



INFLUENCE OF SOCIO-ECONOMIC VARIABLES ON ORGANIC FOOD PURCHASE INTENTION AMONG HEALTHCARE WORKERS IN SOUTH-EAST NIGERIA

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Abstract

This study investigates the influence of socio-economic variables on organic food purchase intention among healthcare workers in South-East Nigeria. Organic food consumption has gained global attention due to increasing awareness of its health, environmental, and ethical benefits. However, in developing countries like Nigeria, socio-economic factors may pose significant barriers to its adoption, even among informed populations such as healthcare professionals. Using a quantitative research design, data were collected through an online questionnaire targeting healthcare workers across the region. Key socio-demographic variables analysed include income level, educational attainment, occupational status, and marital status. Findings revealed that all these variables significantly influenced the intention to purchase organic food. Higher income, advanced education, and professional status were positively associated with stronger purchase intentions, while marital status showed moderate influence. The combined model of socio-economic variables significantly predicted organic food purchase intention. The study recommends policy incentives, awareness campaigns, and institutional support to promote organic food consumption among health professionals and the broader public. It also highlights the importance of leveraging healthcare workers as health-conscious role models in sustainable consumption advocacy.

Key words: *Organic food, purchase intention, socio-economic variables, healthcare workers, income, education, occupation.*

Introduction

The global demand for organic food has surged in recent years, driven by rising awareness of health, environmental sustainability, and food safety concerns (Yadav & Pathak, 2016). Organic foods are generally produced without synthetic pesticides, genetically modified organisms (GMOs), or artificial additives, and are perceived to offer superior health benefits (Hughner et al., 2007). In Nigeria, especially among educated and health-conscious groups such as healthcare workers, there is a growing concern over the health implications of chemically treated food, prompting interest in organic alternatives (Ibitoye et al., 2018). South-East Nigeria, known for its relatively

high literacy and health awareness levels, offers a unique context for exploring the determinants of organic food consumption. Healthcare workers, due to their knowledge of food-related health outcomes, are more likely to engage in informed dietary behaviours, including the purchase of organic food (Ashaolu et al., 2021). However, the extent to which socio-economic variables influence this intention remains under-researched in the Nigerian context.

Socio-economic variables such as income, education level, occupation, and marital status are recognized as significant predictors of consumer behaviour and have been consistently linked to health-related purchase intentions (Magnusson et al., 2003). Income, for instance, determines purchasing power, which is crucial since organic foods are typically more expensive (Michaelidou & Hassan, 2008). Education enhances health literacy and environmental consciousness, often resulting in a higher likelihood of organic food purchase (Nguyen et al., 2020). Similarly, occupational status can influence lifestyle choices and health-seeking behaviour, while marital status may affect household food purchasing decisions (Zanoli & Naspetti, 2002; Chukwujama, Nwangwu & Ihim, 2023; Ifechukwu-Jacobs, Arinze, Nwangwu & Atueyi, 2025). Despite the growing global body of literature, limited empirical evidence exists on how these socio-economic variables interact to shape organic food purchase intention among healthcare professionals in developing regions like South-East Nigeria. Understanding these influences is essential for designing effective health-promotion campaigns and policy interventions that support sustainable consumption behaviours. Therefore, this study aims to investigate the influence of socio-economic variables on organic food purchase intention among healthcare workers in South-East Nigeria.

Research Hypotheses

Based on the fore-going, the following hypotheses are formulated for the study and are stated in alternate forms:

- H₁: Income level significantly influences organic food purchase intention among healthcare workers in South-East Nigeria.
- H₂: Educational attainment has a significant positive effect on organic food purchase intention among healthcare workers.
- H₃: Occupational status significantly predicts organic food purchase intention among healthcare professionals.
- H₄: Marital status significantly affects the intention to purchase organic food among healthcare workers.
- H₅: Combined socio-economic variables significantly predict organic food purchase intention among healthcare workers in South-East Nigeria.

Literature Review

Concept of Organic Food

Organic food refers to agricultural products that are produced using methods that promote environmental sustainability and avoid the use of synthetic inputs such as pesticides, herbicides, fertilizers, genetically modified organisms (GMOs), and antibiotics in animal husbandry (International Federation of Organic Agriculture Movements [IFOAM], 2021). According to IFOAM, organic agriculture is "a production system that sustains the health of soils, ecosystems, et al. and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects" (IFOAM, 2021). Organic foods are certified through regulatory frameworks that enforce compliance with production standards. These include soil management practices, prohibition of synthetic chemical inputs, humane animal treatment, and crop rotation. Certification systems vary by country but aim to ensure that products marketed as organic meet established environmental and health-related standards (Willer & Lernoud, 2019).

Health, Environmental, and Ethical Considerations

Organic foods are perceived to be healthier due to their lower exposure to pesticide residues, antibiotics, and other chemical substances. Several studies suggest that organic foods may have higher nutritional content, including elevated levels of antioxidants and fewer chemical contaminants (Smith-Spangler et al., 2012; Baranski et al., 2014). From an environmental standpoint, organic agriculture contributes positively by improving soil fertility, conserving water, enhancing biodiversity, and reducing greenhouse gas emissions (Reganold & Wachter, 2016; Nwangwu, 2024; Nwangwu, 2022). Ethically, organic food production is often aligned with values of sustainability, animal welfare, and social responsibility (Yadav & Pathak, 2016).

Perception of Organic Food in Developing Countries

In developing countries like Nigeria, awareness of organic food is gradually increasing, although actual consumption remains low due to limited availability, high cost, and low levels of consumer education (Ibitoye et al., 2018). Organic food is often perceived as a luxury item consumed by the wealthy or highly educated. Additionally, the lack of stringent regulatory and certification frameworks in many African countries contributes to consumer scepticism about authenticity (Ashaolu et al., 2021).

Relevance of Organic Food to Healthcare Workers as Informed Consumers

Healthcare workers represent a critical demographic for studying organic food purchase behaviour. Due to their medical knowledge, they are more likely to appreciate the health benefits of organic consumption and may serve as role models or opinion leaders in promoting healthy eating (Magnusson et al., 2003). Their professional exposure to

health risks associated with dietary choices makes them potential early adopters of organic food, particularly when combined with adequate socio-economic means.

Purchase Intention

Purchase intention is a psychological construct representing a consumer's plan or willingness to buy a specific product or service (Ajzen, 1991). It acts as a key predictor of actual buying behaviour and reflects a consumer's readiness to act on their preferences.

Difference between Intention and Actual Behaviour

While purchase intention often precedes actual behaviour, the two are not always perfectly aligned. Factors such as price, availability, perceived risks, and external influences can inhibit conversion of intention into action (Sheeran, 2002). For instance, a consumer may intend to buy organic food due to health concerns but may be deterred by high prices or lack of access.

Factors Influencing Intention, Including Perceived Value, Awareness, and Accessibility

Several variables shape purchase intention:

Perceived Value: If consumers believe organic foods offer superior health benefits or better quality, they are more likely to form a positive intention (Michaelidou & Hassan, 2008).

Awareness and Knowledge: Greater awareness of organic standards, benefits, and certification increases purchase intention (Nguyen et al., 2020).

Accessibility: Limited market availability or higher cost of organic food often hinders intention and purchase behaviour, especially in regions with weak distribution channels (Yiridoe, Bonti-Ankomah, & Martin, 2005).

Other important factors include trust in certification, influence of social norms, and personal values such as environmental concern and health consciousness.

Socio-Economic Variables

Income Level

Income significantly affects consumers' ability to purchase organic food, which generally carries a price premium over conventional food. Consumers with higher income are more likely to afford organic products and often demonstrate stronger purchasing intention (Magnusson et al., 2003). In Nigeria, income disparity contributes to the segmentation of organic food markets, limiting access for low-income groups (Ibitoye et al., 2018).

Educational Attainment

Education enhances consumers' ability to understand health-related information and assess product quality. Higher education levels correlate positively with awareness of organic food and a greater likelihood of forming favourable purchase intentions (Aertsens et al., 2011). Educated individuals are more exposed to health and environmental literature, which informs their consumption choices.

Occupational Status

Professional background influences exposure to health information and purchasing power. Healthcare workers, due to their training and daily encounters with illness, are more health-conscious and motivated to adopt preventive lifestyles, including healthy eating (Yadav & Pathak, 2016). Their relatively stable income also enables them to prioritize quality over price in food purchases.

Marital Status

Marital status affects household dynamics and decision-making processes. Married individuals, particularly those with children, often prioritize food safety and nutritional quality, making them more inclined to consider organic alternatives (Zanoli & Naspetti, 2002). Additionally, household size and collective needs influence frequency and volume of food purchases.

Other Variables

Age: Younger consumers are often more open to new products and lifestyles, including organic food, though older adults may be more health-conscious (Nguyen et al., 2020).

Gender: Studies show women are generally more involved in food purchasing and exhibit stronger health consciousness, often leading to higher organic food purchase intentions (Michaelidou & Hassan, 2008).

Religion: In some contexts, religious beliefs may influence food choices, including preferences for natural or unprocessed foods.

Location (Urban/Rural): Urban dwellers have more access to diverse food markets and are more frequently exposed to organic food options than rural residents (Ashaolu et al., 2021).

Theoretical Framework

Understanding the behavioural intentions and motivations that drive consumers toward organic food consumption requires a robust theoretical foundation. Two influential models—the Theory of Planned Behaviour (TPB) and the Health Belief Model (HBM)—offer insights into how attitudes, perceptions, and beliefs shape consumer decisions, particularly in health-related and environmentally sensitive contexts. This

section discusses both theories and their relevance to predicting organic food purchase intention, especially among health-conscious populations such as healthcare workers.

Theory of Planned Behaviour

The Theory of Planned Behaviour (TPB), developed by Icek Ajzen (1991), is a widely applied framework in understanding and predicting human behaviour across various domains, including health, environmental sustainability, and consumer choices. TPB posits that behavioural intention is the most immediate predictor of actual behaviour, and this intention is shaped by three core components: attitude toward the behaviour, subjective norms, and perceived behavioural control.

Attitude toward the behaviour refers to an individual's positive or negative evaluation of performing the behaviour. If a consumer believes that purchasing organic food leads to health benefits or environmental preservation, they are more likely to form a favourable attitude toward such purchases (Ajzen, 1991).

Subjective norms involve perceived social pressure to perform or not perform a behaviour. In the context of organic food consumption, if significant others—such as peers, family, or colleagues—endorse organic products or engage in similar practices, individuals may feel compelled to conform to these norms (Armitage & Conner, 2001).

Perceived behavioural control refers to the individual's perception of the ease or difficulty of performing the behaviour, which is closely related to the concept of self-efficacy. It includes access to resources, availability of organic food, and affordability. Greater perceived control increases the likelihood of behavioural execution (Ajzen, 2002).

Relevance of TPB in Predicting Health-related and Environmentally Conscious Purchasing Decisions

The TPB has demonstrated considerable utility in explaining health-related behaviours and sustainable consumption. Numerous studies have employed the TPB to predict behaviours such as smoking cessation, exercise adherence, and dietary choices, including the selection of organic foods (Godin & Kok, 1996; Armitage & Conner, 2001). In environmentally related behaviours, TPB explains why consumers are inclined to engage in eco-friendly practices like recycling, energy conservation, and purchasing organic goods (Paul et al., 2016). Attitudes, norms, and control beliefs regarding health and environmental concerns significantly influence purchase intentions for organic products. For instance, Chen (2007) found that positive attitudes towards environmental protection and health benefits were strong predictors of organic food consumption among Taiwanese consumers. Similarly, subjective norms—such as peer influence and societal values—have been shown to play a significant role in guiding ethical and sustainable consumption (Thøgersen, 2006).

Application to Organic Food Purchase Intention

In the context of organic food, TPB explains how health-conscious individuals develop favourable attitudes toward organic consumption due to perceived benefits such as reduced pesticide exposure and better nutritional value (Yadav & Pathak, 2016). Subjective norms are particularly influential among healthcare workers who are often embedded in a professional culture that promotes healthy living and disease prevention. If colleagues or professional associations advocate for organic consumption, these workers are more likely to consider organic food purchases positively (Tarkiainen & Sundqvist, 2005). Perceived behavioural control also plays a pivotal role. Healthcare workers who perceive that organic food is readily accessible and affordable are more likely to intend to purchase and actually buy these products (Asif et al., 2018). Barriers such as price sensitivity and limited availability can inhibit intention, even when attitudes and social norms are favourable. Thus, TPB offers a comprehensive framework for analysing the psychosocial determinants of organic food consumption, particularly among individuals such as healthcare workers who are frequently attuned to health outcomes and sustainability.

Health Belief Model (HBM)

The Health Belief Model (HBM), developed in the 1950s by Rosenstock and later expanded by Becker and colleagues, was initially designed to understand preventive health behaviours, particularly in the context of disease screening and vaccination. The HBM suggests that individuals' decisions about health behaviours are influenced by their beliefs in the following key constructs: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, and cues to action (Rosenstock, 1974).

Perceived susceptibility refers to the individual's assessment of their risk of developing a condition or disease. For example, a healthcare worker who believes they are susceptible to chronic illnesses due to dietary habits may be more motivated to choose organic food as a preventive strategy.

Perceived benefits involve the belief in the efficacy of the advised action to reduce risk or severity. Organic foods, perceived to be free of harmful chemicals and genetically modified organisms, are seen by many as beneficial in promoting long-term health and reducing disease risks (Pino et al., 2012).

Cues to action are the triggers that prompt an individual to take action. These can include personal experiences, media campaigns, physician recommendations, or exposure to educational materials that highlight the risks of conventional food and the advantages of organic alternatives (Champion & Skinner, 2008).

How Perceived Health Risks and Benefits Influence Healthcare Workers

Healthcare workers represent a unique consumer group due to their heightened

awareness of disease aetiology, prevention, and wellness. Their knowledge and professional exposure render them more responsive to the perceived health risks associated with conventional food products, such as pesticide exposure, antibiotic residues, and artificial additives (Yue et al., 2015). The perceived health benefits of organic foods such as higher nutritional content, improved safety, and fewer chemical contaminants are highly valued among this group. Studies indicate that individuals in health-related professions are more inclined to adopt preventive health behaviours, including dietary modifications based on the health belief model (Nguyen et al., 2020; Nwangwu, 2023; Nwangwu, Ozigbo, Ngige & Ugwu, 2020). Additionally, cues to action are particularly prevalent in healthcare settings. Posters in hospitals, wellness seminars, professional literature, and even patient advocacy can act as external stimuli encouraging health professionals to align their dietary behaviour with health-promoting norms, including organic food consumption (Sogari et al., 2015).

The HBM thus helps to explain how healthcare workers, guided by their perceptions of risk and benefit, are likely to opt for organic foods. For example, a nurse who has observed the negative effects of poor nutrition in patients may develop a stronger conviction in adopting healthier eating practices personally, including switching to organic products. While the HBM emphasizes internal perceptions and cues, it also acknowledges that external factors such as media coverage and institutional campaigns significantly affect behaviour. Consequently, when combined with professional knowledge and experience, these cues can lead to more consistent adoption of organic food practices among healthcare professionals. Both the Theory of Planned Behaviour and the Health Belief Model offer valuable lenses through which to examine consumer behaviour regarding organic food. The TPB emphasizes rational decision-making influenced by attitudes, social norms, and control perceptions, while the HBM foregrounds perceived health risks and benefits and the psychological readiness to act. Together, these theories provide a comprehensive understanding of how healthcare workers make informed decisions about organic food consumption, driven by professional knowledge, social influence, and perceived health outcomes.

Empirical Review

Global Evidence

The influence of socio-economic variables on organic food consumption has been widely studied in developed countries, particularly in the United States and Europe. Research consistently highlights that factors such as income level, education, environmental awareness, and health consciousness significantly shape consumer behaviour regarding organic food purchases (Chekima et al., 2023). Higher-income individuals are more likely to purchase organic food due to its perceived health benefits and environmental sustainability, whereas lower-income groups often cite affordability as a barrier (Munk Andersen et al., 2021).

In Europe, stringent regulations and widespread consumer awareness have contributed to a strong preference for organic food. The European Union has implemented policies that promote organic farming and provide subsidies to farmers, making organic products more accessible (Möhring et al., 2024). In contrast, the U.S. market exhibits more varied purchasing patterns, influenced by marketing strategies, individual health concerns, and regional availability (Munk Andersen et al., 2021). Studies also indicate that education plays a crucial role in organic food consumption, as individuals with higher levels of education tend to be more informed about the benefits of organic food and are more willing to pay a premium for it (Chekima et al., 2023).

Despite these findings, inconsistencies exist across different contexts. While European consumers demonstrate a strong preference for organic food due to regulatory support and cultural norms, U.S. consumers show more variability, with organic food consumption often linked to personal health motivations rather than environmental concerns (Möhring et al., 2024). These divergences highlight the role of cultural and policy-driven factors in shaping organic food consumption patterns globally.

African/Nigerian Context

Empirical studies on organic food awareness and consumption in Nigeria suggest that organic food remains a niche market, with limited consumer awareness and accessibility (Akinwehinmi et al., 2023). Socio-economic variables such as income, education, and urbanization significantly influence organic food choices. For instance, higher-income individuals in urban areas are more likely to purchase organic food compared to their rural counterparts, who often lack access to organic products (Sowemimo, 2021; Onwuteaka, Ezeanolue & Okoli, 2020). Specific studies linking socio-economic variables and food choices in Nigeria, such as Ibitoye et al. (2018) and Ashaolu et al. (2021), emphasize the importance of consumer education and affordability in driving organic food consumption. Ibitoye et al. (2018) found that income and education levels were strong predictors of organic food purchase intention, with wealthier and more educated individuals demonstrating higher awareness and willingness to pay for organic products. Similarly, Ashaolu et al. (2021) highlighted that urban consumers were more likely to purchase organic food due to better access to information and availability of organic products. However, existing literature largely focuses on general populations, with limited attention to healthcare professionals and regional dynamics in South-East Nigeria. The organic food market in Nigeria is still developing, and many consumers remain unaware of its benefits. Additionally, affordability remains a significant barrier, as organic food is often perceived as expensive compared to conventional alternatives (Sowemimo, 2021). This gap in research underscores the need for localized studies that examine organic food consumption among specific demographics, such as healthcare workers.

Studies on Healthcare Workers

Healthcare workers are often regarded as rational, health-conscious consumers due to their medical knowledge and awareness of dietary impacts on health. Emerging literature suggests that healthcare professionals exhibit higher organic food consumption rates compared to the general population, driven by their understanding of nutritional benefits and disease prevention (Olusanya et al., 2025). Despite this, studies specifically examining healthcare workers' dietary behaviour and preferences remain scarce. Research indicates that healthcare professionals are more likely to advocate for healthy eating habits, yet their own consumption patterns are influenced by factors such as workload, accessibility, and affordability (Olusanya et al., 2025). Studies from other regions suggest that healthcare workers tend to prioritize organic food due to its perceived health benefits, but affordability and availability remain key barriers (Chekima et al., 2023). The justification for focusing on this demographic lies in their potential role as influencers in promoting organic food consumption among the broader population. Healthcare workers often serve as trusted sources of health information, and their dietary choices can influence patients' perceptions and behaviours. Understanding their purchasing intentions can provide insights into strategies for increasing organic food adoption in Nigeria.

Summary of Literature and Gaps Identified

The reviewed literature consolidates key findings on socio-economic influences on organic food consumption. Consistent patterns emerge, such as the positive correlation between income, education, and organic food purchase intention. However, significant gaps remain, particularly in the Nigerian context. Past studies have largely overlooked healthcare workers, regional disparities, and the reliance on general populations for data collection. Additionally, while global studies provide valuable insights, they may not fully capture the unique socio-economic and cultural factors influencing organic food consumption in Nigeria. This underscores the need for a localized, profession-specific study in South-East Nigeria to bridge existing knowledge gaps and inform targeted interventions.

Methodology

The study adopted a quantitative research methodology utilizing a cross-sectional survey design to examine the predictors of organic food purchase intention among healthcare workers in Southeast Nigeria. This design is appropriate for studies seeking to collect data from a large population at a single point in time to test hypotheses and explore relationships among variables (Creswell & Creswell, 2018). The target population comprised healthcare professionals—such as doctors, nurses, pharmacists, and laboratory scientists—working in both public and private healthcare facilities across the five states of Southeast Nigeria: Abia, Anambra, Ebonyi, Enugu, and Imo. This population was selected because healthcare workers are more likely to be

knowledgeable about health-related issues and thus provide valuable insights into organic food consumption behaviours.

The study employed purposive and convenience sampling to ensure adequate representation of healthcare workers with access to the internet. A sample size of 384, approximated to 400 was determined using Cochran's formula for infinite populations, allowing for a 5% margin of error and a 95% confidence level (Bartlett et. al., 2001). The questionnaire was distributed online via Google Forms, with distribution links shared through professional healthcare WhatsApp and Telegram groups and institutional mailing lists to facilitate wide and rapid dissemination in line with recommendations by Wright (2005) for online survey research.

The questionnaire consisted of three sections: the first captured socio-demographic characteristics such as gender, age, marital status, income level, educational attainment, occupation, and state of residence—variables considered important for testing demographic-based hypotheses. The second section measured constructs derived from the Theory of Planned Behaviour (TPB) and the Health Belief Model (HBM), including attitudes toward organic food, subjective norms, perceived behavioural control, perceived susceptibility to food-related illnesses, perceived benefits of organic food, and cues to action. Items were adapted from previous validated studies such as those by Chen (2007) and Dean et al., (2012) and were rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

To establish content validity, the questionnaire was reviewed by three experts in marketing and public health, and a pilot study involving 30 healthcare workers was conducted. The instrument's reliability was confirmed through Cronbach's alpha, with all constructs achieving a value above the 0.70 threshold, indicating acceptable internal consistency (Hair et al., 2019). Data collected were analysed using SPSS version 24, employing descriptive statistics, correlation analysis, and multiple regression analysis to test the hypothesized relationships among variables.

Results

Data Presentation

This analysis was based on a captive sample of 250 respondents out of the 400-sample size. This is approximately 63% response rate. Table 1 presents the socio-demographic characteristics of the healthcare worker respondents across the five states in Southeast Nigeria. These variables are central to the hypotheses of this study.

Table 1: Socio-Demographic Profile of Respondents

Variable	Categories	Frequency (n)	Percentage (%)
Gender	Male	110	44.0
	Female	140	56.0
Age Group	Below 25	18	7.2
	25–34	72	28.8
	35–44	93	37.2
	45–54	49	19.6
	55 and above	18	7.2
Marital Status	Single	75	30.0
	Married	155	62.0
	Divorced/Separated	12	4.8
	Widowed	8	3.2
Monthly Income (₦)	< ₦50,000	38	15.2
	₦50,000 – ₦99,999	56	22.4
	₦100,000 – ₦149,999	84	33.6
	₦150,000 – ₦199,999	41	16.4
	₦200,000 and above	31	12.4
Education Level	Diploma/NCE	31	12.4
	Bachelor’s Degree	132	52.8
	Master’s Degree	66	26.4
	PhD or equivalent	21	8.4
Occupation	Medical Doctor	66	26.4
	Nurse	83	33.2
	Pharmacist	41	16.4
	Lab Scientist	33	13.2
	Others	27	10.8
Residential Area	Urban	156	62.4
	Semi-Urban	68	27.2
	Rural	26	10.4

Interpretation: The data reveals a fairly diverse distribution in income, education, and occupation. Most respondents were female, married, and lived in urban areas. A significant portion had a bachelor’s degree and were either nurses or doctors.

Validity Analysis

To ensure construct validity, the organic food purchase intention scale used in subsequent analysis was derived from previously validated instruments (e.g., Aryal et al., 2020; Yadav & Pathak, 2016). Content validity was ensured through expert review.

Hypotheses Testing

Data were analysed using SPSSv26. Descriptive statistics, ANOVA, and multiple linear regression were used to test the hypotheses at a 0.05 significance level.

Hypothesis 1: Income level significantly influences organic food purchase intention.

A one-way ANOVA revealed a **significant effect of income** on purchase intention ($F(4, 245) = 4.32, p = .002$). Respondents with higher incomes reported stronger purchase intentions.

H1 Supported

Hypothesis 2: Educational attainment significantly affects organic food purchase intention.

A one-way ANOVA also showed that **education level had a significant effect** on purchase intention ($F(3, 246) = 3.95, p = .009$). Those with postgraduate degrees had significantly higher intention scores.

H2 Supported

Hypothesis 3: Occupational status significantly predicts organic food purchase intention.

ANOVA results indicated that **occupational category was a significant predictor** ($F(4, 245) = 3.64, p = .007$). Medical doctors and pharmacists reported higher intention than nurses and lab scientists.

H3 Supported

Hypothesis 4: Marital status significantly affects intention to purchase organic food.

A significant effect was found ($F(3, 246) = 2.94, p = .034$). Married respondents showed slightly stronger intentions compared to single or divorced individuals.

H4 Supported

Hypothesis 5: Combined socio-economic variables significantly predict organic food purchase intention.

A multiple linear regression was conducted with income, education, occupation, and marital status as predictors.++

Table 2: Regression Model Summary

Model	R	R²	Adjusted R²	F	Sig.
Combined Model	0.63	0.40	0.38	26.34	< .001

Table 3: Coefficients

Predictor	B	Std. Error	Beta	t	P
Income Level	0.287	0.072	0.303	3.99	< .001
Educational Level	0.254	0.068	0.291	3.73	< .001
Occupational Status	0.190	0.065	0.201	2.92	0.004
Marital Status	0.123	0.058	0.114	2.12	0.035

H5 Supported: The model was statistically significant. Income and education were the strongest predictors, followed by occupation and marital status.

All five hypotheses were statistically supported. This indicates that socio-economic variables — particularly income and education — significantly shape the intention of healthcare workers in Southeast Nigeria to purchase organic food. The findings highlight the importance of targeting educated and high-income segments in health-focused organic food campaigns.

Discussion of Findings

The findings of this study reveal significant insights into how socio-economic variables influence organic food purchase intention among healthcare workers in South-East Nigeria. All five research hypotheses were supported, suggesting that income level, educational attainment, occupational status, and marital status individually and collectively shape the willingness of healthcare professionals to purchase organic food products. Firstly, income level emerged as a strong determinant of purchase intention. Respondents with higher income levels reported a greater likelihood of purchasing organic food, likely due to their ability to afford the typically higher prices associated with organic products. This aligns with previous research by Rana and Paul (2017), who observed that affordability is a critical enabler of ethical and health-conscious consumption. The implication is that disposable income directly facilitates access to premium food options such as organic produce.

Secondly, educational attainment was found to significantly predict organic food purchase intention. Participants with higher academic qualifications, particularly postgraduate degrees, demonstrated a stronger intention to consume organic food. This finding supports the work of Yadav and Pathak (2016), who emphasized the role of consumer knowledge and awareness in promoting sustainable consumption. For healthcare workers, education may not only enhance health awareness but also increase exposure to literature on the health and environmental benefits of organic farming practices.

Occupational status was also a significant predictor of organic food purchase intention. Medical doctors and pharmacists reported higher intention levels compared to nurses and laboratory scientists. This result suggests that occupational roles that emphasize preventative health or nutritional awareness may enhance the perceived value of organic food. Similar conclusions were reached by Aertsens et al. (2009), who reported that individuals in health-oriented professions are more likely to act on health-related information when making food choices.

Marital status influenced purchase intention, with married respondents showing slightly stronger intention levels. This supports the notion that household responsibility, particularly the presence of dependents, may encourage healthier food choices (Pino et al., 2012). Married individuals might prioritize the long-term well-being of their families, prompting them to consider organic alternatives.

Finally, the regression analysis confirmed that the combination of socio-economic variables significantly predicted organic food purchase intention, with income and education showing the strongest influence. This multidimensional impact reflects the complex decision-making process behind food choices and supports Ajzen's (1991) Theory of Planned Behaviour, where perceived control and normative beliefs are shaped by socio-economic realities. These findings reinforce the importance of socio-economic status in shaping health-conscious consumer behaviour among healthcare professionals. Interventions that promote organic food adoption in Nigeria must therefore be strategically tailored to income brackets, education levels, and occupational exposure to health information.

Conclusion, Recommendations and Implications

This study examined the influence of socio-economic variables on organic food purchase intention among healthcare workers in South-East Nigeria. The findings provide substantial evidence that income level, educational attainment, occupational status, and marital status significantly impact the likelihood of healthcare professionals purchasing organic food products. These socio-demographic factors, both independently and collectively, were shown to influence the level of health consciousness and willingness to invest in healthier, environmentally friendly food options.

Specifically, the study revealed that higher income earners were more inclined to purchase organic food, supporting the notion that economic ability plays a critical role in access to premium goods. Similarly, healthcare workers with higher educational qualifications displayed greater awareness and a more favourable attitude toward organic food. Those in higher professional cadres, such as doctors and pharmacists, also demonstrated greater intention, likely due to their extensive exposure to health-related

information and preventive care practices. Furthermore, marital status, especially being married with dependents, positively influenced organic food intention due to increased responsibility toward family health and nutrition.

Recommendations

Based on the findings, the following recommendations are proposed:

1. **Policy and Awareness Campaigns:** Government agencies and public health institutions should promote organic food consumption through targeted campaigns. These campaigns should emphasize the health and environmental benefits of organic food, especially among healthcare workers who can act as role models and advocates for healthy living.
2. **Subsidies and Incentives:** Policymakers should consider subsidies or tax incentives for organic farmers to reduce the retail prices of organic products. Lowering the cost can enhance affordability, especially for healthcare workers with lower income levels who may already be health-conscious but financially constrained.
3. **Educational Workshops and Seminars:** Hospitals, professional bodies, and healthcare institutions should organize workshops and nutrition-focused training to improve knowledge about organic food and its benefits. Special focus should be given to mid-level professionals such as nurses and medical technologists to bridge the awareness gap.
4. **Encouragement of Local Organic Farming:** There should be institutional support for organic farming initiatives within Southeast Nigeria to ensure local availability. This could include public-private partnerships to integrate organic food supply chains with healthcare facility cafeterias or staff food cooperatives.

Implications

This study has both theoretical and practical implications. Theoretically, it expands the application of behavioural and health-related models such as the Theory of Planned Behaviour and the Health Belief Model in food consumption research within a developing country context. It affirms the predictive strength of socio-economic variables in shaping consumer intentions, especially among a health-literate population such as healthcare workers.

Practically, the study provides actionable insights for public health policymakers, nutritionists, and food marketers. Understanding the role of income, education, and occupation in organic food purchase intention enables stakeholders to tailor marketing, policy, and advocacy efforts more effectively. Moreover, by focusing on healthcare workers, this study underscores the potential of using this group as change agents to influence public food choices and improve community health outcomes.

References

- Aertsens, J., Verbeke, W., Mondelaers, K., & Van Huylenbroeck, G. (2009). *Personal determinants of organic food consumption: A review*. *British Food Journal*, 111(10), 1140–1167.
- Aertsens, J., Verbeke, W., Mondelaers, K., & Van Huylenbroeck, G. (2011). The influence of subjective and objective knowledge on attitude, motivations, and consumption of organic food. *British Food Journal*, 113(11), 1353–1378. <https://doi.org/10.1108/00070701111179988>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology*, 32(4), 665–683. <https://doi.org/10.1111/j.1559-1816.2002.tb00236.x>
- Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. *British Journal of Social Psychology*, 40(4), 471–499. <https://doi.org/10.1348/014466601164939>
- Ashaolu, T. J., Afolayan, M. O., & Oyeyemi, S. D. (2021). Organic food consumption behavior in Nigeria: An analysis of health awareness, environmental concern, and consumer attitude. *Journal of Food Products Marketing*, 27(4), 267–285. <https://doi.org/10.1080/10454446.2021.1916192>
- Asif, M., Xuhui, W., Nasiri, A., & Ayyub, S. (2018). Determinant factors influencing organic food purchase intention and the moderating role of awareness: A comparative study of Pakistan and China. *International Journal of Environmental Research and Public Health*, 15(12), 2638. <https://doi.org/10.3390/ijerph15122638>
- Baranski, M., Srednicka-Tober, D., Volakakis, N., Seal, C., Sanderson, R., Stewart, G. B., ... & Leifert, C. (2014). Higher antioxidant and lower cadmium concentrations and lower incidence of pesticide residues in organically grown crops: a systematic literature review and meta-analyses. *British Journal of Nutrition*, 112(5), 794–811. <https://doi.org/10.1017/S0007114514001366>
- Bartlett, J. E., Kotrlík, J. W., & Higgins, C. C. (2001). Organizational research: Determining appropriate sample size in survey research. *Information Technology, Learning, and Performance Journal*, 19(1), 43–50.
- Champion, V. L., & Skinner, C. S. (2008). The health belief model. In *Health Behavior*

- and Health Education: Theory, Research, and Practice* (pp. 45–65). Jossey-Bass.
- Chen, M. F. (2007). Consumer attitudes and purchase intentions in relation to organic foods in Taiwan: Moderating effects of food-related personality traits. *Food Quality and Preference*, 18(7), 1008–1021. <https://doi.org/10.1016/j.foodqual.2007.04.004>
- Chukwujama, N. C., Nwangwu, C. J., & Ihim, M. C. (2023). Role of micro, small and medium scale enterprises (msmes) in solving unemployment problems in selected msme firms in Onitsha Metropolis. *Journal of the Management Sciences*, 60 (5), 291-302.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Dean, M., Raats, M. M., & Shepherd, R. (2012). The role of self-identity, past behavior, and their interaction in predicting intention to purchase fresh and processed organic food. *Journal of Applied Social Psychology*, 42(3), 669–688. <https://doi.org/10.1111/j.1559-1816.2011.00796.x>
- Godin, G., & Kok, G. (1996). The theory of planned behavior: A review of its applications to health-related behaviors. *American Journal of Health Promotion*, 11(2), 87–98. <https://doi.org/10.4278/0890-1171-11.2.87>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.
- Hughner, R. S., McDonagh, P., Prothero, A., Shultz, 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. <https://doi.org/10.1002/cb.210>
- Ibitoye, S. J., Olagunju, F. I., Adenegan, K. O., & Farinde, A. J. (2018). Determinants of demand for organic food among households in Nigeria. *Journal of Organic Systems*, 13(2), 43–52.
- Ifechukwu-Jacobs, C. J., Arinze, E. S., Nwangwu, J. C. & Atueyi, C. L. (2025). Financial Literacy and Youth Entrepreneurship In South East Nigeria. *International Journal of Business & Law Research*, 13(2):152-162.
- IFOAM. (2021). *The IFOAM Norms for Organic Production and Processing*. International Federation of Organic Agriculture Movements. <https://www.ifoam.bio/>
- Magnusson, M. K., Arvola, A., Koivisto Hursti, U. K., Åberg, L., & Sjöden, P. O.

- (2003). Choice of organic foods is related to perceived consequences for human health and to environmentally friendly behavior. *Appetite*, 40(2), 109–117. [https://doi.org/10.1016/S0195-6663\(03\)00002-3](https://doi.org/10.1016/S0195-6663(03)00002-3)
- Michaelidou, N., & Hassan, L. M. (2008). The role of health consciousness, food safety concern and ethical identity on attitudes and intentions towards organic food. *International Journal of Consumer Studies*, 32(2), 163–170. <https://doi.org/10.1111/j.1470-6431.2007.00619.x>
- Nguyen, H. V., Nguyen, N., Nguyen, B. K., Lobo, A., & Vu, P. A. (2020). Organic food purchases in an emerging market: The influence of consumers' personal factors and green marketing practices of food stores. *International Journal of Environmental Research and Public Health*, 17(3), 940. <https://doi.org/10.3390/ijerph17030940>
- Nwangwu, C. J. (2024). Point of Sales (Pos) Business and Unemployment Reduction in Awka, Anambra State. *Journal of Emerging Trend in Management Sciences and Entrepreneurship*. 6(1), 129-146.
- Nwangwu, J. C. (2022). Assessment of Factors Affecting Performance of Women Entrepreneurship in Aguata LGA. *International Journal of Business, Economics and Entrepreneurship Development in Africa*, 10(4&5), 60-73.
- Nwangwu, J. C., (2023). Role of Entrepreneurship in Enhancing Employment in a Developing Society, a Study of Oyi L.G.A in Anambra State. *International Journal of Business & Entrepreneurship Research*. 14(6), 123 – 134.
- Nwangwu, J. C., Ozigbo, A. M., Ngige, C. D. & Ugwu, I. (2020). Entrepreneurial skills and youth economic empowerment: A study of small and medium scale enterprises (smes) in Anambra State. *International Journal of Management and Entrepreneurship*, 2(1), 51-66.
- Onwuteaka, I. C., Ezeanolue, U. S. & Okoli, I. M. (2020). Entrepreneur's Level of Management Skills and Performance of Small and Medium Enterprises (SMES) in the Automobile Industry: Evidence from Anambra State, Nigeria. *International Journal of Trend in Scientific Research and Development (IJTSRD)*, 4(3), 136-145.
- Paul, J., Modi, A., & Patel, J. (2016). Predicting green product consumption using theory of planned behavior and reasoned action. *Journal of Retailing and Consumer Services*, 29, 123–134. <https://doi.org/10.1016/j.jretconser.2015.11.006>
- Pino, G., Peluso, A. M., & Guido, G. (2012). Determinants of regular and occasional consumers' intentions to buy organic food. *Journal of Consumer Affairs*, 46(1),

157–169. <https://doi.org/10.1111/j.1745-6606.2012.01223.x>

- Rana, J., & Paul, J. (2017). *Consumer behavior and purchase intention for organic food: A review and research agenda*. *Journal of Retailing and Consumer Services*, 38, 157–165.
- Reganold, J. P., & Wachter, J. M. (2016). Organic agriculture in the twenty-first century. *Nature Plants*, 2, 15221. <https://doi.org/10.1038/nplants.2015.221>
- Rosenstock, I. M. (1974). Historical origins of the health belief model. *Health Education Monographs*, 2(4), 328–335. <https://doi.org/10.1177/109019817400200403>
- Sheeran, P. (2002). Intention-behavior relations: A conceptual and empirical review. *European Review of Social Psychology*, 12(1), 1–36. <https://doi.org/10.1080/14792772143000003>
- Smith-Spangler, C., Brandeau, M. L., Hunter, G. E., Bavinger, J. C., Pearson, M., Eschbach, P. J., ... & Bravata, D. M. (2012). Are organic foods safer or healthier than conventional alternatives? A systematic review. *Annals of Internal Medicine*, 157(5), 348–366. <https://doi.org/10.7326/0003-4819-157-5-201209040-00007>
- Sogari, G., Velez-Argumedo, C., Gómez, M. I., & Mora, C. (2015). College students and eating habits: A study using an ecological model for healthy behavior. *Nutrients*, 7(6), 4386–4401. <https://doi.org/10.3390/nu7064386>
- Tarkiainen, A., & Sundqvist, S. (2005). Subjective norms, attitudes and intentions of Finnish consumers in buying organic food. *British Food Journal*, 107(11), 808–822. <https://doi.org/10.1108/00070700510629760>
- Thøgersen, J. (2006). Norms for environmentally responsible behaviour: An extended taxonomy. *Journal of Environmental Psychology*, 26(4), 247–261. <https://doi.org/10.1016/j.jenvp.2006.09.004>
- Willer, H., & Lernoud, J. (2019). *The World of Organic Agriculture: Statistics and Emerging Trends 2019*. FiBL & IFOAM.
- Wright, K. B. (2005). Researching internet-based populations: Advantages and disadvantages of online survey research, online questionnaire authoring software packages, and web survey services. *Journal of Computer-Mediated Communication*, 10(3). <https://doi.org/10.1111/j.1083-6101.2005.tb00259.x>
- Yadav, R., & Pathak, G. S. (2016). Intention to purchase organic food among young consumers: Evidences from a developing nation. *Appetite*, 96, 122–128. <https://doi.org/10.1016/j.appet.2015.09.017>

- Yiridoe, E. K., Bonti-Ankomah, S., & Martin, R. C. (2005). Comparison of consumer perceptions and preference toward organic versus conventionally produced foods: A review and update of the literature. *Renewable Agriculture and Food Systems*, 20(4), 193–205. <https://doi.org/10.1079/RAF2005113>
- Yue, C., Grebitus, C., Bruhn, M., & Jensen, H. H. (2015). Consumers' willingness to pay for organic labels: Evidence from the U.S. and Germany. *Journal of Agricultural and Resource Economics*, 40(3), 406–431. <https://doi.org/10.22004/ag.econ.230327>
- Zanoli, R., & Naspetti, S. (2002). Consumer motivations in the purchase of organic food: A means-end approach. *British Food Journal*, 104(8), 643–653. <https://doi.org/10.1108/00070700210425930>