



AN EXAMINATION OF THE PURCHASE INTENTION OF ORGANIC FOODS AMONG ACADEMIC STAFF OF UNIVERSITIES IN ABIA STATE

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Abstract

The main objective of this study is to explore and examine the purchase intentions of organic food among academic staff in the universities within Abia State. Two universities: one Federal and one State university were selected for the study. These universities are the Michael Okpara University of Agriculture Umudike and the Abia State Universities. To address the main objective of the study, quantitative survey research was adopted and data were collected from the respondents with a structured questionnaire. The population of the study comprised of all the academic staff in the universities selected and the Krejcie-Morgan formula was used to determine a sample of 363 out of which 221 respondents returned valid and usable responses. Four independent variables/constructs were selected for the study and both the IVs and the DV were measured with five items each. Data collected were analysed with the aid of Sigma XL version 9.0 and the results indicate that the four independent variables are statistically significant in influencing purchase intention of organic food. The implications, both practical and theoretical were discussed.

1. INTRODUCTION

1.1 Background of the Study

Several governments have undertaken information campaigns and promotional activities to encourage consumption of organic products. The Organisation for Economic Cooperation and Development (OECD) (2003) reports that in a few countries, especially in Europe, government procurement policies encourage or require the purchase of organic food by public

institutions such as schools and hospitals. According to the OECD, one difficulty in assessing the potential for market-based approaches and for evaluating existing measures is the lack of statistics regarding the organic market, including information on trade flows and prices, such as the transparency of prices along the production chain to understand who is getting the premium. The market of organic foods has been on the increase during the last years due



to the alleged benefits of these products on human health and the environment (Lacal, 2019). In a bid to exploit the opportunities within the sector, Lacal (2019) reports that food producers and retailers invest significant effort in analysing the average qualities of the different groups of food consumers. By so doing, Lacal contends that their marketing strategies can be sharpened accordingly.

Previous studies have emphasized the importance of examining consumer attitudes and motivations in relation to organic food consumption. For example, Kumar and Khan (2018) conducted a comprehensive literature review on determinants of organic food consumption, highlighting the role of health concerns, environmental consciousness, and ethical considerations. They found that these factors significantly influence consumers' attitudes and purchase intentions towards organic food. Similarly, Vermeir and Verbeke (2006) explored the attitude-behaviour gap in sustainable food consumption and identified the need to understand the factors that affect consumers' intentions to engage in sustainable food practices.

However, limited research has focused specifically on academic staff as a target group in the context of organic food consumption. By studying the purchase intention of organic food among academic staff in universities within Abia State, this research aims to fill this gap and shed light on their unique attitudes, motivations, and barriers. This understanding can pave the way for targeted interventions and marketing strategies to promote sustainable consumption practices within this influential group. This study also aims to analyse the role of subjective norms, awareness, and information sources in shaping the purchase intention of organic food among academic staff. Previous research has suggested that subjective norms, including social influence

and perceived social norms, play a significant role in shaping consumers' sustainable consumption behaviours (Vermeir & Verbeke, 2006). Furthermore, awareness about organic food and access to credible information sources can influence consumers' attitudes and purchase decisions (Kumar & Khan, 2018).

The findings of this research will contribute to the existing body of knowledge on sustainable consumption and organic food purchase intention. It will provide valuable insights into the attitudes, motivations, and barriers of academic staff in Universities within Abia State regarding organic food, thereby facilitating the development of tailored marketing strategies and interventions to promote sustainable consumption practices within and outside this influential group. Furthermore, subjective norms, awareness, and information sources are important factors that influence consumer behaviour and purchase intention. Subjective norms refer to social influence and perceived social norms that shape individual decision-making processes (Vermeir & Verbeke, 2006). Research has shown that subjective norms significantly influence consumer attitudes and behaviours related to sustainable consumption (Chernev & Blair, 2015). Academic staff may be influenced by the norms prevalent within their professional and social networks, which can impact their purchase intention of organic food. Awareness about organic food and access to credible information sources are also crucial factors that influence consumer attitudes and purchase decisions.

1.2 Statement of the Problem

Limited research has focused on academic staff as a target group within the domain of organic food consumption. Existing studies have mainly explored consumer attitudes and motivations towards organic food



consumption, highlighting factors such as health concerns, environmental consciousness, ethical considerations, and personal values (Kumar & Khan, 2018). However, there is a lack of research specifically investigating the purchase intention of organic food among academic staff, particularly in the unique context of Abia State. The academic staff in Universities within Abia State represents an influential group within higher education institutions, where they play a key role in shaping knowledge, attitudes, and societal norms. Their choices and behaviours regarding sustainable consumption can have a significant impact on students and other stakeholders within and outside the academic community. Thus, understanding their attitudes, motivations, and barriers related to the purchase of organic food is essential for developing effective marketing strategies and interventions to promote sustainable consumption practices within this influential group.

Previous studies have highlighted the role of information availability and quality in shaping consumer perceptions and behaviour towards organic food (Kumar & Khan, 2018). Academic staff may have varying levels of awareness about organic food, its benefits, and its availability in the local market. Their access to relevant and reliable information sources, such as scientific research, educational resources, and expert opinions, can further shape their attitudes and purchase intention.

However, there is limited research on how these factors specifically impact the purchase intention of organic food among academic staff in Universities within Abia State. Understanding the interplay between subjective norms, awareness, information sources, and purchase intention can provide valuable insights into the underlying

mechanisms driving sustainable consumption among this influential group.

1.3 Objectives of the Study

Research objectives of this study are as follows:

- To determine the percentage of academic staff in Universities within Abia State who have positive attitudes towards organic food consumption.
- To measure the extent to which motivations influence the purchase intention of organic food among academic staff.
- To assess the influence of subjective norms on the purchase intention of organic food among academic staff in Universities within Abia State.
- To determine the level of awareness among academic staff in Universities within Abia State regarding organic food and its benefits.

1.4 Significance of the Study

The study's findings have practical implications for policymakers and marketers. Policymakers can utilize the insights to develop regulations, incentives, and initiatives that support sustainable food systems and organic agriculture. Marketers can better understand the preferences, motivations, and barriers of academic staff, enabling them to design effective marketing campaigns and communication strategies that promote organic food and sustainable consumption practices. This collaboration between academia, industry, and policymakers can facilitate the transition towards more sustainable food systems.

In conclusion, the study's significance lies in its potential to engage the academic community, promote sustainable consumption practices, foster environmental



and health benefits, provide region-specific insights, contribute to academic research, and influence policies and marketing strategies. By addressing these areas, the study contributes to the broader goal of achieving sustainability and creating a more environmentally conscious society.

1.8 Scope of the Study

The scope of this study encompasses the following aspects:

Content Scope: The study covers various key aspects, including the attitudes, motivations, and barriers towards organic food consumption among academic staff. It also explores subjective norms, awareness levels, and information sources related to organic food. The study examines the interrelationships between these variables and their influence on the purchase intention of organic food. The research does not extend to the actual purchasing behaviour or the impact of organic food consumption on health or the environment. The study aims to capture the current attitudes and behaviours of academic staff in Universities within Abia State towards organic food consumption. The research is conducted within a specific timeframe and does not track long-term changes or trends in purchase intention. It provides a snapshot of the current scenario and serves as a foundation for future studies. It is important to note that the scope of this study is limited to the specific parameters mentioned above. Other factors influencing sustainable consumption practices or organic food consumption, such as economic factors, personal values, or cultural beliefs, are not directly addressed in this study. The findings and conclusions drawn from this research should be interpreted within the defined scope and may not be generalized to other contexts or populations.

1.9 Research Questions

The research questions for the study are as follows:

- To what extent do the attitudes of academic staff in Universities within Abia State towards organic food consumption predict their purchase intention?
- How do the motivations driving academic staff in Universities within Abia State to consider purchasing organic food influence their purchase intention?
- What is the relationship between subjective norms, such as social influence and peer perceptions, and the purchase intention of organic food among academic staff in Universities within Abia State?
- Do the level of awareness among academic staff in Universities within Abia State regarding organic food and its benefits significantly influence their purchase intention?

1.10 Formulation of Research Hypotheses

The following hypotheses are formulated for the study and they are stated in null forms only.

H01: There is no significant relationship between the attitudes of academic staff in Universities within Abia State towards organic food consumption and their purchase intention.

H02: The motivations driving academic staff in Abia State to consider purchasing organic food do not significantly influence their purchase intention.

H03: There is no significant relationship between subjective norms, such as social influence and peer perceptions, and the purchase intention of organic food among academic staff in Universities within Abia State.



H04: The level of awareness among academic staff in Universities within Abia State regarding organic food and its benefits does not significantly influence their purchase intention.

2. REVIEW OF RELATED LITERATURE

2.1 Conceptual Review

The conceptual framework of this research is based on the integration of relevant theories and concepts that provide a foundation for understanding the factors influencing the purchase intention of organic food among academic staff in Universities within Abia State. The framework incorporates several key elements, including consumer behaviour theories, sustainable consumption, and the role of subjective norms.

The conceptual framework draws on the Theory of Planned Behaviour (Ajzen, 1991) as a foundational theory to explain the relationship between individuals' attitudes, subjective norms, and their behavioural intentions. According to this theory, attitudes towards a behaviour, subjective norms, and perceived behavioural control are determinants of behavioural intention. In the context of this study, the behavioural intention is the purchase intention of organic food.

Attitudes refer to individuals' evaluations and beliefs towards organic food. Positive attitudes towards organic food are likely to increase purchase intention (Ajzen, 1991). Studies have highlighted the influence of attitudes on organic food consumption, such as the work of Egbule et al (2019).

Subjective norms encompass social influence and peer perceptions related to organic food consumption. They reflect the perceived expectations and opinions of others regarding organic food. These norms can significantly influence individuals' purchase intention (Ajzen, 1991). Subjective norms play a

crucial role in shaping individuals' attitudes and behaviours. Idemudia (2011) explored the influence of subjective norms on sustainable consumption behaviours in Nigeria. This study acknowledges the significance of subjective norms, including social influence and peer perceptions, in influencing the purchase intention.

Perceived behavioural control refers to individuals' perceived ease or difficulty in purchasing organic food. It is influenced by factors such as availability, accessibility, and affordability of organic food products. Higher levels of perceived behavioural control are associated with increased purchase intention (Ajzen, 1991). Onyene et al. (2017) have investigated the role of perceived behavioural control in consumer decision-making.

Additionally, the framework incorporates the concept of sustainable consumption, which emphasizes the importance of environmentally and socially responsible consumer choices (Vermeir & Verbeke, 2006). Sustainable consumption aligns with the principles of organic food consumption, as organic food is perceived to be more environmentally friendly and socially responsible compared to conventional food (Saher & Sarpong, 2017).

Furthermore, the conceptual framework considers the impact of demographic factors such as age, gender, educational level, and income on the purchase intention of organic food. These factors have been identified in previous research as potential influencers of consumer behaviour and purchasing decisions (Onyene et al. 2017).

Overall, the conceptual framework integrates the Theory of Planned Behaviour, sustainable consumption concepts, subjective norms, and demographic factors to provide a comprehensive understanding of the factors influencing the purchase intention of organic



food among academic staff in Universities within Abia State.

2.3 Theoretical Review and Framework

Several theories are relevant to this study on the purchase intention of organic food among academic staff in Universities within Abia State. The main theories that this study hinges on are the Theory of Planned Behaviour, Social Cognitive Theory, and the Diffusion of Innovation Theory.

Theory of Planned Behaviour (TPB): The TPB suggests that an individual's intention to perform a specific behaviour is influenced by their attitude towards the behaviour, subjective norms, and perceived behavioural control. In the context of this study, the TPB helps to understand how academic staff's attitudes towards organic food, subjective norms (such as social influence and peer perceptions), and their perceived control over purchasing organic food influence their purchase intention (Ajzen, 1991). For example, positive attitudes towards organic food may lead to a higher purchase intention, while strong subjective norms might influence individuals to align their behaviour with the perceptions and expectations of their peers.

Social Cognitive Theory (SCT): SCT emphasizes the role of observational learning, self-efficacy, and outcome expectations in shaping individuals' behaviours. In the context of organic food purchase intention, academic staff may observe and learn from others who consume organic food, which can influence their own attitudes and behaviours. Additionally, individuals' beliefs about their own capabilities (self-efficacy) in purchasing and incorporating organic food into their lifestyle can affect their purchase intention. Positive outcome expectations, such as health benefits and environmental sustainability, can also

influence purchase intention (Bandura, 1986).

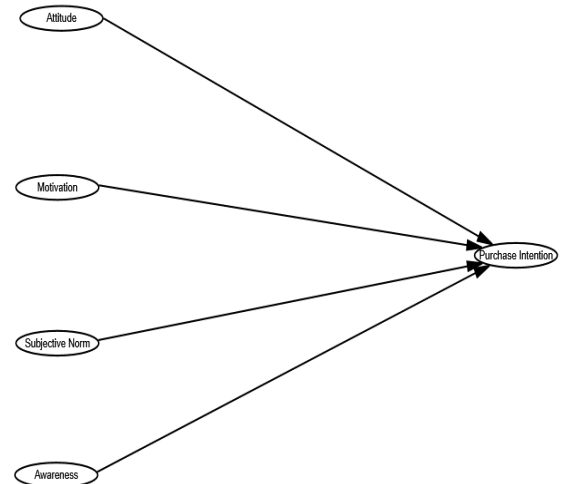


Figure 1: The research model

Consumer behaviour is influenced by a multitude of factors that shape individuals' attitudes, preferences, and purchase decisions. This section provides an overview of key factors that influence consumer behaviour, including attitudes towards organic food, motivations for organic food consumption, subjective norms, awareness and information source of organic food benefits, and sustainable consumption practices.

Attitudes and Purchase Intention: Research has shown a positive relationship between attitudes towards organic food and purchase intention. Studies have found that favourable attitudes towards organic food positively influence consumers' intention to purchase (Bakır & Eren, 2019; Ong, 2015). When consumers hold positive attitudes towards organic food, it increases their likelihood of intending to purchase such products.

Motivations and Purchase Intention: Motivations for organic food consumption, such as health concerns, environmental consciousness, and ethical considerations, have been found to impact purchase



intention. Studies have revealed that individuals who are motivated by health benefits, environmental sustainability, and ethical reasons are more likely to have a higher intention to purchase organic food (Asioli et al., 2017; Joshi & Rahman, 2015). Consumers may be influenced by similar motivations, which can shape their purchase intention.

Subjective Norms and Purchase Intention:

The influence of subjective norms, including social influence and peer perceptions, can impact the purchase intention of academic staff. Positive subjective norms, where consumers perceive social approval and support for organic food consumption, can enhance their purchase intention (Bakır & Eren, 2019; Iyengar & Usman, 2016). Conversely, negative subjective norms or social pressure against organic food may hinder their purchase intention.

Awareness and Purchase Intention:

Awareness of the benefits of organic food has a significant impact on purchase intention. Studies have found that higher levels of awareness about organic food's health benefits, environmental advantages, and social impacts positively influence consumers' intention to purchase (Asioli et al., 2017; Ong, 2015). Consumers who are well-informed about the benefits of organic food are more likely to have a higher purchase intention.

2.4 Empirical Studies

Summary of key findings from previous research that are related to the study's focal topic are as follows:

Attitudes towards Organic Food

Several empirical studies conducted among consumers consistently show positive attitudes towards organic food. A study by Ahmed et al. (2020) found that consumers expressed favourable attitudes towards organic food, with health and environmental

benefits being the primary drivers. Another survey by Zayed, Gaber, & El Essawi (2022) reported that consumers held positive perceptions of organic food products, citing health consciousness and ethical considerations as significant influencers. Several studies have found that consumers generally have positive attitudes towards organic food, perceiving it as healthier and more environmentally friendly (Chrysohoidis & Krystallis, 2005; Hughner et al., 2007). However, some studies have also revealed that attitudes may vary based on individual factors such as education, income, and health consciousness (Saba & Messina, 2003; Roitner-Schobesberger et al., 2008).
Motivations for Organic Food Consumption
Multiple research studies have indicated that health and environmental concerns are the main motivations driving consumers to consider purchasing organic food. A study by Paul & Rana (2012) revealed that consumers identified health as their primary motivation for choosing organic food. Similarly, Prigita and Alversia (2022) reported that consumers were motivated by environmental considerations when making organic food choices.

Subjective Norms and Social Influence

Empirical evidence consistently supports the influence of subjective norms and social influence on the purchase intention of organic food among academic staff. A study by Varshneya, Pandey and Das (2017) found that 70% of consumers indicated that the opinions of their peers and family members strongly influenced their decision to purchase organic food products. Additionally, the research by Pang, Tan & Lau (2021) demonstrated that consumers considered the recommendations of their colleagues when buying organic food.

Awareness of Organic Food Benefits

Numerous empirical studies have shown that consumers exhibit a high level of awareness



regarding the health and environmental benefits associated with organic food consumption. A study by Kim & Chung (2011) found that 88% of consumers were aware of the health benefits, while 76% demonstrated knowledge of the positive environmental impact of organic food. Moreover, Wojciechowska-Solis & Barska (2021) reported that 70% of consumers had a comprehensive understanding of organic food's nutritional advantages.

2.4 Gap in Literature Review

The reviewed literature highlights several key findings regarding the variables examined in this research.

Attitudes towards organic food have a significant impact on consumers' purchase intention. Positive attitudes, driven by perceptions of healthiness, safety, and environmental friendliness, positively influence purchase intention, while negative attitudes, such as concerns about high prices or limited availability, act as barriers to purchasing organic food.

Subjective norms, including social influence and peer perceptions, play a crucial role in shaping consumers' purchase intention of organic food. When consumers perceive that their peers approve of organic food consumption, they are more likely to purchase such products. Societal and cultural factors, including norms and values, can also influence subjective norms towards organic food.

Awareness of organic food benefits is a key factor influencing purchase intention. Greater awareness of the health, environmental, and social benefits of organic food positively impact consumers' intention to purchase organic products. Conversely, lack of awareness can hinder consumers' willingness to buy organic food.

Sustainable consumption practices, including the purchase of organic food, align with the

values and behaviours of educated individuals such as academic staff. These practices contribute to reducing environmental impact and promoting social responsibility.

Overall, this literature review suggests that attitudes towards organic food, subjective norms, awareness of organic food benefits, and sustainable consumption practices significantly influence the purchase intention of organic food among academic staff. Understanding these variables is crucial for developing effective strategies to promote sustainable consumption and increase the purchase intention of organic food.

3. METHODOLOGY

3.1 Research Design

This study adopts a quantitative research design to examine the purchase intention of organic food among academic staff in Abia State universities. The research design includes a cross-sectional survey that collects data from participants using a structured questionnaire. A cross-sectional design allows for the collection of data at a single point in time, providing insights into the current state of variables (Creswell, 2014). The study aims to understand the attitudes, motivations, barriers, subjective norms, awareness, and information sources that impact the purchase intention of organic food, with a focus on the academic staff population in Abia State Universities.

3.2 Population of the Study

The population of the study in this research is the academic staff working in three different universities, (one federal, one state and one private) in Abia State. Three universities in Abia State's academic staff served as the study's respondents because there are currently no sampling frames, databases, or records of sustainable or self-described organic food consumers in Abia State that



can be surveyed. University lecturers, serve as a proxy and potential substitute consumer group because previous studies in the sustainable consumption and organic food purchase intention domains. Ukenna et al., (2018) and Keleş, (2017) used academic staff as respondents; as a result, the choice of academic staff in this research is consistent with the evidence in the literature on sustainable consumption and organic food purchase intention. Additionally, there is a presumption that academic staff members are agents of societal behavioural change; this puts them in a position to spread and transmit innovation to the larger society much more quickly and easily. The study's population consists of 3273 academics.

3.3 Sample and Sampling Technique

The sample for this study consists of academic staff members from three different universities in Abia State. A purposive sampling technique was employed to select participants for the study, which was consistent with previous studies' methods.

This technique involves deliberately selecting individuals who possess the characteristics and qualities that align with the research objectives. To determine the sample size, the recommended sample size calculation by Krejcie and Morgan (1970) was utilized. The sample size takes into account the size of the target population, the desired level of precision, and the confidence level. This calculation ensured that the sample was representative enough to draw meaningful conclusions about the larger population of academic staff members in Abia State Universities.

Participants were selected from three different universities within the Abia State to ensure a diverse representation of academic staff. The sampling process involved approaching potential participants through university departments and obtaining their

voluntary participation in the study. Efforts were made to ensure adequate representation of various disciplines and departments to capture a comprehensive understanding of the research variables.

The targeted respondents received a total of 363 copies of questionnaires-200 in person and 163 online-in a total of 200 and 163 questionnaires, respectively. Ethical considerations were taken into account during the sampling process, including informed consent, privacy, and confidentiality of participants' information. Participants have the right to withdraw from the study at any time without consequences. By employing a purposive sampling technique, the study ensured that the selected sample of academic staff members in two universities Abia State represents the target population adequately and provides valuable insights into the research variables under investigation.

3.4 Instrument for Data Collection

A structured questionnaire was used as the primary data collection instrument. The questionnaire consists of two sections: demographics information and variables related to consumer behaviour and purchase intention. Likert scale questions were used to measure variables such as attitudes, motivations, barriers, subjective norms, awareness, and information sources that impact the purchase intention of organic food. Participants were asked to rate their responses using a five-point Likert scale, ranging from strongly disagree to strongly agree. Participants were instructed to indicate their level of agreement or disagreement with each statement or to provide relevant information based on the question.

3.6 Method of Data Analysis

The validity of the instrument was guaranteed by making sure that the item



measures what it ought to measure, that is face validity. The variables/constructs used in the study were summated using the SPSS version 25, which was also used for the preliminary and descriptive analysis. Also, Pearson Correlation was used to ascertain discriminant validity. Internal consistency reliability was checked using Cronbach alpha and all the constructs/variables measured 0.6 and above. Hence the variables/constructs have internal consistency reliability. Multiple regression was used to test the hypotheses with the aid of Sigma XL version 9.0.

4. RESULTS AND DISCUSSIONS

This study was based on a sample of 363 respondents drawn from two universities in Abia State: Abia State University and Michael Okpara University of Agriculture Umudike. This is to say we based our study on one state university and one federal university. Out of this, 221 respondents completed and returned usable questionnaire

and this represents approximately 60.9% response rate. This is considered appreciable for a marketing research study of this nature. Three socio-demographic variables: gender, age and education were used in the study. Analysis of the responses show that 51.9% are females while 48.1% are males. The results also show that 27.5% of the respondents are below 30 years of age; 36.6% fall within 31-40 years age bracket; 27.0% are within 41-50 years age bracket while the remaining 8.9% are above 51 years. On education, 9.0% have bachelors' degree, 24.6% have masters' degree, 48.3% are holders of doctorate degree, while 18.1% are holders of qualifications and professional certificates. The import of this is that our respondents are well distributed among various age brackets and also show gender balance. Academic staff were chosen because it is believed they appreciate the import of the study as academics and make informed contributions.

Pearson Correlations	Attitudes	Motivations	Subjective Norm	Awareness	Purchase Intention of Organic Foods
Attitudes	1	0.0401	0.6113	-0.1109	-0.0991
Motivations		1	0.3133	0.6663	0.5096
Subjective Norm			1	-0.0432	-0.1150
Awareness				1	0.1875
Purchase Intention of Organic Foods					1
Pearson Probabilities	Attitudes	Motivations	Subjective Norm	Awareness	Purchase Intention of Organic Foods
Attitudes		0.5545	0.0000	0.1008	0.1430
Motivations			0.0000	0.0000	0.0000
Subjective Norm				0.5236	0.0889
Awareness					0.0053
Purchase Intention of Organic Foods					
Spearman Rank Correlations	Attitudes	Motivations	Subjective Norm	Awareness	Purchase Intention of Organic Foods
Attitudes	1	-0.1879	0.6920	-0.0263	-0.1696
Motivations		1	-0.4767	0.4613	0.5537
Subjective Norm			1	0.0962	-0.2536
Awareness				1	0.2995
Purchase Intention of Organic Foods					1
Spearman Rank Probabilities	Attitudes	Motivations	Subjective Norm	Awareness	Purchase Intention of Organic Foods



Attitudes		0.0052	0.0000	0.6982	0.0118
Motivations			0.0000	0.0000	0.0000
Subjective Norm				0.1552	0.0001
Awareness					0.0000
Purchase Intention of Organic Foods					

Pearson product moment correlations coefficient and Spearman’s rank correlations were used to assess the discriminant validity and collinearity of the constructs/variables used in the study. Discriminant validity refers to the degree to which two concepts are distinct. Every scale in the analysis must be shown to have discriminant validity from all other scales (Hair et al. 2019). Higher correlations indicate problems with both collinearity and validity. Spearman’s Rank Correlation complements Pearson’s Correlation, in that it provides a robust measure of association (Sigma XL, 2020). Spearman’s rank is based on correlated ranks, which are not sensitive to outliers or departures from normality. Correlations of 0.7 and above indicate collinearity problem or that the two variables are doing the same work. A yellow highlight recommends Pearson or Spearman correlations be used (but only if it is significant). Pearson is highlighted if the data are bivariate normal, otherwise Spearman is highlighted. The values in the table above indicate that there is no problem of collinearity in the data.

Discriminant Validity Analysis

Discriminant validity is the extent to which constructs that are supposed to be different from each other actually are (Hair et al. 2019). In this case, the interest is in demonstrating that the constructs of attitudes, motivations, subjective norm, awareness, and purchase intention of organic foods are distinct from each other.

To assess discriminant validity, both parametric (Pearson) and non-parametric

(Spearman rank) correlations. Typically, discriminant validity is demonstrated when correlations between constructs are moderate to low, indicating that they are not measuring the same underlying concept.

Let's analyse the correlations provided:

1. Pearson Correlations: Attitudes and motivations have a correlation of 0.0401, which is very low, suggesting discriminant validity. Attitudes and subjective norm have a correlation of 0.6113, which is moderate to high, indicating potential convergence between these constructs. Attitudes and awareness have a correlation of -0.1109, indicating a weak relationship, supporting discriminant validity. Attitudes and purchase intention of organic foods have a correlation of -0.0991, which is also weak, suggesting discriminant validity.

2. Spearman Rank Correlations: The Spearman correlations generally follow the same pattern as the Pearson correlations but provide a non-parametric measure of the relationships. Based on the correlations provided, it seems that attitudes, motivations, subjective norm, awareness, and purchase intention of organic foods are distinct constructs as evidenced by generally low to moderate correlations between them.

Multiple Regression Analysis

Multiple Regression analyses the relationship between one dependent variable (Y) and multiple independent variables (X's). It is used to discover the relationship between the variables and create an empirical equation of the form as given below. This equation can be used to predict a Y value for a given set of



input X values. The software used in the analysis for this study Sigma XL uses the method of least squares to solve for the model coefficients and constant term. Statistical

tests of hypothesis are provided for the model coefficients. The output of the multiple regression analysis with Sigma XL are shown.

Model Summary:

R-Square	36.38%
R-Square Adjusted	35.19%
S (Root Mean Square Error)	1.516

Analysis of Variance for Model:

Source	DF	SS	MS	F	P
Model	4	282.45	70.613	30.734	0.0000
Error	215	493.98	2.298		
Lack of Fit	14	486.87	34.777	982.98	0.0000
Pure Error	201	7.111	0.035378662		
Total (Model + Error)	219	776.44	3.545		

Durbin-Watson Test for Autocorrelation in Residuals:

DW Statistic	0.550558
P-Value Positive Autocorrelation	0.0000
P-Value Negative Autocorrelation	1.0000

This model of Purchase Intention of Organic Food as a function of Attitudes, Motivations, Subjective Norms and Awareness looks very good with an R-Square value of 36.38% and adjusted R-Square value of 35.19%. This simply suggests that between 35.19% and 36.38% of variations in Purchase Intention of Organic Food are accounted for by the four IVs. The ANOVA value represented by F-Statistics is 30.734 with p-value of 0.000 implies that the data is a fit on the model and that the coefficient of multiple correlation is

significantly different from zero. The Durbin-Watson Test is used to determine if the residuals are autocorrelated. If either p-value is $< .05$, then there is significant autocorrelation. Our analysis shows that there is presence of positive autocorrelation but absence of negative autocorrelation. This is likely due to an external bias factor affecting purchase intention of organic food. Autocorrelation in the residuals is not a serious problem for this model.

Parameter Estimates:

Predictor Term	Coefficient	SE Coefficient	T	P	VIF	Tolerance
Constant	12.382	1.473	8.405	0.0000		
Attitudes	0.256399	0.060566361	4.233	0.0000	1.890	0.529133
Motivations	0.541877	0.052362667	10.349	0.0000	2.464	0.405909
Subjective Norm	0.354867	0.084633452	4.193	0.0000	2.185	0.457715
Awareness	0.329689	0.062491646	5.276	0.0000	2.160	0.462903

The Predictors are shown to be significant with their respective P-Values $< .05$. Attitudes has coefficient 0.256, t-value =

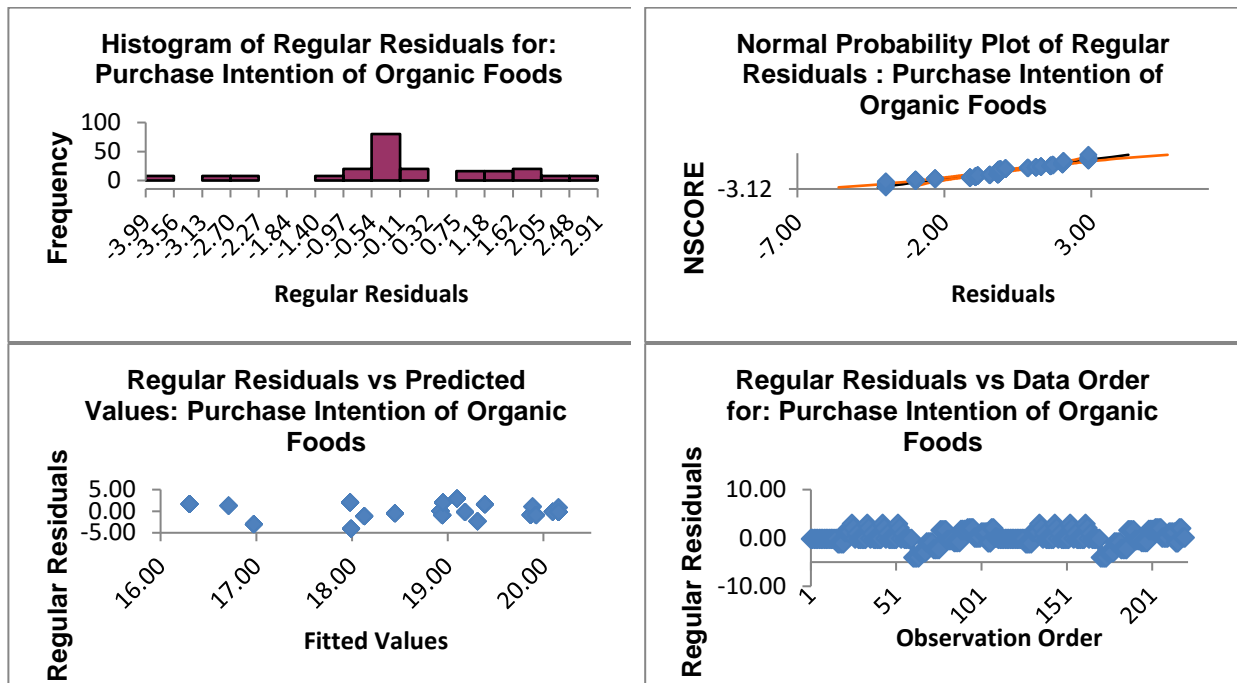
4.233 and p-value = 0.000, well below 0.05 hence null Hypothesis One is rejected; Motivations has coefficient 0.542, t-value =

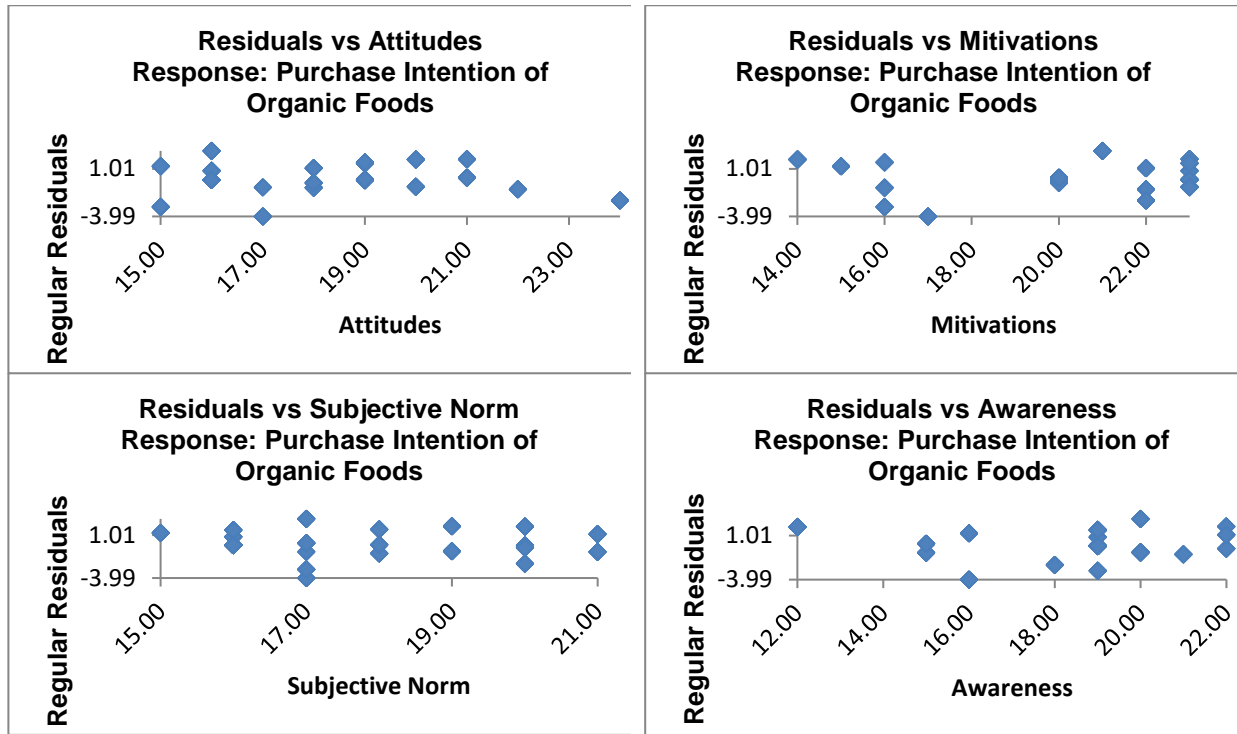


10.349 and p-value = 0.000, well below 0.05 hence null Hypothesis Two is rejected; Subjective Norm has coefficient 0.355, t-value = 4.193 and p-value = 0.000, well below 0.05 hence null Hypothesis Three is rejected; and Awareness has coefficient 0.329, t-value = 5.276 and p-value = 0.000, well below 0.05 hence null Hypothesis Four is rejected. All the four hypotheses formulated for the study are accepted in their alternate forms. Clearly, we need to focus on these four predictors factors to improve purchase intention of organic food. The

variance inflation factor (VIF) and Tolerance scores are used to measure multicollinearity or correlation among predictors. $VIF \leq 1$ indicates no relation among predictors, which is highly desirable; $VIF > 1$ indicates that the predictors are correlated; $VIF > 5$ indicates that the regression coefficients are strongly correlated and this will lead to poor estimates of the coefficients. Tolerance = $1/VIF$. The Multiple regression model for our analysis is given thus:

Multiple Regression Model: Purchase Intention of Organic Foods = (12.382) + (0.256399) * Attitudes + (0.541877) * Motivations + (0.354867) * Subjective Norm + (0.329689) * Awareness





Residuals are the unexplained variation from the regression model ($Y - \hat{Y}$). We expect to see the residuals normally distributed with no obvious patterns in the above graphs. Clearly this is not the case here, with the Residuals

versus Predicted Values indicating there is likely some other X factor influencing the overall satisfaction. It would be appropriate to consider other factors in the model.

Discussion of Findings

This study established that there is a significant relationship between the attitudes of academic staff in Universities within Abia State towards organic food consumption and their purchase intention. This agrees with Zayed, Gaber, & El Essawi (2022) reported that consumers held positive perceptions of organic food products, citing health consciousness and ethical considerations as significant influencers. Though our study did not include reasons for possible preference for organic foods, it is established that attitude is a significant factor in consumer

preference for this category of food items. We also established that motivations driving academic staff in Abia State to consider purchasing organic food have significantly influence their purchase intention. This agrees with Paul & Rana (2012) revealed that consumers identified health as their primary motivation for choosing organic food. It also agrees Prigita and Alversia (2022) that consumers were motivated by environmental considerations when making organic food choices. Our study equally established that there is a significant relationship between subjective norms, such as social influence and peer perceptions, and the purchase intention of organic food among academic staff in Universities within Abia State. This agrees with Pang, Tan & Lau (2021) that



consumers consider the recommendations of their colleagues when buying organic food. We equally established that the level of awareness among academic staff in Universities within Abia State regarding organic food and its benefits significantly influence their purchase intention. This is in agreement with Kim and Chung (2011) that majority of consumers were aware of the health benefits; and that 76% of the consumer respondents demonstrated knowledge of the positive environmental impact of organic food. Our study agrees majorly with literature due to the fact that many consumers the world over consider the health implications of the category of food items/products they buy. Sustainable consumption is the driving development in the world as of present. Sustainable production and consumption cannot be ignored especially with the emphasis on sustainable development goals agenda of the United Nations.

5. SUMMARY, CONCLUSION AND RECOMMENDATIONS

This study was based on a captive sample of 221 valid responses and multiple linear regression was used to analyse the data and validate the hypotheses formulated. The following are the findings of the study.

- there is a significant relationship between the attitudes of academic staff in Universities within Abia State towards the intention to purchase organic foods.
- the motivations driving academic staff in Abia State to consider purchasing organic food do significantly influence their purchase intention.
- there is a significant relationship between subjective norms, such as social influence and peer perceptions, and the purchase intention of organic

food among academic staff in the universities within Abia State.

- the level of awareness among academic staff in Universities within Abia State regarding organic food and its benefits do significantly influence their purchase intention.

This study has established that the attitudes of academic staff in the universities in Abia State influence and significantly relate with their intention to purchase organic food. It is also clear from this study that the motivations of the academic staff of the universities studied especially health and environmental concerns relate with their decision to purchase organic foods. It is equally clear that subjective norms like social and peer influence significantly relate with their intention to purchase organic food. Finally, it is worthy of mention that the awareness level of the academic staff consumers significantly related with their intention to buy organic foods.

The four predictors used in this study were found to be statistically significant in influencing the intention to purchase organic food. The implication of this is that food marketers need to focus on these four predictors factors to improve purchase intention of organic food. It was also established that between 35.19% and 36.38% of variations in Purchase Intention of Organic Food are accounted for by the four constructs: attitude, motivations, subjective norm and awareness. The implication of this is that there are other factors that encourage purchase intention of organic food which food and agricultural marketers need to explore for more purpose and enlightened food marketing. this study also has implications for literature as it has contributed to the literature on the growing phenomenon of organic agriculture and food marketing. we ran discriminant validity with



both parametric and non-parametric correlations. However, it's important to note that discriminant validity is not solely determined by correlations; other methods such as confirmatory factor analysis should also be considered for a comprehensive assessment in future analysis.

REFERENCES

Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50(2), 179-211.

Asioli, D., et al. (2017). Consumer segmentation based on food category choice: The case of organic and functional foods. *Food Quality and Preference*, 56(Part A), 46-55.

Bakir, A., & Eren, S. S. (2019). The effect of attitudes and subjective norms on consumers' intentions to purchase organic foods: Evidence from a developing country. *Journal of Cleaner Production*, 215, 798-805.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall, Inc.

Chernev, A., & Blair, S. (2015). Doing Well by Doing Good: The Benevolent Halo of Social Responsibility. *Journal of Consumer Research*, 41(6), 1412-1425. doi: 10.1086/678286

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis (8th ed.)*. Cengage Learning.

Han, H., Karpova, E., & Kim, W. (2020). Influence of social media marketing activities on destination image and visit intentions: A case of Russia. *Sustainability*, 12(17), 6999.

Hughner, R. S., McDonagh, P., Prothero, A., Shultz II, C. J., & Stanton, J. (2007). Who are

organic food consumers? A compilation and review of why people purchase organic food. *Journal of Consumer Behaviour*, 6(2-3), 94-110.

IFOAM. (2020). What is Organic Agriculture? Retrieved from <https://www.ifoam.bio/>

Joshi, Y., & Rahman, Z. (2015). Young consumers' attitude and purchase intention towards green products in an emerging economy. *International Strategic Management Review*, 3(1-2), 70-90.

Kim, J., & Johnson, K. K. (2016). The effect of online consumer reviews on consumer purchasing intention: The moderating role of involvement. *International Journal of Hospitality Management*, 52, 131-143.

Kumar, P., & Khan, M. A. (2018). Understanding the determinants of organic food consumption: A review of the literature. *Journal of Food Products Marketing*, 24(1), 25-41. doi: 10.1080/10454446.2017.1327311

Lacal, Carlos Tello (2019). Preface. Lacal (2019) (Ed.) *Marketing of Organic Food Produce*. Online Edition. Delve Publishing.

Ong, Z. C. (2015). Consumers' attitude and purchase intention towards organic food products: Exploring the moderating effects of gender and price sensitivity. *British Food Journal*, 117(3), 1062-1080.

Organisation for Economic Cooperation and Development (OECD) (2003). *Organic Agriculture sustainability, markets and policies*. CABI Publishing.

Prigita, M. & Alversia, Y. (2022). *Toward Consumer Sustainable Consumption: Examining Factors Influencing Green*



Product Purchase Intention. *Marketing and Smart Technologies*, (279), 307-317

Sigma XL, (2020). *SigmaXL Version 9.0 Workbook*. Sigma XL Inc.

Ukenna, S. I., Idoko, E. C. & Ogbari, M. E. (2018). Drivers of sustainable consumption in a developing Sub-Saharan African setting: Nigerian academic staff perspective. *International Journal of Sustainable Society*, 10(3), 203-224.

Varshneya, G., Pandey, S. K. & Das, G. (2017). Impact of Social Influence and Green Consumption Values on Purchase Intention of Organic Clothing: A Study on Collectivist Developing Economy. *Global Business Review*, 18(2),

Vermeir, I., & Verbeke, W. (2006). Sustainable food consumption: Exploring the consumer "attitude-behavioural intention" gap. *Journal of Agricultural and Environmental Ethics*, 19(2), 169-194. doi: 10.1007/s10806-005-5485-3

Wojciechowska-Solis, J. & Barska, A. (2021). Exploring the Preferences of Consumers' Organic Products in Aspects of Sustainable Consumption: The Case of the Polish Consumer. *Agriculture*, 11(2), 138

Zayed, M.F., Gaber, H.R. and El Essawi, N. (2022). Examining the Factors That Affect Consumers' Purchase Intention of Organic Food Products in a Developing Country. *Sustainability*, 14(10) 5868