THE FACTORS EFFECTING ORGANIC FOOD PURCHASE INTENTION WITH THE MODERATION ROLE OF AWARENESS (IN YEMEN)

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ABSTRACT
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, 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: Customers, Purchase, Intention, Organic, Food, Awareness.

I. INTRODUCTION
Organic production is an ecological agriculture growth management system that enhances and promotes soil biological activities, biological cycles, and biodiversity. 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).

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).

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 organic food purchase intention. 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:

1. Is there a relationship between purchase intention and organic food characteristics
2. Is there a relationship between purchase intention and health consciousness
3. Is there a relationship between purchase intention and subjective norms
4. Is there a relationship between purchase intention and environmental concern
5. Is there a relationship between purchase intention and organic food awareness as a moderating affect

1.3 Research questions

1- Is there a significant relationship between organic food characteristics and the intent to purchase these products?
2- Is there any other factors that control consumer intent to buy organic food products?
3- 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.

II. LITERATURE REVIEW

2.1 Background
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.

2.2 Concept of purchase intention
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).

2.3 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 (Ferraris et al., 2019).

Some purchase intention approaches may come from search marketing, widely recognized as search engine optimization and search engine marketing. 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 (Ferraris et al., 2019). 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).

2.4 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. 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).

2.5 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 hysteresis 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. 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 (Ramya& Ali, 2016).

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).

2.6 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 (Paul et al., 2016). 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. 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 (Paul et al., 2016).

2.7 Theories of Purchase Intention

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).

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. 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). 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).
perception of different groups of people, family members, and colleagues may influence consumer's behavioral intentions (Shin & Hancer, 2016). 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 (Konuk, 2019).

2.8 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).

III. 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: \( Z \times \sqrt{\frac{P(1-P)}{n}} \) (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 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 R. Yadav, G.S. Pathak 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.

### IV. RESULTS AND ANALYSIS

#### 4.1 Simple Percentage Analysis

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

**Table 4.1: Gender Q1**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>210</td>
<td>70.2%</td>
</tr>
<tr>
<td>Female</td>
<td>89</td>
<td>29.8%</td>
</tr>
<tr>
<td>Total</td>
<td>299</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

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 4.2: Age Q2**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 18 years old or less</td>
<td>9</td>
<td>3.0%</td>
</tr>
<tr>
<td>From 18-24</td>
<td>114</td>
<td>38.1%</td>
</tr>
<tr>
<td>From 25-34</td>
<td>109</td>
<td>36.5%</td>
</tr>
<tr>
<td>From 35-44</td>
<td>50</td>
<td>16.7%</td>
</tr>
<tr>
<td>From 45 years old or more</td>
<td>17</td>
<td>5.7%</td>
</tr>
</tbody>
</table>
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 4.3: Occupation Q3**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployed</td>
<td>12</td>
<td>4.0%</td>
</tr>
<tr>
<td>Student</td>
<td>163</td>
<td>54.5%</td>
</tr>
<tr>
<td>Self-Employment</td>
<td>33</td>
<td>11.0%</td>
</tr>
<tr>
<td>Public Staff</td>
<td>32</td>
<td>10.7%</td>
</tr>
<tr>
<td>Private Section Staff</td>
<td>59</td>
<td>19.7%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>299</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

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

**Table 4.4: Marital status Q4**

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>158</td>
<td>52.8%</td>
</tr>
<tr>
<td>Married</td>
<td>141</td>
<td>47.2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>299</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

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 4.5: Education Status Q5**

<table>
<thead>
<tr>
<th>Education Status</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>High School</td>
<td>43</td>
<td>14.4%</td>
</tr>
<tr>
<td>2 Years graduate</td>
<td>14</td>
<td>4.7%</td>
</tr>
<tr>
<td>Bachelor</td>
<td>178</td>
<td>59.5%</td>
</tr>
<tr>
<td>Graduate</td>
<td>63</td>
<td>21.1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>299</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

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

**Table 4.6: Income Level Q6**

<table>
<thead>
<tr>
<th>Income Level</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>50,000 YR or less</td>
<td>131</td>
<td>43.8%</td>
</tr>
<tr>
<td>51,000-100,000 YR</td>
<td>63</td>
<td>21.1%</td>
</tr>
<tr>
<td>101,000-150,000 YR</td>
<td>36</td>
<td>12.0%</td>
</tr>
<tr>
<td>151,000-200,000 YR</td>
<td>26</td>
<td>8.7%</td>
</tr>
<tr>
<td>More than 200,000 YR</td>
<td>43</td>
<td>14.4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>299</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
4.2 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.

4.3 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.

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

![Normality Assessment](image)

**Figure Error! No text of specified style in document..1: Normality assessment**

Making sure that there is no Skew and Kurtosis is important during the normal distribution assessment.

- 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, it can be concluded that there is no Skew and Kurtosis.

4.4 Exploratory factor analysis EFA:

<table>
<thead>
<tr>
<th>Organic food Characteristics Q1: Organic foods are healthy</th>
<th>Factor: 1</th>
<th>Factor: 2</th>
<th>Factor: 3</th>
<th>Factor: 4</th>
<th>Factor: 5</th>
<th>Factor: 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic food Characteristics Q2: Organic foods are having high nutritional value</td>
<td>.887</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organic food Characteristics Q3: Organic foods are free from chemical pesticides and fertilizers</td>
<td>.885</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organic food Characteristics Q4: Organic foods are produced with environmentally / animal friendly techniques</td>
<td>.907</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organic food Characteristics Q5: Organic foods are produced with sustainable farming techniques</td>
<td>.949</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table Error! No text of specified style in document..7: Skew and Kurtosis calculation**
Organic food Characteristics Q5: Organic foods are free from genetically modified organisms (GMO) .867
Organic food Characteristics Q6: All products coming from organic agriculture are certified .718
Health Consciousness Q7: My health is very important to me .624
Health Consciousness Q8: Conventional foods are as healthy as organic foods .631
Health Consciousness Q9: Organic foods are natural and therefore better for my health .733
Health Consciousness Q10: Organic food are healthier because they have no/fewer growth hormones additives and antibiotics .501
Environmental concern Q14: Organic food production is better for the environment because it uses no/less chemical residues .602
Environmental concern Q15: Organic food production is better for the environment because it uses no/less growth hormones .945
Subjective Norm Q17: People that are important to me would like me to consider buying organic food .834
Subjective Norm Q21: My family would me to have organic food purchasing plans .633

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

4.5 Confirmatory factor analysis CFA:
The final results of the CFA model fit analysis for this research are explained below:
4.6 SEM Hypotheses Testing

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.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Standard fit</th>
<th>Result</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMIN/DF</td>
<td>(3 ≥ value ≥ 1)</td>
<td>1.848</td>
<td>Good Fit</td>
</tr>
<tr>
<td>CFI</td>
<td>(value ≥ 0.95)</td>
<td>0.976</td>
<td>Good Fit</td>
</tr>
<tr>
<td>RMSEA</td>
<td>(0.06 ≥ value)</td>
<td>0.053</td>
<td>Good Fit</td>
</tr>
<tr>
<td>PCLOSE</td>
<td>(value ≥ 0.05)</td>
<td>0.310</td>
<td>Good Fit</td>
</tr>
</tbody>
</table>

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 H0 (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 H0 will be rejected (Hair Jr, et al., 2014).

4.7 Hypothesis Results (Direct effect)

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Direct effect Hypothesis Testing Results:</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Organic food Characteristics --- Purchase Intention</td>
</tr>
<tr>
<td>H2</td>
<td>Subjective Norm --- Purchase Intention</td>
</tr>
<tr>
<td>H3</td>
<td>Environmental Concern --- Purchase Intention</td>
</tr>
<tr>
<td>H4</td>
<td>Health Consciousness --- Purchase Intention</td>
</tr>
</tbody>
</table>

According to the P-value results shown in table 5.13, 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 Hypothesis Results (Moderating effect)

<table>
<thead>
<tr>
<th>Direct effect</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>H5 Organic food Characteristics X Awareness ---</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>H6 Subjective Norm X Awareness ---</td>
<td>0.098</td>
<td>0.063</td>
<td>-1.561</td>
<td>0.119</td>
</tr>
<tr>
<td>H7 Environmental Concern X Awareness ---</td>
<td>0.104</td>
<td>0.068</td>
<td>-1.52</td>
<td>0.128</td>
</tr>
<tr>
<td>H8 Health Consciousness X Awareness ---</td>
<td>-0.043</td>
<td>0.033</td>
<td>-1.303</td>
<td>0.193</td>
</tr>
</tbody>
</table>

According to the P-value results shown in table 5.15, 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.

V. 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 & Chryssohoïdis (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.

5.2 Limitations
This study, like all previous studies, is not without limitations, so we find the following:
1. This study was conducted in one geographical area, Yemen, which may limit the generalization of the results to other countries.
2. 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.
3. 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.
4. Finally, this study did not require specific criteria to test these relationships.

5.3 Recommendations
1. Develop an appropriate and effective marketing strategy in Yemen based on the factors affecting the intention to buy organic food.
2. 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.
3. 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.
4. We recommend conducting similar studies with increasing sample size to obtain better results.

VI. REFERENCES


