining and keeping up of land for people in the future. Accentuation is likewise positioned on the utilization of sustainable resources, the requirement for preservation of energy, soil and water assets and the upkeep of natural quality (OPEC, 2002) Similarly, organic agriculture is defined by the National Organic Standards Board in the United States as “an

ecological production management system that promotes and enhances biodiversity, biological cycles and soil biological activity. It is based on minimum use of off-farm inputs and on management practices that restore, maintain, and enhance ecological harmony” (USDA 2003).

Organic farming supports covering crops and promotes balanced predator relationships and crop rotations. Organic nutrients and residues emitted from the field are reused in the soil. Composted manure and cover crops are used to preserve soil fertility and organic matter. Preventive disease, weed, and pest control approaches are practiced, consisting of resistant varieties, improved genetics, and crop rotation. Comprehensive weed and pest control and soil conservation methods are significant for organic farming. Organic farming principles prohibit products of ionizing radiation, synthetic food ingredients, animal cloning, and genetic engineering, synthetic fertilizers and drugs, and the use of pesticides. Livestock produced under organic farming should be fed with organic feed ingredients. The feeds should not include the fish by-products, avian and mammalian. Insecticide growth hormones and antibiotics are generally prohibited in animals' production, although artificial insemination is permitted. Markets for organic meat products have continuously increased (Mie et al., 2017).

Many farmers have a passion for carrying out organic farming. This is because of their vast concerns about the environment and agricultural chemicals in inorganic farming methods. Thus, various farm chemicals need energy in small-scale manufacturing, hence farming energy. Organic farmers also refer to organic agriculture as being personally rewarding and profitable. Customers also order organic products for various reasons. Some purchase organic food products for they are grown without inorganic fertilizers or free from chemical pesticides. Desires to avoid products from genetically engineered organisms, preserving the environment, and product taste may also lead the consumers to purchase the products. Organic products may be of higher prices than conventional products. The changes may vary with the product and may rely on whether the consumers are dealing directly with retailers, wholesalers, and processors. Although the premiums and prices may be negotiated between the

consumer and seller, they decrease with global supply and local demand (Dash, 2018).

farming is sustainable when it is environmentally sound, economically practical, socially just, socially suitable and dependent on a comprehensive logical methodology. Besides, sustainable farming preserves biodiversity, keeps up soil fertility and water immaculateness, moderates and improves the compound, physical and organic characteristics of the soil, reuses normal resources and preserves energy. sustainable farming additionally implies utilizing locally accessible inexhaustible resources and proper and reasonable technologies, and limiting the utilization of outside and bought inputs. Clearly, organic farming fits in well with these characteristics of sustainable farming. In spite of the fact that it isn't the lone alternative, what recognizes organic farming from different types of sustainable farming is the presence of production principles and certification techniques, hence giving a distinctive advertising edge over different methodology (FAO 2001). Nonetheless, it may not be well before competition from "environmental administration system" certification and eco-marking represents a danger.

2.5.2 Organic food characteristics

Organic food "is the product of a farming system which avoids the use of man-made fertilizers, pesticides, growth regulators, and livestock feed additives. Irradiation and the use of genetically modified organisms (GMOs) or products produced from or by GMOs are generally prohibited by organic legislation" (taken from DEFRA). It is assessed that 95% of absolute retail deals of natural food items happens in the European Union and United States. A survey of those writing from these business sectors gives us knowledge into what spurs and what obstructs the acquisition of natural food varieties and consequently help in recognizable proof of significant develop regions for thought. The market of organic foods in the USA proceeds to quickly develop, while it is generally full grown in different zones especially in parts of Western Europe. The EU effectively encourage development of the organic foods sector (Dimitri & Operholtzer, 2005). Government sponsorships and industry advancement have brought down cost charges. What's more, there is a more significant level of client awareness than that found in the United States (Thompson & Kidwell,

1998). In Denmark, a few analysts have considered the variables that encourage customers to purchase organic items such as Grunert and Juhl (1995), Land 1998, and Wier and Andersen (2003). Grunert and Juhl found that purchasing organic food products is directly related to the attitude and behaviors that reflect concern of the environment (Grunert and Juhl, 1995). While Land found that the purchase of organic products is linked to some of the characteristics found in organic food, such as its association with better health and better taste. Consumers also consider that the organic product is free of pesticides, and this is one of the important characteristics of organic food products (Land 1998). As for Wire and Andersen, they found that consumers tended to buy the organic product because of their primary concern for health, as they considered the absence of chemical residues in the organic product as the feature of the most preferred product for organic food. It has also been found that animal welfare, food origin and environmental issues play a significant role in shopper's choices to buy organic food items (Wier & Andersen, 2003). Hack was recognized the two essential motives in buying organic food products among Dutch buyers which are health and beneficial impact on the environment, also he identified four major obstacles to consumption of organic food; it was less recognizable to consumers, not as accessible as conventional products, more expensive, and saw to be of lesser quality (Hack, M.D. 1993). Another study was conducted by Bugge and Wandal, this study examined buying motives for organic food products among Norwegians. The main purchasing motive for clients was health concern Bugge & Wandel, 1995). Latacz-Luhmann and Foster conclude that health and food safety are the main drivers of consumption of organic food products in the United Kingdom (Latacz & Foster, 1997). A new study by Hill and Lynchehaun discovered that health is the staggering reason for buyers to purchase organic milk (Hill & Lynchehaun, 2002). Likewise, Makatouni found that perceived healthfulness of organic food products to be the fundamental contributor to buy organic foods, followed by the perception that organic food promotes a higher degree of animal welfare. The study also revealed consumer's concern about the use of industrial fertilizers and chemicals in food production, and the negative effects it has on the environment (Makatouni, A. 2002). Also another study conducted in Scotland by Meachern and McClean (2002), this study showed that there are three main factors that affect consumer's intention

to buy organic dairy products in Scotland, which are: health benefits, food safety, and taste (Anderson, Wachenheim and Lesch, 2021).

There are many studies conducted in the United States of America to study how demographics in organic food markets affect consumers' intentions to buy these products and their willingness to pay for organic food, (Thompson & Kidwell, 1998; Huang). Other researchers also studied the factors affecting the intention to buy these products. A study conducted by Goldman and Clancy, this study found that there are customers hesitant to buy organic food due to their concern about pesticide residues and their effects on public health. Their essential purpose behind buying organic foods were promotion of sustainable agricultural practice, protection of the environment, and food safety in New York city (Goldman & Clancy, 1991). Another study similar to the previous one was conducted by Jolly (1991) found that California buyers purchasing organic food were worried about health and how it could be endangered by the presence of pesticides in their food. Also, high prices and poor availability were considered an obstacle in purchasing organic food products (Jolly, 1991). So many studies conducted by Byrne, Bacon, and Toensmeyer (1994) and Toensmeyer (1993) inferred that customer needed organic produce on account of its apparent safety and higher nutritive value due to the damage that affects the environment was minimal. Also, they found that freshness, food safety, flavor nutrition, and healthfulness were the main factors that affected the consumption and purchase of organic products. Health and nutrition were identified by Sloan (2002) as the primary drivers behind purchasing organic food products. Most organic food customers said that organic food products play a big role in their overall health as they have not been linked to any specific health effect. Also in this study a number of buyers were found to be searching specifically on organic food products in order to avoid genetically modified (GM) ingredients. Another significant driver of organic food utilization was the perceived impact of production on the ecological. It has been observed that consumers of organic foods are more worried about the ecological and contamination than everybody (Anderson, Wachenheim and Lesch, 2021). In general, and through the various studies conducted in North America and Europe, they find that the factors affecting the purchase of organic products do not differ significantly, as they

find that everyone focused on food safety and its effect on health, noting that the price was the biggest obstacle in both the United States and the European Union. Organic foods are products yielded through approaches complying with principles of organic agriculture. Organic food products have various attributes such as no pesticides, high quality, good health, proper pricing, and good taste. Organic products are produced without the application of artificial fertilizers or pesticides. The products have to follow stiff tests in terms of cultivation, production methods, and composition to attain this quality that differentiates them from their competitors. Organic products do not come from transgenic plants or different types of seeds. The quantity of food yielded is the most significant in ensuring the organic product than conventional products produced on a large scale. Organic products are stored in packages or containers that are organic to decrease human contamination and the carbon dioxide emitted during manufacturing (Carvalho, 2017).

2.5.2.1 Quality

The principles regulating organic animal and crop farming production are strict, resulting in high farm produce quality. Initially, the quality of food was defined through quantitative approaches. The quality of organic food evaluation should aim at all approaches and from probable views. A gap may arise between the quality expected by the consumers and what is offered by the regulation. The quality of organic food is determined by the process and product of linked approaches. Depending on the organic product's intended purpose, different elements are used to determine the quality, such as consumers, distributors, processors, and parameters. An organic product's sensory quality may also be determined through the vision, touch, smell, and taste of the food. The sensory quality is significant as it influences the consumer's purchasing intention. The product's sensory assessment has two approaches: evaluating the recognition, consumer's choice, and desirability by the consumer. The sensory panel also evaluates the product's quality based on trained personnel and criteria (Gomiero, 2018).

The food's nutritional quality may be considered optimal when it has ingredients such as protein, mineral elements, and vitamins. Simultaneously, the minimal content would be evaluated through heavy metals, nitrates, and pesticide

elements. The quality may also be measured typical sole element through analytical approaches. The quality of the food may also be determined by its authenticity. Authenticity may be represented in two forms: the product's attributes should correspond to those found in them. For example, exploration may be done to decide if the products found in the marketplace originate from organic production. The second form may be evaluated by weighting the developing trends of food globalization. Consumers search for food from safer sources produced locally from known processors. Therefore, consumers look for organic products made on a small scale and buying directly from the farmers or the local markets (Yang & Lee, 2019).

Several values affect organic food quality, such as farm animal welfare, social-economic approach, and environmental effect. Individuals expect the product's quality to be high when the surface and groundwater, soil, and air are of quality levels. Organic farmers are expected to preserve the surroundings in better situations to promote the cycle approach. The organic production methods aim to protect the environmental elements against the pressures of agricultural methods, such as through the emission of gases into the air (Gomiero, 2018). Many consumers purchase organic foods rather than conventional products because they have better tastes. Many distributors, promoters, and sellers also support those organic foods taste better. The phenolic compound in vegetables and fruit is higher in organic than conventional. Through research, it is rare to find that organic fruits and vegetables taste poorer than conventional ones. Organic food products have a longer shelf life due to lower nitrate levels than conventional produce. For instance, organic apples are firm, and potatoes are rich in vitamin c, making them taste better (Mie et al., 2017).

2.5.2.2 Pricing

The prices for organic food products are high compared to inorganic products. Various reasons could make the price differences between conventional products and organic goods. The factors include cheap synthesis, demand and supply, unfair subsidies, small-scale marketing, small operations, education, organic certification, and time requirements. Time issues may contribute more to organic pricing. After all, time is money, and organic farmers use a lot of time on their products than conventional farmers (Aschemann-Witzel&Zielke,

2017). The organic products price tag most probably echoes the actual cost of growing the product substituting storage, transportation, intensive management for pesticides and insecticides, increasing and labor used. Organic farmers go for an extra step in applying manual methods for controlling diseases and pests rather than using the same quantity of hazardous pesticides. Manual approaches are expensive, but they keep pesticides out of the surroundings and people (Shen et al., 2019). Organic farmers also undergo the learning process to increase their agricultural skills, planning, inspections, paperwork, and the certification process, which is in their schedule. The high cost of animal products is also not left behind as they are handled with a lot of care. Organic certification is time-consuming and costly. Expenditure is incurred for startups, special processing equipment, organic seeds, animals from organic origins, suitable organic land, and renewal certification costs (Chaparro-Africano& Naranjo, 2020).

Several organic farmers carry out organic agriculture on a small scale than the conventional agriculturalists. Therefore, small-scale farmers do not take advantage of economies of scale. Moreover, the organic farmers' incurred cost is more to process and grow small quantities of organic products than large amounts. In addition to the products' processing, the farmers also incur costs in shipping the products (Nandwan&Nwosisi, 2016).

Economies of scale elaborate that the more consumers purchase, the more the companies will produce, and the more they grow, the prices will fall. Therefore, the relationship between demand and supply becomes a vast issue. Although organic products are increasingly gaining popularity, non-organic food sales are steps ahead. When more customers purchase organic products, their demand will increase; this would decrease prices. Nonetheless, when customers crowd to toxic and cheap products, the companies will produce more of the products, thus the cost of organic products remaining high. Organic products do not apply the readily available low-priced preservatives, flavors, and additives as non-organic farmers do. Therefore, the organic farmers look for less dangerous, less known, and expensive elements instead, thus increasing the final product's cost (Kleer&Piller, 2019).

Farmers and processors require special facilities and land to carry out the certified organic operations to yield the products. Organic facilities and land are more expensive than inorganic farmland because there exists a list of qualities that the organic land should hold. It is suitable for organic land used for livestock and crops. Various organic operations are carried out on a small scale. Therefore, they do not warrant a manufacturing processor of their own. Henceforth, the farmers have to locate organic operations to purchase or share special equipment with the non-organic facilities. More time may be spent when organic firms share equipment with non-organic organizations in ensuring that the products do not mix. If the products mix, the processing equipment must be cleaned before the organic products are processed (Shen et al., 2019).

2.5.2.3 Healthy

Organic food has a positive impact on consumers as they contain more nutrients such as antioxidants than conventional foods, which have preservatives, chemicals, and allergy elements. Organic food consists of other factors such as phosphorus, magnesium, vitamin C, which have less exposure to pesticides and nitrates residues. Several individuals consume organic foods due to the health impact. Grains, vegetables, and fruits labeled organic are grown without applying inorganic fertilizers and synthetic pesticides. For instance, insecticide chlorpyrifos and roundup are hazardous as they lead to developmental delays and are a probable carcinogen, respectively (Brantsæter et al., 2017). Organic food products have more healthy fats. Milk and meat have healthy unsaturated fats of about 50%, which are omega-3 fatty acids compared to inorganic products. The distinction results from how organic animals are raised by spending more time outdoors and feeding on a grass diet. Consumers switching from inorganic products to organic foods would increase the fatty acids without increasing the calories (Stanton et al., 2021).

Organic foods do not contain synthetic hormones or antibiotics. Conventional farmers can rear animals in crowded conditions as they are fed with antibiotics to prevent them from contracting diseases. In poultry farming cases, the animals are injected with growth hormones to produce more milk, grow faster, and have more weight. The traces of the genetic hormones and antibiotics make their way to consumers. The synthetic hormones are related to increased cancer risks,

unlike organic milk and meat, which do not consist of antibiotics and synthetic hormones (Welsh et al., 2019). Organic products also have high levels of antioxidants, unlike non-organic products. For instance, organic onions have about 20% higher antioxidant levels than inorganically grown onions (Ren et al., 2017).

Consuming organic products have various benefits such as improved health condition, overall better health, a robust immune system, and the certainty of consuming fresh products. Organic food agriculture is guided by rigorous preparation, processing, and production. Therefore, it is rare to find inorganic food preservatives in organic products. Thus, the food is fuller of flavor, often fresher, and has a long shelf life. Consumers develop a more robust immune system by feeding organic foods with minerals and vitamins, which helps them fight diseases. Natural methods such as crop rotation in condition and pest control and green manure to add nutrients in the lands better yield healthier products. Therefore, healthy products lead to better nourishment and healthy individuals, thus better living for human beings (Willett & Skerrett, 2017).

2.5.2.4 No Pesticides

Organic products are grown using natural means, thus eliminating insecticides, herbicides, and pesticides. Consumption of chemicals is related to various disorders and diseases such as weakened immune systems, congenital disabilities, headaches, digestive dysfunctions, and cancer. Organic products are free from pesticides, thus preferable consumption leading to better health. Despite eliminating pests from the field, traces of organo-phosphorus, which are unnatural, are left and leads to health abnormalities in human beings. The chemical is also related to developmental problems such as autism. Therefore, organic products are significant for better health standards for infants in their developmental stages and would be affected by pesticide toxins (Reganold & Wachter, 2016).

2.6 Other Factors Affecting Organic Food Purchase Intention

Consumers are influenced by various factors which lead them to purchase organic products. The elements affect health consciousness, environmental

concerns, and subjective norms. Health consciousness evaluates the eagerness to undertake health issues. Health-conscious customers are concerned and knowledgeable about their health safety and are inspired to maintain or increase their health status and living standards. This enables them to thwart health problems by being self-conscious about their health and interacting in healthy conduct. Consumers tend to know of and involving themselves with physical and nutritional fitness (Rana & Paul, 2017). Health consciousness is a direct approach that influences customer's intentions and attitudes in purchasing organic products. Organic food consumers know that consuming the food influences their health, thus appreciating natural and healthy products, and are willing to switch from conventional products to organic. Ethical self-identity also helps forecast attitude and intention in buying organic products. Health-conscious customers focus on the effective long-term health product consumption approach as a replacement for short-term functions. When consumers are in a state of food decision, they value the positive impacts of feeding on organic products rather than low health-conscious customers who aim to taste the food rather than the health effect. Moreover, consumers who are more conscious about their health respond more powerfully to the availability of various healthy food options, unlike low health-conscious customers. Households that possess habitation and have high-income jobs or businesses are more health-conscious than those with low income. The more educated individuals are, the more they are alert. Additionally, dwellings with infants are more health mindful as they care about their children's development to prevent them from diseases such as autism. Also, habitations with an increased health perception measure are less price-sensitive, unlike low-health perception measures (Xu et al., 2020).

2.6.1 Health consciousness

Health consciousness is characterized as a disposition in which individuals knows about the strength in their eating routine and lifestyle"(Oxford Dictionaries 2014). Likewise, Health consciousness characterized as how much health concerns are coordinated into individual's every day exercises". (Asif, Xuhui, Nasiri and Ayyub, 2018). Health saw to be the basic factor when purchasing organic food items. The health perception scale consists of four

approaches that evaluate human health perception. The dimensions include health involvement, health self-consciousness, health self-monitoring, and health alertness (Shrestha, S. K. ,2020). Health engagement is the field of personal empowerment and involvement in wellness and health. However, the health involvement process aims to encourage health and life quality and yield self-fulfillment in daily living. Therefore, the health involvement process starts with effective communication between health care providers and individuals. Health consciousness may also be measured through actual health-related tasks because it elaborates an individual's life as a combination of actual health conduct. The scale assesses those consumers are concerned about their health and their conduct towards improving and safeguarding their health (Nahum-Shani et al., 2018). Consumer traits are investigated to assess their health ability level, including age, education, income, health status, health locus of control, behavioral health control, and health knowledge. Generally, consumers with a high degree of consciousness are projected to have more knowledge (O'Connor &Kabadayi, 2020).

Organic foods are considered healthier compared to traditional foods, as the more people are aware of their health, the more intent they are to buy organic products, according to Paul & Rana 2012. (M. Asif et al). With regard to organic foods, many studies have been conducted, where Pedersen and Devcich mentioned that the consumer tends to buy the organic product because of his feeling that this product is free of chemicals, while Suh, Eves and Iumber 2012 said that organic foods have a beneficial effect on health and thus this generates a positive feeling among consumers for the demand for These products and buy them. On the other hand, Petrie 2007 conducted a study on the intent to buy organic food and concluded that consumers tend to buy foods that are made from natural ingredients instead of foods that have artificial additives, and this is because of their concern about the health effects of eating foodstuffs that contain synthetic materials. Likewise, Roddy, Cowan, and Hutchinson 1996 say there is a positive attitude towards organic foods for consumers who care more about food safety (Faiola& Holden, 2017). Health concern was additionally considered as one of the most factors when purchasing organic food products. Also, many studies were conducted on the relationship of health consciousness

with the intention to buy organic products, and these studies concluded that there is a close relationship between health consciousness and the intention to buy organic products, such as the study conducted by Tergandlu 2016. health consciousness was considered one of the best factors that motivate consumers to buy organic food products (Yadav and Pathak, 2016). Health-Related issues are one of the most important factors affecting consumer's purchase of non-traditional food products. Researchers have highlighted the importance of these health-related issues as people are motivated to buy organic food products through the proverb that says you are what you eat. People's perceptions of eating differ, but in general this proverb many people agree with (Fischler, 1988)

It is logical that the intention of consumers to buy organic products is positive if they derive health benefits from these foods. Klöckner, 2012 has found that health motives are closely related to the purchase of organic products although they indirectly affect consumers' intention to buy them (Klöckner, C.A. 2012). Some researchers said that consumers are becoming more sensitive to their health and the food they eat at the present time. There is a lot of scientific evidence that proves the existence of a positive relationship between health consciousness and consumer's intention towards buying organic food, as some studies have shown that the main motive for buying an organic product is health risks and this is what appears in organic food as it is free of pesticides and this is the biggest advantage that distinguishes organic food from Traditional ones. While studies conducted by Mayfield, Holt & Tranter (2001) have proven that chemicals are widely used in traditional intensive agriculture techniques, and this is not desirable for a large number of consumers (Mhlophe, 2016). On the contrary, a study was conducted by Magkos, Arvaniti & Zampelas, where the study suggested the presence of chemical residues in organically grown fruits and vegetables compared to their traditionally cultivated alternative, and therefore organic foods may not be free of pesticides, and this leads us to clarify the idea that the word organic does not necessarily mean that it is safe and this gives Difficulty assessing the risks of different products (Magkos, Arvaniti, & Zampelas, 2006).

Basically, studies have shown that predicting consumer's intentions to buy organic food products through health consciousness is not sufficient, although people interested in health will be more motivated than others to buy healthy food, and this is what said, but this possibility remains doubtful because it contradicts the results of studies by other researchers (Quah & Tan 2009)

2.6.2 Environmental concerns:

Another factor which effect organic food purchase intention is environmental concern, shoppers are progressively getting pro-ecological conscious and willing to add to ensure the natural in any methods. Consumers may be influenced to purchase organic food products due to environmental concerns about the surroundings. Environmental issues are the dangerous effects of human activities on biophysical surroundings. Environmental protection is the act of safeguarding the natural habitat on the governmental, organizational or individual level for the advantage of human beings and the (Kenis&Lievens, 2016). Ecological concern is how much individuals know about issues in regards to the environment and backing endeavors to address them or demonstrate the ability to contribute actually to their solution"(Dunlap and Jones, 2002). Ecological concern shows the degree to which individuals know about the ecological issues and willingness of them solving the environmental issues. Alibeli and Johnson (2009). Many researchers have said that environmental concern is linked to environmentally friendly behavior, Lee (2008) defined environmental concern as the“degree of emotional involvement in environmental issues. (Asif, Xuhui, Nasiri and Ayyub, 2018). Environmental behaviors refer to all activities of individuals that are altogether identified with the nature of environment, for example, consumption of environmental resources Shrestha, S. K. (2020).

Some agricultural activities can lead to air pollution. Air pollution changes in the air can be attributed to physical, chemical, or biological pollutants. Therefore, the air contains an undesirable presence of residues or impurities and is classified as invisible and visible air pollution. It may be caused by waste production, agricultural activities, emissions from factories and industries, and fossil fuel combustion. Agricultural activities such as herbicides, pesticides, insecticides, and inorganic fertilizers lead to air pollution (Sun et al., 2018).

Researchers have expanded the emphasis on environmental concern as it is the consequence of developing worries by buyers toward ecological sustainability and is viewed as one of the main points of interest of ecological records. characterize ecological concern as realization that ecological conditions are undermined by human resource utilization and contamination. Urban (1986) is the pioneer to bring up issues identified with ecological concerns. He accepts that this is a multidimensional measure comprising of “value, environmental attitudes, and ecologically responsible behavioral intentions”. As indicated by Crosby (1981), ecological concern is characterized as strong attitude for ensuring the environment (Ahmed et al., 2020). To more readily comprehend the responsiveness of the green development in a country, examining the purchaser view about issues identified with the environment and how these perspectives are reflected in their organic food purchases can be a decent beginning stage (Koklic et al., 2019). Worry about the environment is central to ecological research and it is a significant factor in the purchaser decision making process (Liao et al., 2019). In the event that the buyer has a more serious level of worry toward the environment this may result in some eco-friendly purchasing. Elevated concern for the climate brought about more noteworthy probability for purchasing eco-friendly items. Research on natural food shows that the individuals who consume natural food were more worried about the environment, when contrasted with everyone (Hughner et al., 2007). Diamantopoulos et al. 2003 report that ecological issues are a significant factor in buyer decision-making. Aman, Harun, and Hussein (2012), Indriani, Rahayu, and Hadiwidjojo (2019) see that an ever-increasing number of ecologically cognizant buyers will build their eagerness to buy natural food. Shoppers who focus harder on the environment may buy natural food (Konuk, 2018). Hence, individuals ordinarily view ecological concern as a strong motivation for procurement (Zhang et al., 2018). A few investigations have analyzed the effect of ecological issues on ability to buy natural food (Konuk, 2019).

Environmental awareness pushed consumers to take into account the environment and animals by switching products and brands (Massey et al., 2018). Better understanding the position of individuals helps policy-makers, marketers and even producers to consume and use environmentally friendly

food products. With regards of organic food buying intention the impact of attitude is uncertain, as such a few investigations found a weak relationship. And other's noticed inconsequential relationship (Chekima et al., 2019)

Organic food products are considered healthy and environmentally friendly products and are tastier better than traditional foodstuffs. A study conducted by Kumar 2012, this study showed that products that do not harm the environment are more popular with consumers While Pagiaslis, Krontalis, 2014 said that preserving the environment and taking care of it was the main motivation or incentive for consumers to buy environmentally friendly products. Consumers have been showing concern about the effect of ecological conditions on their health, according to Coddington's 1993 study. All these studies showed that consumers have concerns about their health, and this has led to their tendency to buy organic food. Smith and Paladino show that consumers considered organic foods as environmentally friendly and thus have increased intentions to purchase these products. While three main elements that distinguish between organic and traditional foods in Poland have been identified: price, health and environmental response (Smith, & Paladino, 2010).

A person's anxiety for the ecological is basic to ecological examination and has a close relationship with the harmless to the ecosystem conduct. Many studies such as Smith & Paladino, 2012 study were conducted to clarify the connection between environmental concern and the intention to buy organic food. These studies have demonstrated the existence of a positive relationship and a direct effect of ecological concern on the intention to buy environmentally friendly organic food. The study proved that deciding the intention to purchase organic items is closely related to ecological concern, as buying these foods is considered an environmentally friendly behavior. People who buy organic foods are bound to take part in harmless to the ecosystem activities (Yadav and Pathak, 2016). Consumers who are more engaged with organic and harmless to the ecosystem issues will in general take a strong positive outlook about expectation to purchase organic food. Many researches have been conducted on people's attitude towards natural food products in various nations and they discovered three primary factors that influence the expectation to buy natural food in different nations and these specifications lie in that natural food is

healthier, harmless to the ecosystem and better tasting than traditional foods, despite the positive attitude of consumers towards organic foods, the number of shoppers who buy these foods routinely is low. (Shrestha, S. K. 2020).

Through most of the studies that were conducted on the relationship of the environmental factor with the intention of buying organic food products, it was reached that there is a positive connection between ecological concerns and purchaser's aim to purchase natural food. Other researchers said that the environmental factor and consumer's attitudes towards natural foods positively influence the aim to purchase natural food. also, many reserch studies have shown that individuals who have less information on the ecological actually have an incredible aim to purchase these items(Mhlophe, 2016). Ecological concern relate to the degree to which customers are aware of environmental-related issues and exhibit the desire or tendency to partake in solving them. Organic food consumption is considered to reflect behavior that is environmentally protective and promotes sustainability. Impact of the ecological concern on shopper choice to establish pro-environmental behavior has been recently researched. And has been demonstrated to be related with increased frequency of purchasing organic foods. For instance, a new study discovered EC to positively impact shopper's social and health consciousness and thusly, increasing their willingness to pay for organic food products (Tandon et al., 2020).

Environmental awareness is to show strong feeling for ecological responsibility. In other words, environmental awareness is the protection of the climate just as bringing issues to light about this issue (Alsamadi, 2007). In the sector of organic food, customer request higher security and quality just as the sustainability at activities by showing affectability to the environment, this implies that the legitimate utilization of natural resources and the worry about the environment are basic for this sector (Achilleas and Anastasios, 2008). Environment and health are likewise corresponded to purchasing intention organic food sources. Health consciousness is in regards to how much an individual adjusts the concern about his own health to his everyday activities (Jayanti and Burns, 1988). Prakas et al. (2009) expressed that health and environmental consciousness essentially impact the buyer's expectations to buy

organic food (Parks & Guay, 2009). Results from different past investigation has demonstrated that the organic food products are less destructive to the environment. The outcomes and campaign from the in-business partners have added to a more ecological conscious among the buyers. The ceaseless health effort and awareness ecological awareness program leads to a difference in shopper insights and their outlooks are gradually expanding toward getting pro towards ecological concerns and are more able to help, take part or added to take care of the ecological using and all means conceivable at their level. (Mohd Farid Shamsudin et al; 2018).

attention regarding the environment alludes to individual's attention to ecological issues and their longing to settle them. The people group's emphasis on the environment has prompted the rise of another kind of shopper, showing their interests in buying choices. few researchers have announced that ecological concern positively affects buyer attitudes toward harmless to the ecosystem products and services which further influence their readiness to buy. All the more explicitly, a huge positive effect of ecological concern on the purchase intention of a wide scope of ecofriendly/organic food has been proposed. For instance, Haghjou et al. (2013) have revealed that ecological concerns decidedly affect shopper's willingness to buy natural food (environmentally friendly vehicles). They further revealed the huge effect of ecological concern on customer's willingness to buy biofuels (Ahmed et al., 2020).

some researchers show the critical positive effect of ecological concern on organic food buying behavior and great civic conduct on the environment. Mostafa (2009) distinguished ecological concerns in the fundamental factors that impact purchaser attitude and ability to buy green items. Lockie et al. (2004) likewise detailed that attention regarding the environment would decidedly influence buyer's attitudes toward organic food, which thus will additionally influence their organic food buying intention. Indeed, even scientists like Voon, Sing Ngui, and Agrawal (2011), Kushwah, Dhir, and Sagar (2019) referenced the significance of focusing on the environment, in any event, while assessing the organization's intention to embrace cleaner innovations. Studying attitudes toward ecological sustainability, various analysts have shown

that the choice to purchase and consume organic food is firmly and continuously controlled by ecological awareness among shoppers (Laureti & Benedtti, 2018). As indicated by Zsoka et al. (2013), ecological awareness implies giving data and awareness about ecological issues and goals. In addition, Safari et al. (2018) conversely used ecological awareness with ecological information, and thought about the critical determinants of green behavior. It is fundamental for the prosperity of society everywhere scale to spread ecological awareness and affectability training among the human population. Chen (2007) concludes that expanding ecological awareness, alongside stresses over worries food sources, made people question contemporary cultivating rehearses, so sustainability of the ecological can proceed. It is viewed as a fundamental component influencing the utilization behavior of people and the sustainability of the environment (Choi & Johnson, 2019).

2.7 Organic Food Brand Awareness:

Consumer awareness moderates the factors influencing organic food's purchase intention. Awareness refers to the technique of making the consumers aware of the advantages of consuming organic products. Awareness moderates the relationship between environmental concern, health consciousness, subjective norm, and organic food purchase intention. Consuming organic products have positive effects on human lives. They develop robust immune systems that help in fighting diseases. More so, feeding on organic products has added more nutrients such as vitamin C. Children consuming organic products help in reducing the cases of autism (Maniatis, 2016). The consumer has the know-how on organic products' impacts; they become health-conscious, influencing them to purchase. Consumers being aware of environmental concerns such as acid rains, air pollution, land and soil pollution resulting from conventional agriculture make them switch to organic food products. Subjective norms involve social pressure to perform the behavior. When colleagues, family members, and peer groups are aware of organic food products' impacts, they influence other consumers' purchasing intentions (Rana & Paul, 2017).

Purchaser awareness, cognizance and convictions of ecological advantages for organic items are determinants of natural utilization. Buying/consuming natural

items and gaining information about natural items in a functioning or latent way create familiarities with these items. As people obtain immediate or circuitous experience in organic items, they get a strong handle of special and lasting attributes (Du et al., 2017). Because of the economic and social improvements in Turkey, contrasts in buyer inclinations for food have started to arise. Particularly sure improvements in fields like schooling, incomes and urbanization are the main factors that increment the information and awareness level of customers. Media and social correspondence channels additionally made significant commitments to these turns of events. Today, shoppers will in general control food production process all the more firmly and question the dependability and wellbeing impacts of food delivered by regular techniques (Unusan, 2007).

The creation cycles of organic items, like certification, labeling and inspection are observed by buyers. As they have sufficient data about organic food items, purchasers will have an uplifting outlook towards these items. Thusly, we can discuss a positive relationship between buying expectation and having awareness. The overall appraisals that happened in the public eye likewise influence the behavior of individuals. Consequently, the people who act as indicated by accepted practices will organize their standards according to the social affectability towards natural items. Additionally, having sufficient information in a subject has worked on the ability to control the apparent conduct of individuals. Today, it might be normal that clients have more data about natural food items. Subsequently, it is seen as that there is a positive correlation between client's level of natural food data and attitudes, person normal practices and perceived behavioral controls (Demirtas, 2019).

In this study, we will talk about the factors which affecting the intention to buy organic food product in Yemen, where we will study the following factors; organic food characteristics, Health consciousness, Subjective norm, and environmental concerns, with studying the moderating role of awareness and how it is affecting the relationship between these factors and purchase intention.

3. RESEARCH METHODOLOGY

3.1 Introduction

Appropriate research assessment and development are needed for appropriate research methodology. It will lead to good data analysis and more valid and accurate output.

This chapter provides explanations of the method and procedures for conducting this research. It includes the research design, population, sampling procedures, data collecting instrument, and statistical techniques used.

3.2 Research Design

This research target is to determine if there is a relationship between purchase intention of organic food and the factors; organic food characteristics, health consciousness, subjective norms, and environment concerns. Also, to study the role of awareness as a moderating affect between these factors and purchase intention of organic food products.

A quantitative research approach has been designed and implemented, as this research is formed “according to the meanings taken from numbers, results collected in a numerical standardized form and analysis directed by diagrams and statistics” (Saunders, et al., 2009), such numerical data was collected from a specific sample that represents the whole population in Yemen.

A questionnaire was used to collect the primary data, as surveys help to collect data from a large sample of individuals who are questioned about their opinions and views. The questionnaire was posted online to save time and cost of collecting the needed data, they help to reach a wide audience wherever their geographical location is (Ilieva, et al., 2002), however, an assessment of the research goals, timeline, and financial situation should be done by the researcher before selecting the data collecting method.

The questionnaire participants were requested to respond to the two main parts of the survey, the first part was the demographics data part, which helps to understand more about the respondent and his/her relation with the survey topic. The second part was about the variables related questions that will help to test the research hypotheses, an explanation about the research topic, goals and research population, and targeted sample with some guidelines was provided before the survey questions. The questionnaire was approved by the Istanbul Aydin University ethical committee.

As variables in this research cannot be measured directly, they can be considered as Latent variables, such variables are indicated by other observed variables that are responsible to designate them, all these variables are measured through surveys, tests, and statistical analysis (Byrne, 2012).

The research started by finding the main idea and reviewing the previous relevant studies and articles to improve and develop the idea, till reaching the point of formatting the main research variables, and forming the research questions and hypotheses and related research conceptual framework. That research was designed and the needed data was collected, to get appropriate answers for the research questions and perform the test of the research hypotheses, the collected data were measured and analyzed by the SEM which led to the research results and their interpretation, finally, the conclusion was formed and written.

3.3 Population

This study is discussing the relation between organic food purchase intention and the factors that affect consumers to buy these products in Yemen. Also, it describes the moderating role of awareness on factors which affect organic food products. The targeted population was people who know organic food products and were living in Yemen. From our research we removed the people who doesn't know organic food products.

3.4 Sampling Method

In this research, a convenience sampling method was used to select the target respondents. According to (Etikan & Bala, 2017) such a method is done “based on the researcher judgment without using any probability technique, it targets respondents with certain criteria, such respondents are considered as a convenient source of data”.

400 sample was targeted as according to (Varoquaux, 2018) “from 200 to 500 observation will lead to 4.5% errors”,

The margin of error formula is:
$$Z * \sqrt{\frac{\hat{p}(1-\hat{p})}{n}}$$
 (Surendran, 2019), and the following graph explained in (Reyes & Ghosh, 2013) shows the relation between the sample size and the margin of error, and will lead to concluding that the more sample size the less err.

After collecting the data and initial data screening 299 responses were accepted for the research.

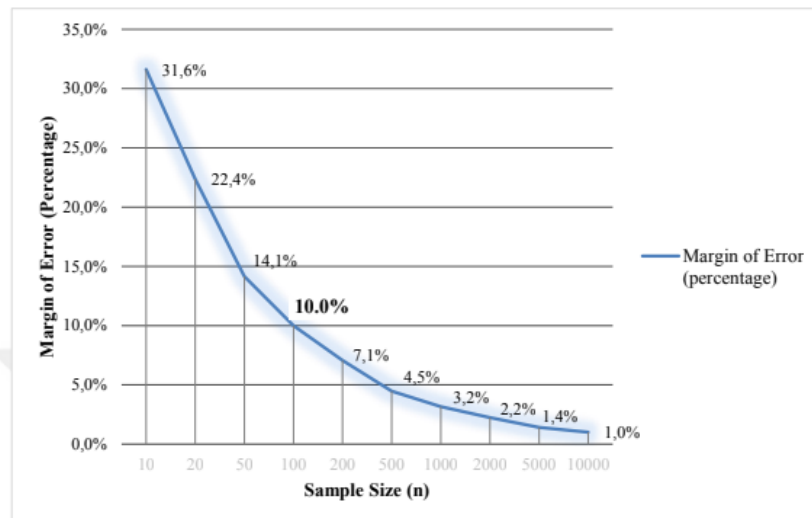


Figure 3.1: Sample size & Margin of Error (Reyes & Ghosh, 2013)

3.5 Data Collecting Instrument

This research is considered quantitative research, so the collection of the data was done by a survey which was adapted from three articles.

Organic food characteristics, Health consciousness, subjective norm, and Environment concerns were adopted from Bongani Mhlophe 2016, brand awareness was adopted from M. Asif et al. 2018, purchase intention was adopted from Yadav, R. and Pathak, G., 2016.

A 5-point Likert scale (1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree) such close-ended questions type was selected as it needs the minimum writing activity which makes it easy and less time consuming for the respondent.

The survey starts with an introduction about the researcher, the research main idea and goals, and an explanation about the targeted respondents, the survey started with the question " Do you know organic food products" if no you will leave the survey. If yes you will still in the survey and go to the first part which is the demographic part to get an idea about the target respondent and how much he/she is related to the research, the second part of the survey includes the main variables measuring questions.

The questions were in English language and translated to Arabic language, following the process recommended by (Brislin, 1970) which is to be back-translated the translated questions to English and checked again by a third-party researcher.

3.6 Statistical Techniques

The statistical techniques used for this research are Simple Percentage Analysis, Descriptive Statistics, Exploratory Factor Analysis, Confirmatory factor analysis and Structural Equational Modeling (SEM).

- Simple Percentage Analysis: This analysis is used on the analysis of the demographic part of the research survey for a better understanding of the targeted respondents, it depends on the frequency distribution of the data collected and doesn't have a role in the hypothesis testing.
- Exploratory Factor Analysis: This analysis is considered as the first step of the SEM analysis as it explores the factor loading and confirms them, it also helps in calculating the reliability of the data collected and the validity of the measures. (Byrne, 2012).

- CFA analysis measures the relationship between the observed variables themselves (reliability) and their relation with their observed variable (validity).
- Structural Equational Modeling (SEM): This analysis helps to test “various theoretical models, that hypothesize how sets of variables define constructs and how these constructs are related to each other in a quantitative manner” (Schumacker & Lomax, 2010).

Analysis software used for this research is IBM SPSS version 23 and IBM SPSS AMOS version 22.

3.7 Ethical Consideration of the Research

Any research needs to be done and implemented with ethics. Ethical considerations were followed in all the process of the research, the data collection process of this research was carried out by a high privacy and confidentiality procedure as the data was only used for the analysis. The data was not used for personal interest at any stage of the research implementation, the company and the participant privacy were considered as no company name or employee identity was requested in the survey.

4. ANALYSIS And RESULTS

4.1 Introduction

This chapter shows the analysis implemented for the data collected, it starts with the simple percentage analysis, then factor analysis, and finally SEM hypothesis testing. An explanation of the results is included.

4.2 Simple Percentage Analysis

To understand the targeted respondents and their characteristics, a Simple percentage analysis was conducted for the demographic data of them. Such analysis gives an accumulated summary according to the frequency distribution of the data collected; it is calculated by the following formula: $\text{Percentage} = (\text{Number of Respondents} * 100) / \text{Total Number of Respondents}$.

Demographic questions include questions about the characteristics of the research survey respondents. They provide information about the respondents' gender, age, marital status, education, occupation, income level. The results are explained below:

Table 4.1: Gender Q1

	Frequency	Percent
Male	210	70.2%
Female	89	29.8%
Total	299	100.0%

Most of the respondents are males, representing 70% of the total respondents, on the other hand, the remaining 30% are females.

Table 4.2: Age Q2

	Frequency	Percent
Less than 18 years old	9	3.0%
From 18-24	114	38.1%
From 25-34	109	36.5%
From 35-44	50	16.7%
From 45 years old or more	17	5.7%
Total	299	100.0%

Most of the respondents are between 18 and 34 years old, 38% are between 18 and 24 years old and 37% are between 25 and 34 years old.

Table 4.3: Occupation Q3

	Frequency	Percent
Unemployed	12	4.0%
Student	163	54.5%
Self-Employment	33	11.0%
Public Staff	32	10.7%
Private Section Staff	59	19.7%
Total	299	100.0%

Half of the respondents are students they represent 55% the second half is cumulatively being employed either in the public sector, private sector, or self-employed.

Table 4.4: Marital status Q4

	Frequency	Percent
Single	158	52.8%
Married	141	47.2%
Total	299	100.0%

Half of the respondents are single they represent 53% the other half are married they represent 47%.

Table 4.5: Education Status Q5

	Frequency	Percent
Primary	1	.3%
High School	43	14.4%
2 Years graduate	14	4.7%
Bachelor	178	59.5%
Graduate	63	21.1%
Total	299	100.0%

More than half of the respondents are having a bachelor's degree they represent 60%, on the other hand, respondents with a graduate degree represent 21% of the total respondents.

Table 4.6: Income Level Q6

	Frequency	Percent
50,000 YR or less	131	43.8%
51,000-100,000 YR	63	21.1%
101,000-150,000 YR	36	12.0%
151,000-200,000 YR	26	8.7%
More than 200,000 YR	43	14.4%
Total	299	100.0%

Less than half of the respondents have an income of 50,000 YR or less, they represent 44%, on the other hand, 21% of the total respondents have an income between 51,000 YR and 100,000 YR.

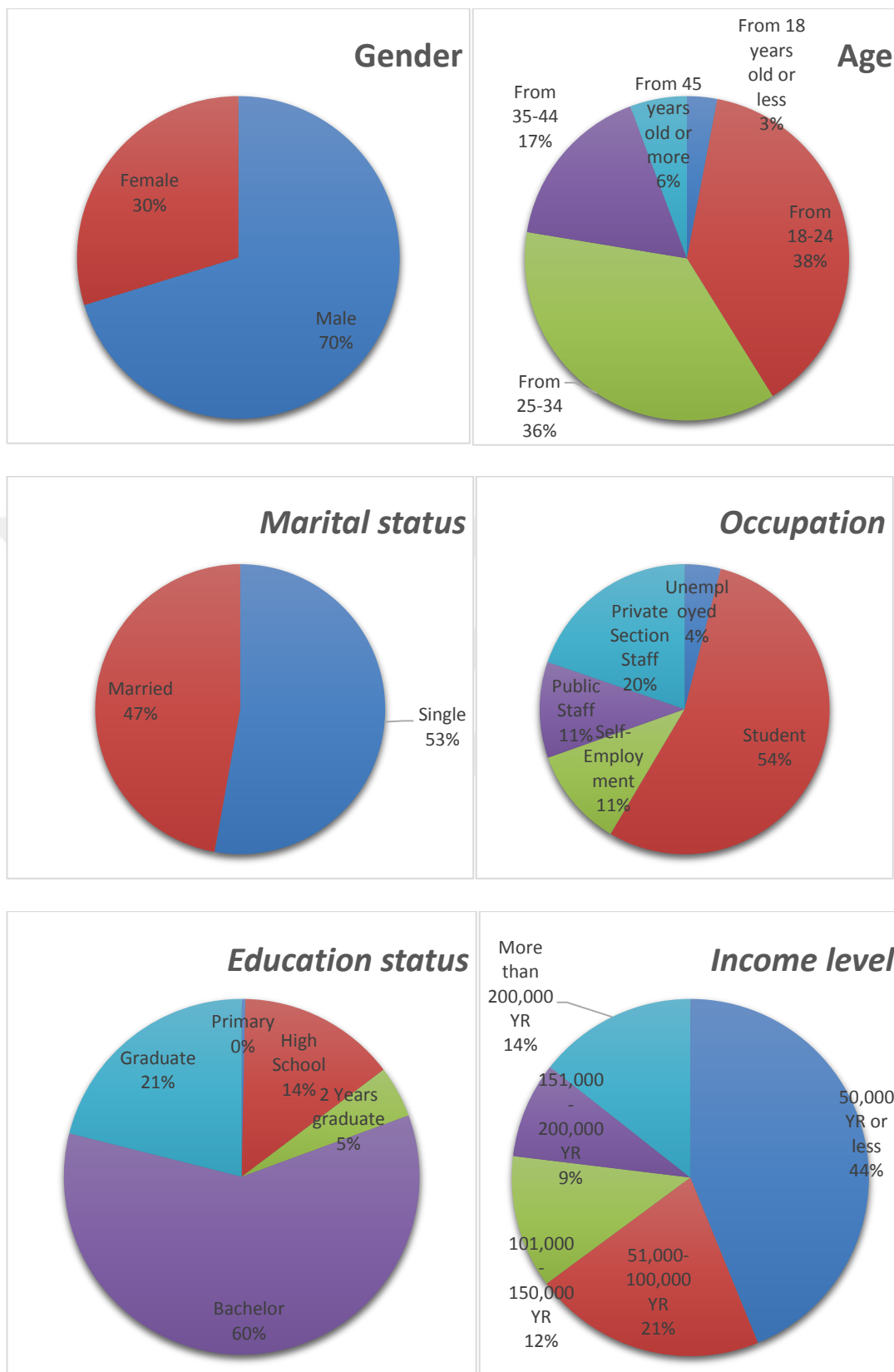


Figure 4.1: Respondents demographic questions answers frequency distribution

4.3 Descriptive Statistics:

Descriptive statistics show the elementary features of the data. They present quick summaries of the sample responses; mainly Mean and Standard Deviation are calculated in the descriptive statistics step.

Below is the list of Mean and Standard Deviation for all the Survey questions:

Table 4.7: Descriptive statistics

	Mean	Std. Deviation
Organic Food Characteristics	3.74	1.239
Q1: Organic foods are healthy		
Q2: Organic foods are having high nutritional value	3.60	1.240
Q3: Organic foods are free from chemical pesticides and fertilizers	3.44	1.263
Q4: Organic foods are produced with environmentally / animal friendly techniques	3.47	1.224
Q5: Organic foods are free from genetically modified organisms (GMO)	3.28	1.218
Q6: All products coming from organic agriculture are certified	3.15	1.175
Health Consciousness		
Q7: My health is very important to me	4.55	.970
Q8: Conventional foods are as healthy as organic foods	2.90	1.090
Q9: Organic foods are natural and therefore better for my health	4.00	.998
Q10: Organic food are healthier because they have no/less growth hormones additives and antibiotics	3.77	1.006
Q11: Organic foods are healthier because they have no/less chemical residues	3.79	1.105
Environmental Concerns		
Q12: The environment should be protected through environmentally friendly farming methods	4.26	1.084
Q13: The production of conventional food does not harm the environment	3.03	1.165
Q14: Organic food production is better for the environment because it uses no/less chemical residues	3.77	1.109
Q15: Organic food production is better for the environment because it uses no/less growth hormones	3.58	1.064

Table 4.7: (con) Descriptive statistics

	Mean	Std. Deviation
Q16: Organic food production practices are better for the environment than conventional farming methods	3.54	1.065
Subjective Norm	3.36	1.031
Q17: People that are important to me would like me to consider buying organic food		
Q18: Most people who influence what I do, think that I should not intend to buy organic food	2.69	.967
Q19: It is good for me to consider buying organic food	3.76	.973
Q20: I think it is not important to consider buying organic food	2.35	1.059
Q21: My family would be to have organic food purchasing plans	3.23	.986
Organic Food Brand Awareness		
Q22: I know what organic food is	3.56	1.036
Q23: I'm familiar with the term of organic food	3.62	.981
Purchase Intention	3.68	1.028
Q24: I'm willing to buy organic food while shopping		
Q25: I will make an effort to buy organic food in the near future	3.69	1.047
Q26: I intend to buy organic food products because they are more environmentally friendly	3.75	1.028

4.4 Normality Assessment

Normal distribution assessment is used to see whether a data set is well-modeled by a regular distribution and how likely it is to naturally spread a random variable underlying the data set.

Normality assessment is the foundation of many statistical tests, it “shows how the variables’ values are symmetrically distributed around its mean where the values near the mean are more frequent in occurrence than the values far from the mean. It can be checked using the graphical method that visualizes the distributions of variables’ values and compared it to the standard theoretical one” (Ghaleb & Kaplan, 2020; Baghban, et al., 2013).

According to the below shape that leads to conclude that the data collected for this study is normally distributed.

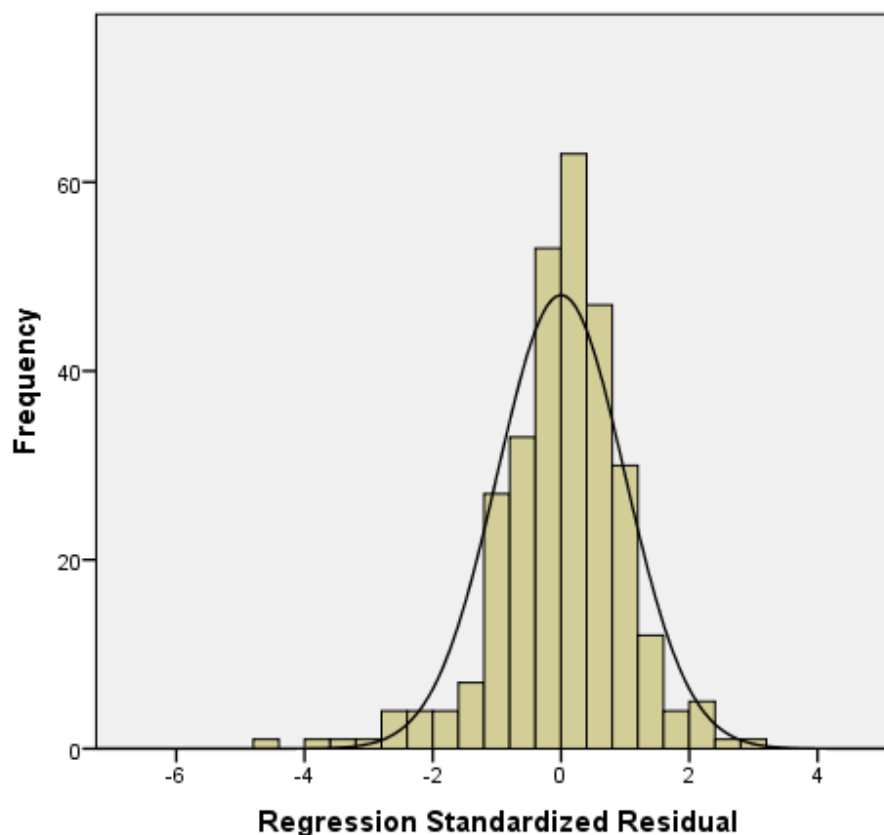


Figure 4.2: Normality assessment

Making sure that there is no Skew and Kurtosis is important during the normal distribution assessment, Skew and Kurtosis are defined as the following:

- Skew: “when the data distribution is not asymmetrical around its mean, either below or above the mean” (Kline, 2011) for not having a Skew the Skew analysis results must be between 3 and -3.
- Kurtosis: “when the data have a higher or lower peak comparing to normal distribution” for not having a Kurtosis the Kurtosis analysis results must be between 8 and -8.

According to the results shown in the below table, it can be concluded that there is no Skew and Kurtosis.

Table 4.8: Skew and Kurtosis calculation

	Skewness	Kurtosis
Organic food Characteristics	-.983	.008
Q1: Organic foods are healthy		
Q2: Organic foods are having high nutritional value	-.733	-.466
Q3: Organic foods are free from chemical pesticides and fertilizers	-.516	-.733
Q4: Organic foods are produced with environmentally / animal friendly techniques	-.630	-.548
Q5: Organic foods are free from genetically modified organisms (GMO)	-.298	-.857
Q6: All products coming from organic agriculture are certified	-.214	-.846
Health Consciousness	-2.586	6.300
Q7: My health is very important to me		
Q8: Conventional foods are as healthy as organic foods	.288	-.656
Q9: Organic foods are natural and therefore better for my health	-1.277	1.657
Q10: Organic food are healthier because they have no/less growth hormones additives and antibiotics	-.890	.749
Q11: Organic foods are healthier because they have no/less chemical residues	-1.078	.695
Environmental concern	-1.671	2.121
Q12: The environment should be protected through environmentally friendly farming methods		
Q13: The production of conventional food does not harm the environment	-.008	-.812
Q14: Organic food production is better for the environment because it uses no/less chemical residues	-.967	.356
Q15: Organic food production is better for the environment because it uses no/less growth hormones	-.653	-.030
Q16: Organic food production practices are better for the environment than conventional farming methods	-.604	-.127
Subjective Norm	-.528	-.190
Q17: People that are important to me would like me to consider buying organic food		
Q18: Most people who influence what I do, think that I should not intend to buy organic food	.127	-.432

Table 4.8: (con) Skew and Kurtosis calculation

	Skewness	Kurtosis
Q19: It is good for me to consider buying organic food	-.939	.711
Q20: I think it is not important to consider buying organic food	.711	-.035
Q21: My family would be to have organic food purchasing plans	-.230	-.308
Organic food brand awareness	-.686	-.231
Q22: I know what an organic food is		
Q23: I'm familiar with the term of organic food	-.949	.645
Purchase Intention	-1.087	.858
Q24: I'm willing to buy organic food while shopping		
Q25: I will make an effort to buy organic food in the near future	-1.057	.759
Q26: I intend to buy organic food products because they are more environmentally friendly	-1.025	.827

4.5 Exploratory factor analysis EFA:

“EFA help to determine to what extent the observed variables are connected to their underlying factors and to identify the minimal number of factors that account for the covariation among the observed variables” (Byrne, 2010). Questions with multiple loading between variables were removed, to get the needed factor loading. (KMO) factor measure was giving a positive indicator for a good loading as it was 0.901. The factor loading of the survey questions is presented below.

Table 4.9: Exploratory factor analysis EFA

	Factor: 1	Factor: 2	Factor: 3	Factor: 4	Factor: 5	Factor: 6
Organic food Characteristics	.887					
Q1: Organic foods are healthy						
Q2: Organic foods are having high nutritional value	.885					

Table 4.9: (con)Exploratory factor analysis EFA

	Factor: 1	Factor: 2	Factor: 3	Factor: 4	Factor: 5	Factor: 6
Q3: Organic foods are free from chemical pesticides and fertilizers	.907					
Q4: Organic foods are produced with environmentally / animal friendly techniques	.949					
Q5: Organic foods are free from genetically modified organisms (GMO)	.867					
Q6: All products coming from organic agriculture are certified	.718					
Health Consciousness			.624			
Q7: My health is very important to me						
Q8: Conventional foods are as healthy as organic foods			.631			
Q9: Organic foods are natural and therefore better for my health			.733			
Q10: Organic food are healthier because they have no/fewer growth hormones additives and antibiotics			.501			
Environmental concern					.602	
Q14: Organic food production is better for the environment because it uses no/less chemical residues						
Q15: Organic food production is better for the environment because it uses no/less growth hormones					.945	
Subjective Norm						.834
Q17: People that are important to me would like me to consider buying organic food						
Q21: My family would me to have organic food purchasing plans						.633

Table 4.9: (con)Exploratory factor analysis EFA

	Factor: 1	Factor: 2	Factor: 3	Factor: 4	Factor: 5	Factor: 6
Organic food brand awareness				.754		
Q22: I know what an organic food is						
Q23: I'm familiar with the term of organic food				.999		
Purchase Intention						
Q24: I'm willing to buy organic food while shopping		.915				
Q25: I will make an effort to buy organic food in the near future		.868				
Q26: I intend to buy organic food products because they are more environmentally friendly		.965				

4.6 Confirmatory factor analysis CFA:

Confirmatory Factor Analysis “tests the significance of a hypothesized factor model, whether the sample data confirm that model or not, for a prior specified theoretical model CFA specifies a certain number of factors, which group of them are correlated and which observed variables measure each factor” (Schumacker & Lomax, 2010). It works on confirming the relationship between the observed factors and their latent factor, it also checks and evaluates the regression paths that connect the variables.

CFA Starts by getting a model fit, using AMOS, a CFA model was created to reach the appropriate model fit, some analysis was conducted. This analysis includes crating covariance between questions and removing other questions to get a fit model as shown in figure 4.3.

CFA model fit is determined by these measures:

- CMIN/DF (Chi-Square Mean / Degree of Freedom): which has to be between 3 and 1 (Hooper, et al., 2008).

- CFI (Comparative Fit Index): which has to be greater than or equal to 0.95 (Hooper, et al., 2008)
- RMSEA (Root Mean Square Error of Approximation): which has to be less than or equal to 0.06 (Hooper, et al., 2008; Hu & Bentler, 1999).
- PCLOSE (Root Mean Square Error of Approximation associated p-value): which has to be greater than or equal to 0.05 (value ≥ 0.05) (Hu & Bentler, 1999)

The final results of the CFA model fit analysis for this research are explained below:

Table 4.10: CFA model fit results and interpretation

Measure	Standard fit	Result	Interpretation
CMIN/DF	(3 $\geq$ value $\geq$ 1)	1.848	Good Fit
CFI	(value $\geq$ 0.95)	.976	Good Fit
RMSEA	(0.06 $\geq$ value)	.053	Good Fit
PCLOSE	(value $\geq$ 0.05)	.310	Good Fit

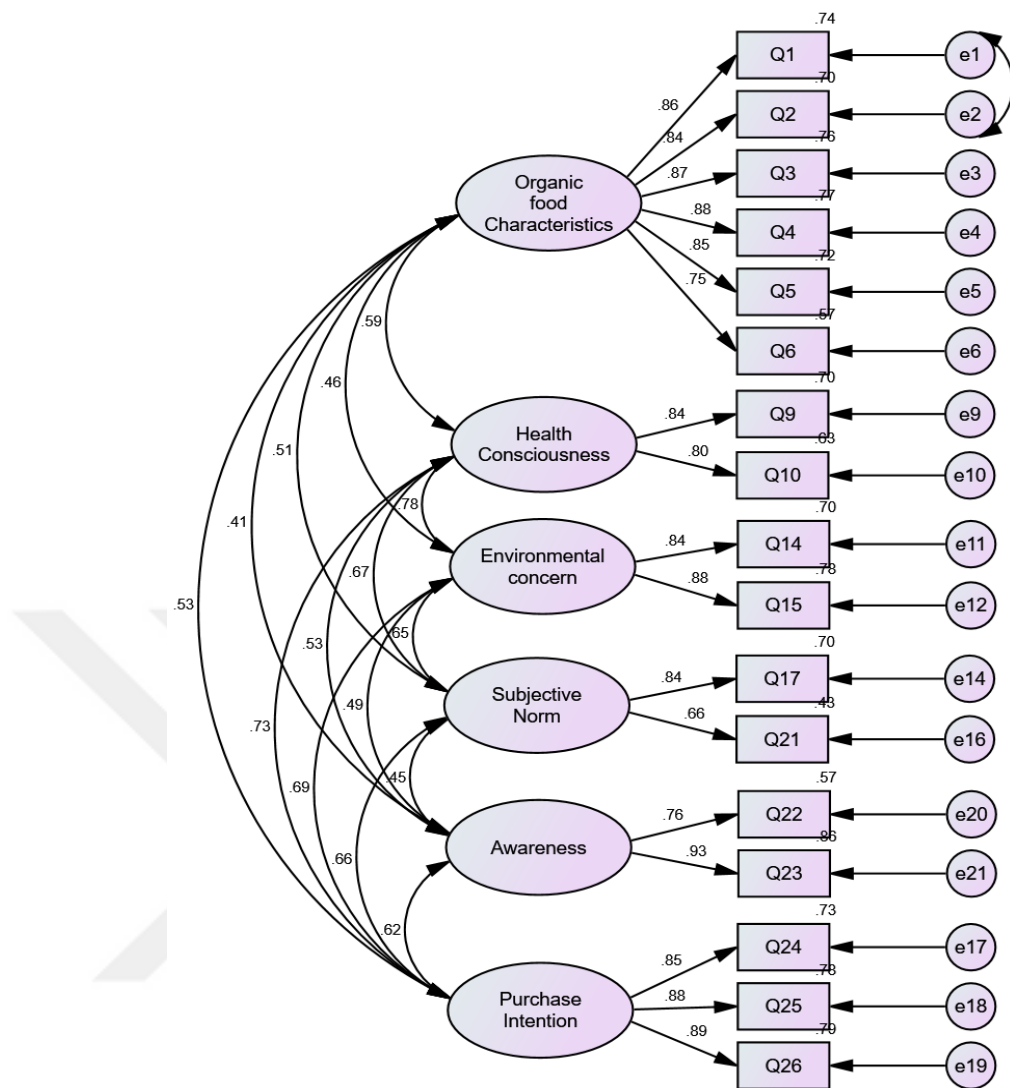


Figure 4.3: CFA Model

4.7 Reliability and Validity Assessment

Reliability: “is the level that the test scores are free from measurement error or the elements of errors that occur when testing something” (Muijs, 2004), it tests the consistency of analysis results over groups of people or over the same person at different times (Smith & Albaum, 2010). It has to be above 0.70 for the measurement to be reliable.

Validity: “lead to answer the question, are we measuring what we are willing to measure? So, it works on confirming if the variables are being measured accurately or not, especially the variables that can’t be measured directly (latent variables)” (Muijs, 2004). Validity can be divided into Convergent Validity which indicates “to what level two measures of the same variable are

correlated”, and Discriminant Validity which indicates “to what level two conceptually similar concepts are separated” (Hair Jr, et al., 2014).

To get an accepted validity you have to get an Average Variance Extracted higher than or equal to 0.5 and a Maximum Shared Variance that is less than the Average Variance Extracted (Ghaleb & Kaplan, 2019; Gefen & Straub , 2005).

The results of the reliability and validity assessment shown in table 4.11 show that there is accepted reliability and validity for the research variables.

Table 4.11: Reliability and validity

	CR	AVE	MSV	MaxR(H)	PN	OfC	HC	EC	SN	BA
Purchase Intention (PN)	0.906	0.762	0.527	0.907	0.873					
Organic food Characteristics (OfC)	0.936	0.711	0.342	0.940	0.526	0.843				
Health Consciousness (HC)	0.801	0.668	0.608	0.804	0.726	0.585	0.817			
Environmental Concern (EC)	0.849	0.738	0.608	0.853	0.686	0.455	0.780	0.859		
Subjective Norm (SN)	0.720	0.566	0.449	0.755	0.659	0.513	0.670	0.649	0.752	
Awareness (BA)	0.835	0.718	0.386	0.886	0.621	0.413	0.526	0.495	0.448	0.84

7

4.8 SEM Hypotheses Testing

Structural Equation Modeling works on analyzing and evaluating the relations of the hypothesized latent variables. It is “a multivariate statistical analysis technique that is used to analyze structural relationships that are considered as a combination of factor analysis and multiple regression analysis, and it is used to analyze the structural relationship between measured variables and latent constructs” (Byrne, 2016). “It is a powerful technique that can combine complex path models with latent variables and help to specify confirmatory factor analysis models, regression models, and complex path models” (Hox & Bechger , 1999).

Using SPSS AMOS, the hypothesis structural model was created, this model shows the relation between the research latent variables where several regression equations take place. The model shows the direct effect between independent and dependent variables and the indirect relation between independent and dependent variables with mediator variables.

The hypothesis structural model which shows the independent and dependent variables with their factors loading is shown in figure 4.4.

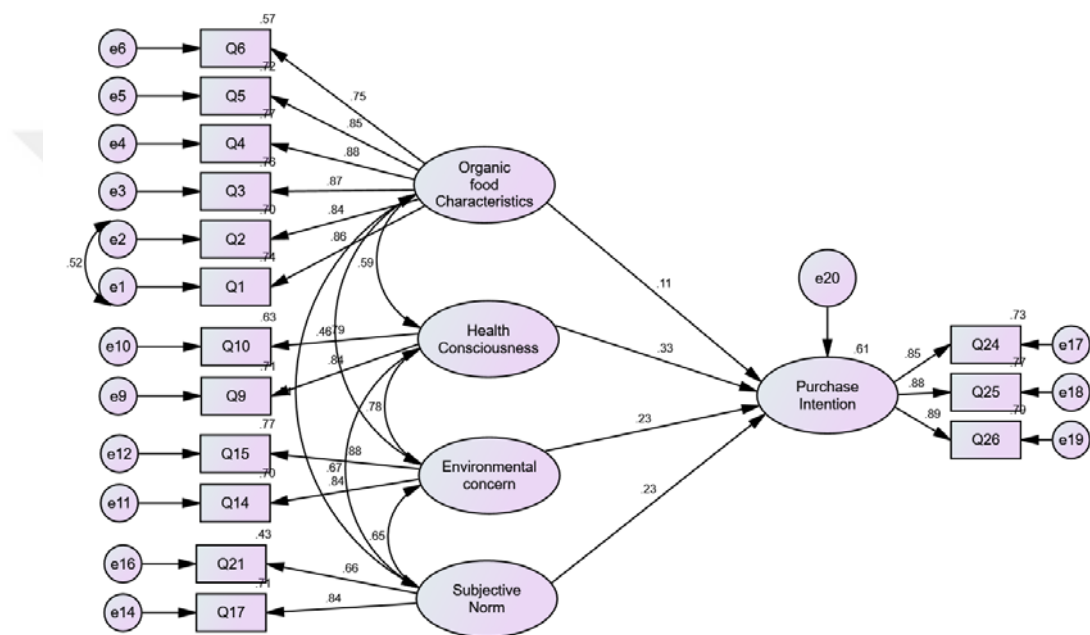


Figure 4.4: Hypothesis structural model

There are three steps to be done before testing the hypothesis, and it is not acceptable to go forward to the next step before getting accepted results in the first step, these steps are Model fit, R-squared calculation, and P-value calculation.

Getting an accepted model fit for the hypothesis structural model is important, then to get an accepted R-squared value, after that the P-value can be evaluated to test the hypothesis, as shown in figure 4.5

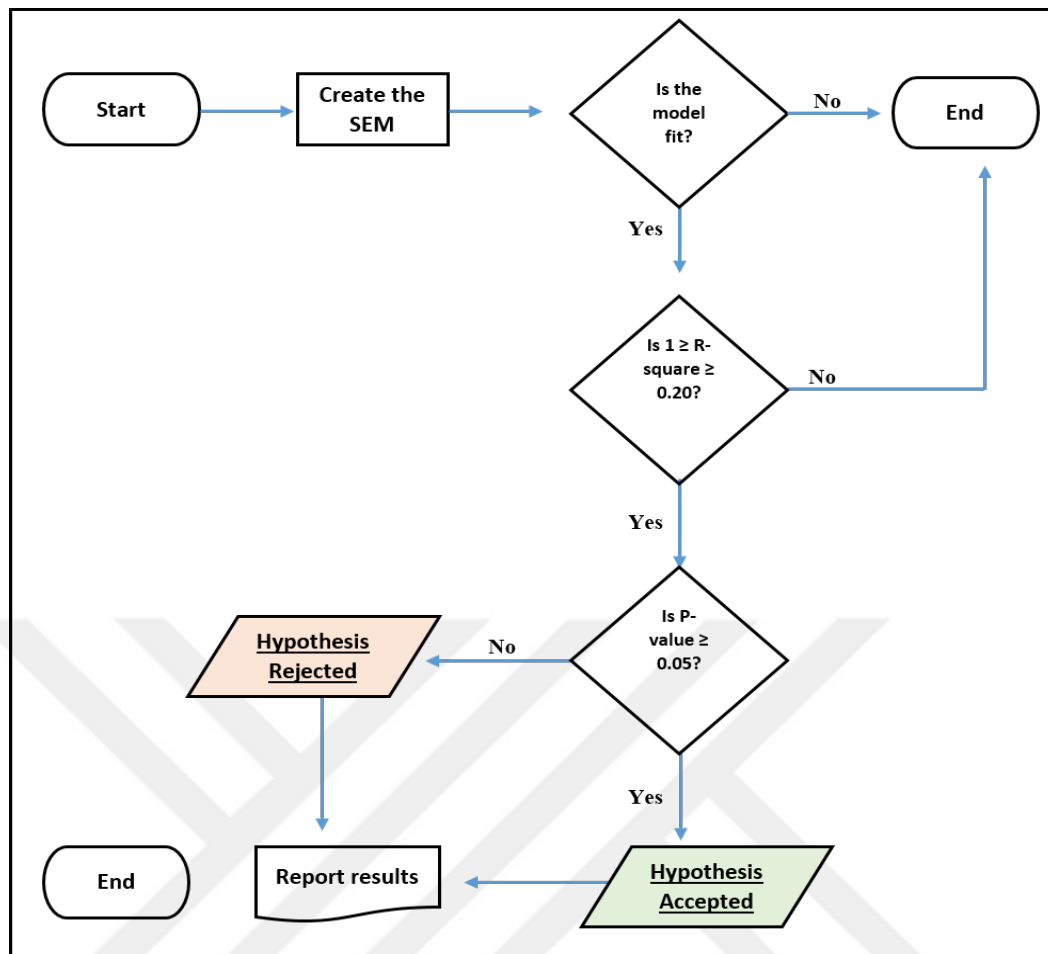


Figure 4.5: SEM hypothesis testing steps

Source: Ghaleb, 2019.

The same rules of CMIN/DF, CFI, RMSEA, and PCLOSE in the CFA analysis will be implemented in SEM Hypotheses Testing Model to determine its model fit status, as shown below:

Table 4.12: SEM model fit results and interpretation

Measure	Standard fit	Result	Interpretation
CMIN/DF	$(3 \geq \text{value} \geq 1)$	1.592	Good Fit
CFI	$(\text{value} \geq 0.95)$	.986	Good Fit
RMSEA	$(0.06 \geq \text{value})$	.045	Good Fit
PCLOSE	$(\text{value} \geq 0.05)$	.719	Good Fit

This will lead to concluding that fitted SEM is available and the first testing criteria is fulfilled, and the evaluation of the R-square results can be done.

After getting a model fit the R-squared must be calculated. It represents the percentage of variance that is reflected by the variable predictors of the questions, it is usually between 0% and 100%, and the higher the value the better the sample data matches the model (Byrne, 2010).

R-squared for Purchase intention is 0.61 which leads to calculating the P-value for testing the hypotheses.

P-value can be determined. it is the indicator of accepting or rejecting the null hypothesis H_0 (Carvalho & Chima, 2014), it has a cutoff point of accepting or rejecting the null hypothesis as long as it is less than 0.05 the null hypothesis H_0 will be rejected (Hair Jr, et al., 2014).

4.8.1 Hypothesis results (Direct effect)

The First four hypotheses of this research are testing the direct effect from the independent variable to a dependent variable are:

- H1. Organic food characteristics will positively affect the purchase intention of organic food products.
- H2. Health consciousness will positively affect the purchase intention of organic food products.
- H3. Subjective norms will positively affect the purchase intention of organic food products.
- H4. Environmental concern will positively affect the purchase intention of organic food products.

The results of their testing are shown below:

Table 4.13: Direct effect hypotheses testing results:

Direct effect								
					Estimate	S.E.	C.R.	P
H1	Organic food Characteristics	--->	Purchase Intention		0.091	0.05	1.811	0.070
H2	Subjective Norm	--->	Purchase Intention		0.234	0.087	2.68	0.007
H3	Environmental Concern	--->	Purchase Intention		0.221	0.092	2.39	0.017
H4	Health Consciousness	--->	Purchase Intention		0.339	0.119	2.841	0.004

According to the P-value results shown in table 4.13, it is concluded that:

- There is no direct effect of organic food characteristics on organic food purchase intention.
- There is a direct effect of subjective norm on organic food purchase intention.
- There is a direct effect of environmental concern, on organic food purchase intention.
- There is a direct effect of health consciousness, on organic food purchase intention.

4.8.2 Hypothesis results (Moderating effect)

The fifth, sixth, seventh, and eighth hypotheses of this research are testing the moderating effect of organic food awareness between independent and dependent variable they are:

- H5. Awareness moderates the effect of Organic food characteristics on the purchase intention of organic food products.

- H6. Awareness moderates the effect of Health consciousness on purchase intention of organic food products.
- H7. Awareness moderates the effect of Subjective norm on the purchase intention of organic food products.
- H8. Awareness moderates the effect of Environment concern on purchase intention of organic food products.

Since there is no direct effect from organic food characteristics on organic food purchase intention, no moderating effect for this variable is going to be tested and the fifth hypothesis will be rejected directly. Hypothesis structural model which shows the moderating variable effect between intendants and dependent with their factors loading are shown in figure 5.5.



Figure 4.6:Hypothesis structural model – The Moderating effect

The same rules of CMIN/DF, CFI, RMSEA, and PCLOSE in the CFA analysis will be implemented in SEM Hypotheses Testing Model that includes the moderating effect to determine its model fit status, as shown below:

Table 4.14: SEM model fit results and interpretation

Measure	Standard fit	Result	Interpretation
CMIN/DF	($3 \geq \text{value} \geq 1$)	1.702	Good Fit
CFI	($\text{value} \geq 0.95$)	.988	Good Fit
RMSEA	($0.06 \geq \text{value}$)	.049	Good Fit
PCLOSE	($\text{value} \geq 0.05$)	.570	Good Fit

This will lead to concluding that fitted SEM is available and the first testing criteria is fulfilled, and the evaluation of the R-square results can be done.

R-squared for Purchase intention during the availability of the moderating effect is 0.84 which leads to calculating the P-value for testing the hypotheses.

The P-value is calculated for the sixth, seventh and eighth, the results are shown in the table below:

Table 4.15: Moderating effect hypotheses testing results:

Direct effect					Estimate	S.E.	C.R.	P
H5	Organic food Characteristics X Awareness	--->	Purchase Intention		----	----	----	----
H6	Subjective Norm X Awareness	--->	Purchase Intention		-0.098	0.063	-1.561	0.119
H7	Environmental Concern X Awareness	--->	Purchase Intention		-0.104	0.068	-1.52	0.128
H8	Health Consciousness X Awareness	--->	Purchase Intention		-0.043	0.033	-1.303	0.193

According to the P-value results shown in table 4.15, it is concluded that:

- H5. Awareness does not moderate the effect of Organic food characteristics on the purchase intention of organic food products.

- H6. Awareness does not moderate the effect of Health consciousness on the purchase intention of organic food products.
- H7. Awareness does not moderate the effect of Subjective norms on the purchase intention of organic food products.

H8. Awareness does not moderate the effect of Environment concern on the purchase intention of organic food products.



5. CONCLUSION

The main purpose of studying the factors affecting the intention to buy organic foods is to help understand the factors that direct consumers to buy these foods more. This study focused on knowing the role of the characteristics of the organic food product, subjective norm, health consciousness, and the environmental concerns factor in the intention of consumers to purchase organic foods. This study also examined the moderating role of organic food brand awareness in the relationship between these factors and purchase intention.

We found that the characteristics of the organic product did not affect the consumer's intention to purchase organic food in Yemen, Therefore, the role of the moderating factor has not been studied about this independent variable due to the lack of relationship.

On the other hand, we find that there is a positive relationship between health consciousness and purchase intention, and this is consistent with the results of studies such as the study conducted by Krystallis & Chrysosoidis (2005), Millock et al. which demonstrated a positive relationship between the intention to purchase these products and health consciousness. Also, we find a strong relationship between subjective norm and purchase intention. Finally environmental concern was considered as significance and this implies that consumer will lead to buy organic food products when they know about its benefits for the environment and this result is contradict with the results of the study conducted by M. Asif et al 2018.

In view of the existence of this relationship, the role of the moderating factor (organic food brand awareness) and its impact on the relationship between these factors and purchase intention was tested. In a quick look at the results that we obtained by using the Amos program to study the role of the moderating factor, we found that this factor does not play a role in the relationship between these factors and the intention to buy organic food products, and this is consistent with studies conducted by M. Asif et al 2018.

Finally, this study provided a clear understanding of the nature of the relationship between the characteristics of the organic product, health consciousness, subjective

norms, and environmental concern on the one hand, and the intention to purchase organic food products on the other hand, by highlighting the role that these factors play in shaping this relationship. As a result, marketers must realize the importance of these factors to reach the optimal purchase intent for consumers.

5.1 Limitations

This study, like all previous studies, is not without limitations, so we find the following:

- This study was conducted in one geographical area, Yemen, which may limit the generalization of the results to other countries.
- This study examined the effect of four independent factors on the intention to buy organic food in Yemen. These factors are: Organic food characteristics, Health consciousness, Subjective norm, and environmental concern.
- This study focused on the role of the moderating factor of organic food brand awareness as a moderating variable in the relationship between intent to purchase organic food and independent factors.
- Finally, this study did not require specific criteria to test these relationships.

5.2 Recommendations

- Develop an appropriate and effective marketing strategy in Yemen based on the factors affecting the intention to buy organic food.
- Conducting an awareness campaign to inform people of the health and environmental benefits resulting from consuming organic food, which ultimately affects the intent to purchase these products and thus increase sales.
- Because of the lack of interest in organic agriculture in Yemen, we recommend policy makers to switch to organic farming for its environmental and health benefits.
- We recommend conducting similar studies with increasing sample size to obtain better results

5.3 Future work

The results of this study provide a strong basis for future work on the influence of some factors on the intent of consumers to purchase organic food in Yemen. One of the areas of future work is the gradual shift from traditional agriculture to organic farming because of its great health and environmental benefits. The results of the study can also be applied to other geographical areas.



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APPENDIX

APPENDIX A Foreign Language Anxiety Scale

APPENDIX B Ethical Approval Form



APPENDIX A: Questionnaire

- **Do you intent to buy organic food products?**

Yes

No

Part 1: Demographic data

Gender

Male

Female

Age

Less than 18 years old

18-24 years

25-34 years

35-44 years

45 years old or more

Occupation

Student

Public Staff

Private Section Staff

Self-Employment

Retired

Unemployed

Marital Status

Married

Single

Education Level

Primary

High School

2Years graduate

Bachelor

Graduate

Income Level

50000 YR or less

51000-100000 YR

101000-150000 YR

151000-200000 YR

More than 200000 YR

Part 2: Research Questionnaire

A. Organic food Characteristics

1. Organic foods are healthy.

Strongly disagree

Disagree

Neither agree nor disagree

Agree

Strongly agree

2. Organic foods are having high nutritional value.

Strongly disagree

Disagree

Neither agree nor disagree

Agree

Strongly agree

3. Organic foods are free from chemical pesticides and fertilizer.

Strongly disagree

Disagree

Neither agree nor disagree

Agree

Strongly agree

4. Organic foods are produced with environmentally / animal friendly techniques.

Strongly disagree

Disagree

Neither agree nor disagree

Agree

Strongly agree

5. Organic foods are free from genetically modified organisms (GMO).

Strongly disagree

Disagree

Neither agree nor disagree

Agree

Strongly agree

6. All products coming from organic agriculture are certified.

Strongly disagree

Disagree

Neither agree nor disagree

Agree

Strongly agree

B. Health Consciousness

7. My health is very important to me.

Strongly disagree

Disagree
Neither agree nor disagree
Agree
Strongly agree

8. Conventional foods are as healthy as organic foods.

Strongly disagree
Disagree
Neither agree nor disagree
Agree
Strongly agree

9. Organic foods are natural and therefore better for my health.

Strongly disagree
Disagree
Neither agree nor disagree
Agree
Strongly agree

10. Organic foods are healthier because they have no/less growth hormones additives and antibiotics.

Strongly disagree
Disagree
Neither agree nor disagree
Agree
Strongly agree

11. Organic foods are healthier because they have no/less chemical residues.

Strongly disagree
Disagree
Neither agree nor disagree
Agree
Strongly agree

C. Environmental concern

12. The environment should be protected through environmentally friendly farming methods.

Strongly disagree
Disagree
Neither agree nor disagree
Agree
Strongly agree

13. The production of conventional food does not harm the environment.

Strongly disagree
Disagree
Neither agree nor disagree

Agree
Strongly agree

14. Organic food production is better for the environment because it uses no/less chemical residues.

Strongly disagree
Disagree
Neither agree nor disagree
Agree
Strongly agree

15. Organic food production is better for the environment because it uses no/less growth hormones.

Strongly disagree
Disagree
Neither agree nor disagree
Agree
Strongly agree

16. Organic food production practices are better for the environment than conventional farming methods.

Strongly disagree
Disagree
Neither agree nor disagree
Agree
Strongly agree

D. Subjective Norm

17. People that are important to me would like me to consider buying organic food.

Strongly disagree
Disagree
Neither agree nor disagree
Agree
Strongly agree

18. Most people who influence what I do, think that I should not intend to buy organic food.

Strongly disagree
Disagree
Neither agree nor disagree
Agree
Strongly agree

19. It is good for me to consider buying organic food.

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

20. I think it is not important to consider buying organic food.

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

21. My family would me to have organic food purchasing plans.

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

E. Organic food brand awareness

22. I know what an organic food is.

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

23. I'm familiar with the term of organic food.

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

F. Purchase Intention

24. I'm willing to buy organic food while shopping.

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

25. I will make an effort to buy organic food in the near future.

Strongly disagree

Disagree

Neither agree nor disagree

Agree

Strongly agree

26. I intend to buy organic food products because they are more environmentally friendly.

Strongly disagree

Disagree

Neither agree nor disagree

Agree

Strongly agree

APPENDIX B Ethical Approval Form



RESUME

Personal Information

Name: Abdulfattah Ahmed Yahya

Last Name: Al-Abarah

Education Background:

Education Background	University or Institute	Location	Years
Bachelor's in Agricultural Engineering (Food Science)	Aleppo University	Syria	2006-2011
Master in Business Administration (MBA)	Istanbul Aydin University	Turkey	2018-2021
English Preparatory Program	Istanbul Aydin University	Turkey	2018
diploma in English language	Modern British Institute	Yemen	2004-2005
Secretarial Diploma in Computer	Emirates Computer Center	Yemen	2004
Applies Programs Sessions	Emirates Computer Center	Yemen	2004

Work Experience:

2012-2015 Customer Service at Al-Kuraimi Bank in Yemen.

Languages:

-Arabic: Native Language

-English: Very Good

Skills:

-Communication, Teamwork, Problem Solving.

- Computer skills (Microsoft Office) and others.