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Factors Influencing Green Food Purchase Intentions: The Intervening Role of Customer Satisfaction and Advertising

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Abstract

The coronavirus pandemic has changed people's diets and consumption structures. In recent years, the increasingly serious food safety and environmental problems have also made people gradually increase their awareness of green food. However, the proportion of green food consumption in the Chinese market is still insufficient, which seriously threatens society's sustainable development. The present research aims to explore the most significant factors (attitude, eWOM, and consumer perceived CSR) that influence consumers' green food purchase intention in the Chinese context. Moreover, the mediating role of customer satisfaction and the moderating role of advertising are also examined. This study uses quantitative methods. Data is collected from Chinese consumers in the 25-45 age group who live in Shandong province of China via random sampling. SPSS and Smart-PLS are used to analyze the data and answer research questions. This study has specific theoretical and empirical significance in promoting the healthy development of China's green food market in the future.

Keywords: Consumer purchase intention, Attitude, eWOM, Consumer perceived CSR, Customer Satisfaction, Advertising, Green food market

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Introduction

The idea of this study was initiated when the researcher found that COVID-19 has significantly influenced how people consume goods and services. Several changes in consumption patterns have emerged as various countries declared the pandemic over. In this scenario, the pandemic has heightened awareness about people's health and hygiene to give them a new understanding of and attention to the concept of 'green food'. Reviewing the related literature from different countries found that according to the data, global consumers' consumption of green food has increased significantly compared with the pre-COVID-19 period (Sun et al. 2021; Hu et al. 2022). Consumers are now more concerned about their well-being and the safety of the products they use. The present research aims to investigate by taking customer satisfaction as the mediating role and advertising as the moderating role to work out how the factors of 'green food' purchase (consumer attitude towards green food,

eWOM, and consumer perceived CSR) can affect the purchasing intentions in Shandong, China.

Figure 1 shows the Global Mean Temperature Difference from 1850-1900, which indicates the trend of global climate warming. As the global climate changes frequently and abnormal appearances cause severe disasters, consumers' environmental awareness needs to increase. A notice on the United Nations official website (2023) declares that using chemical fertilizers is one of the significant causes of global warming in the human food system. Green farming often uses regenerative farming techniques to reduce the need for chemical fertilizers, which can also provide benefits such as reduced greenhouse gas emissions, improved land health, and increased nutrient content in food. By eating organic food, individuals can reduce their carbon footprint by up to 0.9 tons per year.

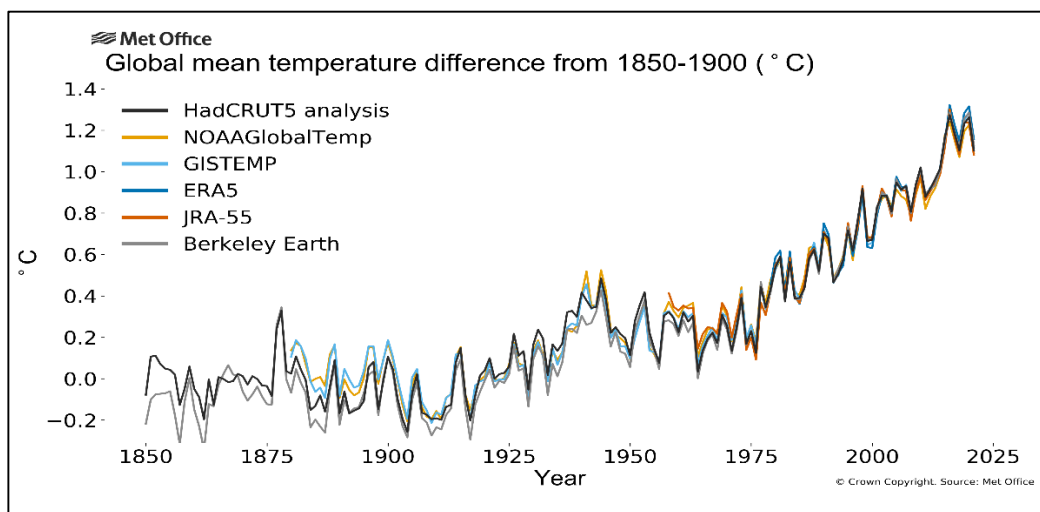


Figure 1: Global Mean Temperature Difference from 1850-1900 (World Meteorological Organization, 2022)

Green marketing research began in the 1980s and is dedicated to studying strategies on how to increase consumers' attention to green products. Through the growing popularity of this type of research, 92% of European multinational companies have changed their products to respond to growing concerns about environmental pollution (Odiah and Linus, 2017). Since then, green marketing research has made significant progress in Western countries. Consumers in developed countries such as the United States and Western Europe are more concerned about environmental issues. According to research conducted over the past decade, consumers are aware and ready to spend more to "go green". In particular, the green food market has enormous development potential because the sales of green food are increasing year by year (Rustagi and Prakash, 2022). Figure 2 shows that starting in 2022, the global green food packaging market is expected to reach US\$692.84 billion by 2029 (Data Bridge, 2021).



Figure 2: Global Green Food Packaging Market 2022 to 2029 (Data Bridge, 2021)

The concept of green food in China originated in the late 1980s, which means uncontaminated, safe, nutritious, and high-quality food produced by professional and sustainable producers. At that time, the Chinese government realized the need to implement an initiative against the excessive use of chemical inputs that heavily harm the environment. Chinese officials developed the Chinese Ecological Agriculture (CEA) to solve this problem (Hassan et al., 2019). In 1990, the Chinese government established the Green Food Development Center (CGFDC) under the Ministry of Agriculture to launch the certification and management of green food. It primarily refers to the range of agricultural plants, raw materials, value-added processed products, and condiments (Xu et al., 2020). According to the principles of CGFDC, the entire industry chain, including the production, processing, packing, storage, and transportation of green food, must have standard protocols and strict regulations.

With the transformation of the economy from high-speed growth to high-quality development, residents' living standards have been further improved, which makes people's requirements and recognition for the quality of food consumption continue to increase. The residents' insufficient consumption of green food seriously threatens the sustainable development of society. For example, compared to other developed countries, the consumption of organic food in China accounted for only 8.3% of global organic food consumption (Willer and Lernoud, 2020). The per capita consumption of organic food is only 5.8 euros, less than half of the global per capita consumption (Xing et al., 2022). The fast-growing development of green food formed a major practical gap in which to construct this study. Understanding the factors influencing Chinese consumers' purchasing intentions toward green food is now very meaningful for various stakeholders, including consumers, producers (farmers, suppliers, distributors, retailers, etc.), and policymakers.

In addition, the exposure of various food safety incidents in China has further aroused people's attention, food safety has become a significant concern tied to the national economy and the well-being of the people. The green food industry in China has undergone a swift growth over the last decade. Currently, over 25% of all agricultural products and 90% of agricultural exports meet at least one standard, whether it be hazard-free, green, or organic.

Although the majority of green products were initially directed towards export, the surge in domestic demand has surpassed that of international markets. This shift is attributed to escalating concerns about food safety and the expanding middle class domestically. This means that the domestic demand potential for green food remains largely unmet. Although more than 50% of Chinese respondents in a recent survey expressed a positive view of green food, only 10% said they regularly buy green food due to the higher prices (Leggett, 2020). Limited production causes high industrial costs, influencing the consumers' low actual demand, and then purchase intention is affected. China's green food market flourishes slowly, even if it has potential for growth. Those issues formed a significant industrial gap in which to construct this study.

There is limited research on green food in the Chinese context, which has formed a gap (Arli et al., 2018; Putten et al., 2019; Vera-Martínez, 2022). The lack of research in the previous literature to investigate the mediating role of customer satisfaction on the relationship between the factors of green purchase and purchasing intentions is another problem. The role of satisfaction can be examined in a few studies that have shown an influence on consumer satisfaction and brand loyalty. (Hwang et al., 2021; Ali et al., 2021; Rao et al., 2021). Furthermore, the lack of research on advertising as a moderator is the most important motivation for conducting this research (Jiang et al., 2023; Leong and Mariadass, 2019).

Research Questions and Objectives

The general objective of this study is to investigate the most significant factors of green purchases that influence consumer purchasing intentions and enhance the borders of understanding about consumers' green food purchasing intentions in the Chinese context. Regarding the identified gaps in the practice, industry, and theory, the following research questions and research objectives can be listed for the present study:

Research Questions:

- 1: What are the most significant factors of green purchases influencing consumers' purchasing intentions in the green food market in Shandong, China?
- 2: What is the relationship between attitude, eWOM, and consumer perceived CSR with purchasing intentions in the green food market in Shandong, China?
- 3: Is there a direct relationship between advertising and purchasing intentions in the green food market in Shandong, China?
- 4: Does customer satisfaction mediate the relationship between factors of green purchase and consumer purchasing intentions in the green food market in Shandong, China?
- 5: Does advertising moderate the relationship between factors of green purchase and consumer purchasing intentions in the green food market in Shandong, China?

Research Objectives:

- 1: To determine the factors of green purchases influencing consumers' purchasing intentions in the green food market in Shandong, China.
- 2: To examine the significance of the relationship between attitude, eWOM, and consumer perceived CSR with purchasing intentions in the green food market in Shandong, China.
- 3: To investigate the direct relationship between advertising and purchasing intentions in the green food market in Shandong, China.

4: To determine the mediating effect of consumer satisfaction on the relationship between factors of green purchase and consumer purchasing intentions in the green food market in Shandong, China.

5: To investigate the moderating influence of advertising on the relationship between factors of green purchase and consumer purchasing intentions in the green food market in Shandong, China.

Significance and Scope of the Study

The research findings will help stakeholders better understand consumer psychology to formulate more effective and reasonable marketing mechanisms. It also can fill the practices' gaps in the Chinese green food context, especially in Shandong province. Moreover, it contributes to solving the problem in the green food market, where consumers' environmental awareness and demand are gradually increasing. However, their actual intention and behavior to purchase green food are insufficient. Furthermore, this study forms and verifies a new idea for the theoretical framework by extending the existing theories of Theory of Planned Behavior, Social Exchange Theory and Social Identity Theory.

Therefore, this study can help researchers in related fields understand how to predict consumers' purchase intention for green food through consumer attitude, eWOM and consumer perceived CSR. In order to further understand the relationship between green purchase factors and consumer purchase intentions, this study also explores the mediating effect of customer satisfaction and the moderating role of the relationship between green purchase factors and consumer purchase intentions. This research can bring direct and indirect inspiration for economic improvement towards China's green industry and provide new advantages for environmental protection and sustainable development.

The study scope should randomly select consumers from different demographical ranges within Shandong Province, China (Chen et al., 2024). However, the research will not look into the actual purchase behavior or consumption patterns of green food products. Instead, it will focus on understanding the factors that shape consumers' intentions to purchase them. The respondents' citizenship should be Chinese at the age of 25-45 because this study only aims to assess the purchase intention of adults who can purchase and the potential acceptance of emerging products, and minors are not considered.

Literature Review

Consumer Purchase Intention

Research on the factors that influence consumer purchase intentions has evolved over the years, and many views on this topic remain vague and controversial, with a serious lack of understanding. Through reviewing a large amount of literature, it found that many factors influence consumer purchase intention, and different scholars have different opinions on the research conclusion. Research by Leong and Mariadass (2019) shows that factors such as willingness to pay, green advertising, and trust have a significant impact on the purchase intention of green food. Maichum et al. (2017) indicate that environmental awareness, environmental knowledge, and environmental attitude significantly positively impact the purchase intention of young consumers aged 19-29 in Thailand toward green products. Suphasomboon and Vassanadumrongdee (2022) take green cosmetics as the research object and believe that consumers show a strong interest in green cosmetics with natural ingredients and sustainable packaging. However, there is still a gap between consumers' knowledge of green cosmetics and the form of the consumer market, and they maintain a neutral attitude toward green cosmetics.

However, the study by Putten et al. (2019) shows that consumers' environmental attitudes had an insignificant relationship to intent to purchase green food products in Malaysia. Based on Huang et al.'s (2023) study, which surveyed 305 Ant Forest green app users to investigate the relationship between gamification, perceived enjoyment and sustainable consumption while observing the moderating effect of green advertising. The findings indicate that green advertising does not moderate gamification experience or perceived enjoyment. Therefore, it can be seen that there are divergent opinions on the research, and different results have been drawn from scholars based on specific locations and market backgrounds. Therefore, the issues in investigating the factors influencing consumer purchase intention in this research are very worthy of exploration.

Consumers' Attitude

Buss and Craik (1983) defined attitude as "the comprehensive evaluation of object cognition, emotion and information behavior". From the perspective of previous studies, the inconsistency of attitudes and behaviors is mainly from the dimensions of demographic characteristics, green cognition (environmental knowledge), and personality dimension (value orientation, environmental responsibility, etc.). Qi (2021) confirmed that the price attribute and sensory attraction of green food will have an impact on consumers' utilitarian attitude and hedonistic attitudes, and then affect their purchasing behavior. Costa et al. (2021) evaluated consumer attitudes towards green products and their purchasing decisions. The result shows that brand and gender differences have a low link with green consumer behaviors, price, quality and marketing have a relatively significant positive correlation. However, according to the study by Putten et al. (2019), it shows that consumers' environmental attitudes had an insignificant relationship to intent to purchase green food products in Malaysia.

Concerning the earlier literature discussion and align with research objective (2), the hypothesis is proposed as:

H1: Consumers' attitudes towards green food influence their purchasing intentions significantly.

eWOM Literature Discussion

eWOM is any positive or negative statement about a product or company made by potential, actual or former customers to other consumers and relevant agencies through internet communication (Pedersen et al., 2014). Gu and Yin (2023) used the psychological perception of consumers as the mediating role to work out the relationship between eWOM and consumers' purchasing intention for sports consumption in the Yangtze River Delta region. The result shows that the quality of eWOM and positive reviews have a significant negative impact on the intentions of customers' willingness to buy. In contrast, the dispersion degree of eWOM has a significant negative impact on consumers' willingness to consume. Keller and Fay (2012) found that positive reviews from others result in higher levels of trust, so consumers are more likely to make a purchase decision when they hear positive feedback on a product or service. Rahman et al. (2020) revealed that eWOM has a significant positive effect on online purchase intention (OPI). This study suggests that online sellers can prioritize eWOM to maximize the product's sales rate, that would affect customer purchasing intent.

Positive reviews help build corporate reputation, increase customer loyalty, and build brand equity among consumers. Positive eWOM is important to the hotel industry (Cardona et al., 2018). However, Zayed et al.'s (2022) research used an online questionnaire to collect data from 363 Egyptian consumers. Research has found that consumer attitudes and environmental concerns affect consumers' purchase intention for organic food. eWOM, subjective norms, perceived behavioral control and health awareness have no impact on consumers' purchase intention.

Concerning the earlier literature discussion and aligning with research objective (2) the present research objective, the hypothesis is proposed as follow:

H2: eWOM influences consumers' green food purchasing intentions significantly.

Consumer Perceived CSR

Perceived CSR refers to the perception of stakeholders regarding the companies' strategies and operating practices on the well-being of all its key stakeholders as well as the natural environment (Waddock, 2004). Corporate social responsibility (CSR) has primarily been treated as a corporate issue. The majority of the literature on this topic takes a management perspective, which indicates that companies can best respond to specific demands of primarily external stakeholders, which CSR initiatives enhance corporate performance, and what motivates companies to become engaged in CSR (Basu & Palazzo, 2008).

Ali et al. examined the role of perceived CSR in deriving customer loyalty by exploring the direct and mediated effects of corporate reputation and customer satisfaction in Pakistan's food chains. It tested 322 respondents, and the results revealed a significant positive impact of perceived CSR on customer loyalty, corporate reputation, and customer satisfaction. Further, customer satisfaction and corporate reputation appeared to mediate the relationship between perceived CSR and customer loyalty (Ali et al., 2021). Agrawal and Gupta explored that when a consumer evaluates a brand for self-consumption, one can assume that the perceived CSR of the firm will influence their evaluation (Agrawal and Gupta, 2018).

However, Vera-Martínez et al. suggest that the three aforementioned components do not equally attract customers and do not necessarily consider such efforts when evaluating if they would like to choose the final purchasing decisions with 521 respondents in Mexico (Vera-Martínez et al., 2022). The results show that only economic and social dimensions affect variables related to brand perceptions (Vera-Martínez et al., 2022). Currás-Pérez et al.'s study assessed that all three components were found to tend to affect perceived emotional value. However, only the social dimension was likely to affect perceived social value (Currás-Pérez et al., 2018).

Concerning the earlier literature discussion and aligning with research objective (2), the present research objective, the hypothesis is proposed as:

H3: Consumers' perceived CSR influences the purchasing intentions significantly.

Customer Satisfaction

The role of customer satisfaction demonstrates the impression of increased customer engagement and loyalty with the company or particular brand, which means that higher levels of customer satisfaction may lead to continuing relationships with businesses, especially in the food industry. Satisfaction is a crucial predictor of customers' purchasing

intentions and helps managers seek existing customers' recommendations to re-visit the outlet (Shao et al., 2019; Guo et al., 2024). Lee et al. indicated that website design, perceived usefulness, and customer satisfaction positively affect purchase intention for e-commerce platforms in Uzbekistan. That means customers who are more satisfied with an e-commerce retailer's performance are more likely to have purchase intentions and actual purchases (Lee et al., 2022). Febrian and Fadly investigate the fact that customer satisfaction has a significant effect on eWOM and purchase intentions through e-commerce in Indonesia (Febrian and Fadly, 2021). At the same time, Ur Rehman et al. (2019) determined that customer satisfaction significantly mediates between celebrity endorsement, brand equity, corporate social responsibility, and online purchase intention in Pakistan. Hospitality organizations make great endeavors to expand the number of repeat visitors by creating client loyalty. One of the primary considerations that influence the making of client loyalty is the satisfaction of clients, which is the aftereffect of perceived service quality (Tekin and Kalkan, 2017). Sadia stated that customer purchasing intentions significantly increase when customers are satisfied with the quality of e-banking services in Qatar (Sadia, 2020).

Concerning the earlier literature discussion and aligning with research objectives (3 and 4), the present research objective, the hypothesis is proposed as follows:

H4: Customer satisfaction influences consumers' green food purchasing intentions significantly.

H5: Advertising influences consumers' green food purchasing intentions significantly.

H6: Customer satisfaction mediates the relationship between attitude and consumers' purchasing intentions towards green food.

H7: Customer satisfaction mediates the relationship between electronic word of mouth (eWOM) and consumers' purchasing intentions towards green food.

H8: Customer satisfaction mediates the relationship between consumers' perceived CSR and purchasing intentions towards green food.

Role of Advertising

Stadlthanner et al. explore that advertising may stimulate people's perceptions and lead them to make different decisions. Green advertising can increase the knowledge of green products and the green concern of consumers (Stadlthanner et al., 2022). Chekima et al. (2015) found that environmental advertising positively moderates green purchase intention in Malaysia. Hussain et al. (2020) explored that green advertisements could increase green purchase behaviors in Karachi. Leong and Mariadass (2019) investigate the significant impact of factors such as willingness to pay, green advertising, and trust on the purchase intention of green food among university students in Malaysia. In addition, Huang et al. (2023) investigated that green advertising does not moderate gamification experience or perceived enjoyment but moderates perceived enjoyment and sustainable consumption among Chinese youth.

Concerning the earlier literature discussion and aligning with research objective (5), the hypothesis is proposed as follows:

H9: Advertising plays a moderating role between consumer attitude and consumers' purchasing intentions towards green food.

H10. Advertising plays a moderating role between eWOM and consumers' purchasing intentions towards green food.

H11. Advertising plays a moderating role between consumer perceived CSR and consumers' purchasing intentions towards green food.

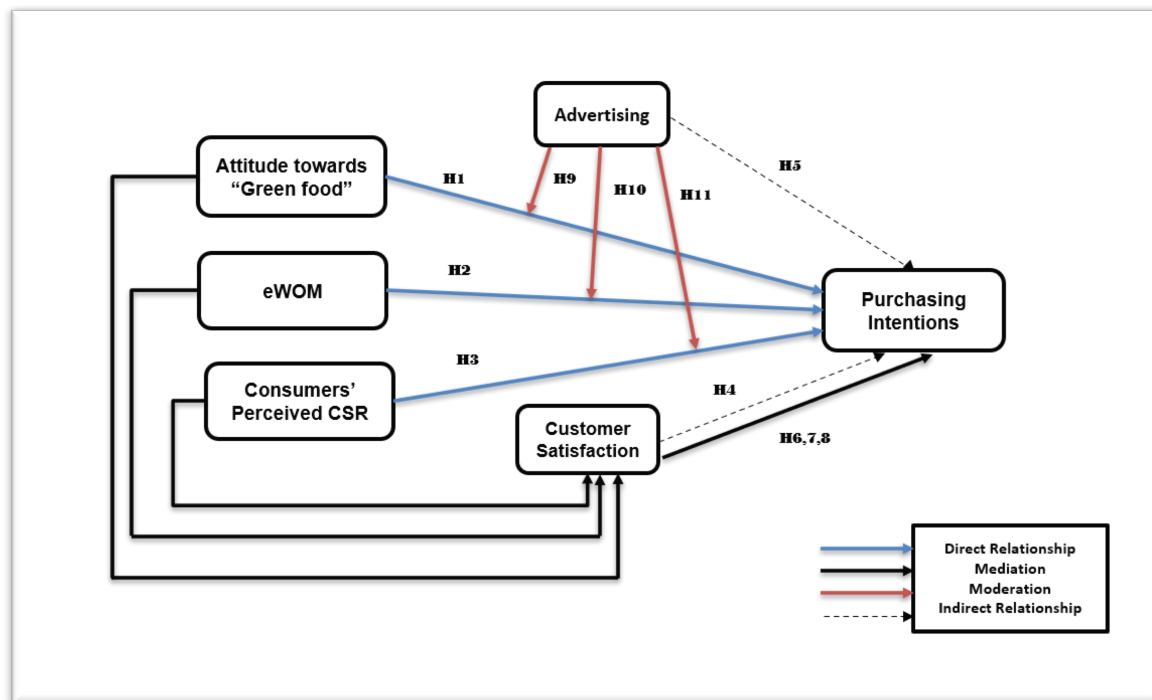


Figure 3: Research Framework

Methodology

Research Paradigm

A research paradigm is the fundamental belief system that guides researchers in determining the choice of methods (Guba and Lincoln, 1994). After reviewing the literature's definition and in-depth social science assumption, positivism is the research paradigm that best fits the present study (Sun, Soh, Mohammadi et al., 2022). Since the primary purpose of the present study is to investigate the relationship between six research variables extracted from the relevant literature review, positivist researchers prefer precise quantitative data and use experimental, survey and statistical analysis methods (Zhou, Mohammadi et al., 2022). The advantage of quantitative research is to seek rigorous measurement tools and "objective" research methods to test hypotheses by analysing measurement data, making the results more accurate and convincing. Quantitative research is most appropriate if this kind of research tests a theory or model to understand the relationship between various variables (Guba and Lincoln, 1994). Therefore, the present research uses a quantitative methodology to achieve the study's objectives.

The research questions are well-addressed to explain consumers' green attitude, eWOM, consumer perceived CSR, customer satisfaction, green advertising and consumer purchasing intention in the context of the green food market in China. To achieve the research purpose, the questionnaire measurement was adapted and modified based on previous sources, and a Likert scale was adopted, ranging from one (strongly disagree) to five (strongly agree). The collected data will be analyzed statistically through SPSS and Smart-PLS modeling to test the relationship between each hypothesis.

Population and Sampling Technique

According to Statista (2023) data from the seventh census of Shandong Province, the number of people aged 25-45 among the total population of 101.5275 million in Shandong Province is approximately 29.25 million, which constitutes the study population of this study. The sample size was determined using the statistical formula of Krejcie and Morgan (1970). Academics and researchers adopt this sample size determination table, which facilitates the researcher in determining the sample size for research purposes.

Where:

S = Sample size

X² = The table value of chi-square for 1 degree of freedom at 0.05% confidence level (3.841)

N = Population size

P = Population proportion (0.5)

d = Degree of accuracy expressed as a proportion (0.05)

$S = 3.841(29,250,000) (0.5) (1-0.5) \div [(0.05)^2(29,250,000-1) + (3.841) (0.5) (1-0.5)]$

$S = 28,087,312.5 \div 73,125.96$

S=384

After the calculation, the results show that the number of respondents required for this study is 384 to reach 95% of the confidence interval. In fact, according to Krejcie and Morgan (1970), since the study population and sample frame exceed 1 million people, a sample size higher than 384 will not be affected (Xu et al., 2023). A larger sample size reduces the possibility of sampling error, enhances the findings, and facilitates the generalization of the findings in the population (Sekaran and Bougie, 2010).

Measurement

This questionnaire uses multi-item scales to measure the primary constructs. These scales were adopted from previous studies and modified in this study. Multi-item scale measurements provide a more comprehensive understanding and insight. This helps reveal connections and interactions between scales, improving accuracy and reliability (Yang et al., 2022). Except for personal characteristics and “yes or no” questions, other questions were formulated on a 5-point Likert scale, ranging from 1 (“strongly disagree”) to 5 (“strongly agree”).

Consumer Purchase Intention: This study adopted the consumer purchase intention scale studied by Chen et al. (2018), Goh and Balaji (2016) and He et al. (2019). This research designed five statements to measure Purchase Intention (PI): (1) I plan to buy green food in the future; (2) I would recommend my friends to buy green food; (3) I am happy to purchase green food because they are environmentally friendly; (4) I would purchase green food products even if I have to pay more; (5) If I have encountered the sale of green food, I would consider buying some.

Consumer Attitude: This research used the scale applied by Chen et al. (2018) and Kim and Han (2010) to measure consumers' attitudes towards green food. Some items were modified to fit the purposes of our study. This paper will use the following seven items developed on the scale to measure the relationship between consumers' attitudes towards green food and consumer purchase intention: (1) I prefer purchasing green food over conventional food; (2) I think purchasing green food is good for me; (3) Green products can save energy and

electricity and this is important to me; (4) I think green products that can reduce environmental damage are essential; (5) I think the health benefits of buying green food are justified; (6) I feel good when I encourage everyone to eat green food to save water resources; (7) I do not mind paying higher prices for green food.

eWOM: The measurement for eWOM items was sorting out and screening from the existing literature, and the high-reliability scale used in the research by Jasarai et al. (2022) and Sosanuy et al. (2021) was selected for the measurement of eWOM. After considering the current research background, unsuitable items were deleted and the final scale suitable for this study was obtained: (1) Recommendations regarding green food on social media are useful to me; (2) Recommendations regarding green food on social media influence my choice; (3) I will decide to purchase green food based on a recommendation I received on social media; (4) If I don't read consumers' online product reviews when I buy a product or brand, I may worry about my decision; (5) I often read other consumers' online product reviews to make sure I buy the right product; (6) I frequently gather information from online consumers' product reviews before I buy a particular product or brand.

Consumer Perceived CSR: This study also plans to apply the Alvarado-Herrera et al.'s (2017) study and derive four items with modifications to fit the current research context: (1) I think green food try to maintain a competitive pricing policy; (2) I think green food constantly seeks to improve the quality of the product it offers; (3) If I heard the company respects an ethical code of conduct with its customers and employees, I will happy to consider of buying green food; (4) I will be interested with the green company if I know that tries to protect the environment.

Customer Satisfaction: Customer satisfaction (CS) with green food means that consumers are happy with the environmental protection effects of food brands, products and services, or think that the quality of their goods or services is reliable and friendly. Chen et al. (2015) used the measurement scale of customer satisfaction in the organic food market, after considering the actual research background of this study and the overall scientific nature of the questionnaire, some items were deleted and summarized. Finally, the 4 items developed by the following scale will be used to measure consumer satisfaction with green food and consumer satisfaction: (1) Consumers feel happy with their decision to choose green food because of its commitment to the environment; (2) Consumers are satisfied with the decision to buy the green food; (3) Consumers feel the supply chain of green food is contributing to preserving the environment when buying green food; (4) Environmental performance satisfaction, that is, consumers are satisfied with the environmental performance provided by green food.

Advertising: This research will use three items adapted from Rizwan's (2014) measurement scale of green advertising and two items from Kim and Cha (2021) to measure the relationship between green advertising and consumer purchase intention: (1) There is a green advertisement to increase knowledge about green food; (2) Feel comfortable with green product advertising; (3) Green food advertisement guides consumers in deciding to buy products; (4) I think the green advertising expresses the true nature of the product; (5) I think green food advertising is interesting.

Data Analysis

To determine the content validity of the questionnaire items, a pilot study with a sample size of 30 people was initially necessary before distributing the final questionnaire. This circumstance guarantees the reliability and validity of the survey. Another essential step of data analysis is choosing the appropriate tools for analysing the complicated data sets.

SPSS (Statistical Package for the Social Sciences) can provide a range of functions for analyzing descriptive data to develop graphs and charts. It has been widely used in social science research since the 1980s and is a popular and trusted software by many scholars (Mohammadi, 2019). Smart-PLS is a software package for Structural Equation Modeling (SEM). It has received extensive attention in recent literature because it can be faster to execute and easier to understand and interpret, especially when verifying mediation and moderating effects.

The choice of analytical method was determined based on the research objectives. Each technique has different uses in statistical analysis. This study uses SPSS for preliminary analysis of the data sets such as descriptive data analysis, reliability test, validity test and normality test. It offers multiple methods for handling missing values, including deletion, imputation, and replacement with alternative values (Mohammadi et al., 2021). Intelligent PLS is used for more advanced analysis, such as structural equations to predict and explain the relationships between target variables.

Conclusion and Future Recommendation

Consumer purchase intention has been marked as a crucial topic in social and scientific management. In the specific context of this study, an in-depth study is conducted on the purchase intention of green food by examining the impact of factors of green purchase (consumer attitude, eWOM, consumer perceived CSR) on consumer purchase intention. In addition, it also adds customer satisfaction as a mediator and advertising as a moderator to construct a new model. The results can further provide a new perspective on environmental protection and sustainable development and a new approach to solving the existing problem of people's livelihood and well-being.

Due to this research being limited to the scope within China (specifically Shandong Province) in the 25-45 age group, different age socio-demographic groups in other countries or regions can be used in future studies to provide more general results. Besides, this study only considered the impact of three green purchasing factors as independent variables (consumer attitude, eWOM, consumer perceived CSR) on consumer purchase intention, including two additional variables: customer satisfaction and advertising. Future recommended that other variables that may affect consumers' purchase intention of green food should be taken into consideration as much as possible. Additionally, this study focused on the general concept of green food, whereas previous research has shown that consumer behavior differs when it comes to specific types of products or services. Therefore, future researchers could try to test the effectiveness of this model in other industries.

This study was conducted according to the ethical guidelines of the Institutional Review Board (IRB). Participants were informed of the study's purpose and parameters and assured of confidentiality and anonymity. All subjects gave informed consent before filling out the questionnaire. Data collected from participants is kept strictly confidential and will be used for research purposes only.

Reference

- Agrawal, R., and Gupta, S., (2018). Consuming responsibly: Exploring environmentally responsible consumption behaviors. *Journal of Global Marketing*, 31(4), 231–245. <https://doi.org/10.1080/08911762.2017.1415402>.
- Ali, W., Danni, Y., Latif, B., Kouser, R., & Baqader, S. (2021). Corporate social responsibility and customer loyalty in food chains—mediating role of customer satisfaction and corporate reputation. *Sustainability (Switzerland)*, 13(16). <https://doi.org/10.3390/su13168681>
- Alvarado-Herrera, A., Bigne, E., Aldas-Manzano, J., and Curras-Perez, R. (2017). A scale for measuring consumer perceptions of corporate social responsibility following the sustainable development paradigm. *J. Bus. Ethics* 140, 243–262. doi: 10.1007/s10551-015-2654-9.
- Arli, D., Tan, L. P., Tjiptono, F., & Yang, L. (2018). Exploring consumers' purchase intention towards green products in an emerging market: The role of consumers' perceived readiness. *International Journal of Consumer Studies*, 42(4), 389–401. <https://doi.org/10.1111/ijcs.12432>
- Basu, K. and Palazzo, G., (2008). Corporate Social Responsibility: A Process Model of Sensemaking, CSR & Management Practice, DOI:10.5465/AMR.2008.27745504.
- Buss, D. M., & Craik, K. H. (1983). The Act Frequency Approach to Personality. In *Psychological Review VOLUME* (Vol. 90, Issue 2).
- Cardona, J. R., Cantallops, A. S., & Salvi, F. (2018). The impact of positive Emotional Experiences on eWOM Generation and Loyalty. *The Spanish Journal Of Marketing*, 22, 142-162.
- Chekima, B., Khalid Wafa, S. A. W. S., Igau, O. A., & Chekima, S. (2015). Determinant factors of consumers' green purchase intention: The moderating role of environmental advertising. *Asian Social Science*, 11(10), 318–329. <https://doi.org/10.5539/ass.v11n10p318>
- Chen, C., Chen, C., & Tung, Y. (2018). Exploring the consumer behavior of intention to purchase green products in Belt and Road Countries: An empirical analysis, *Sustainability*, 10(3), pp. 1-18.
- Chen, M.H, Mohammadi, A., Li, Q.L., Jantan, A.H., Sun, H. (2024). Role of Business Environment and Size Between Company Capabilities and Crisis Management for Catering Enterprises. *Journal of International Business and Management*, 7(3): 01-14.
- Chen, Y. S., Lin, C. Y., & Weng, C. S. (2015). The influence of environmental friendliness on green trust: The mediation effects of green satisfaction and green perceived quality. *Sustainability (Switzerland)*, 7(8), 10135–10152. <https://doi.org/10.3390/su70810135>
- Chen, Y., Wang, Q., Xie, J., (2011). Online social interactions: A natural experiment on word of mouth versus observational learning. *J. Marketing. Res.* 48(2), 238-254.
- Costa, C. S. R., Costa, M. F. da, Maciel, R. G., Aguiar, E. C., & Wanderley, L. O. (2021). Consumer antecedents towards green product purchase intentions. *Journal of Cleaner Production*, 313, 127964. doi:10.1016/j.jclepro.2021.127964.
- Currás-Pérez, R., Dolz, -Dolz, C., Miquel, -Romero, M. J., & Sánchez-García, I. (2018). How social, environmental, and economic CSR affects consumer-perceived value: Does perceived consumer effectiveness make a difference? *Corporate Social Responsibility and Environmental Management*, 25(5), 733–747. <https://doi.org/10.1002/csr.1490>.
- Data Bridge. (2021). Global Green Food Packaging Market – Industry Trends and Forecast to 2029. official website.
- Febrian, A., & Fadly, M. (2021). The Impact of Customer Satisfaction with EWOM and Brand Equity on E-Commerce Purchase Intention in Indonesia Moderated by Culture. *Binus Business Review*, 12(1), 41–51. <https://doi.org/10.21512/bbr.v12i1.6419>.
- Goh, S. K., Balaji, M. S., 2016. Linking green skepticism to green purchase behavior. *J. Clean. Prod.* 131, 629-638.
- Gu, S, Y., and Yin, Y., T. (2023). Influence of Online Word of Mouth in Public Sports Stadium Service Industry on Sports Consumption Intention in Yangtze River Delta Region-based on the Mediating Role of Consumer Psychological Perception. *Bulletin of Sport Science and Technology*. Vol.31. No.2.
- Guba, E. G. & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In Denzin, N.K. & Lincoln, Y.S. *Handbook of qualitative research*, 3rd Edn. (pp. 105 – 117). California: Sage.
- Guo, Y. Mohammadi, A., Jantan, A.H., and Sun, H. (2024). The Mediating Role of Consumer Social Presence and Satisfaction between E-Commerce Live Streaming Characteristics and Repurchase Intention of Agricultural Products. *Journal of International Business and Management*, 7(1): 01-21.
- Hassan, M. Wen, X., Xu, J., Zhong, J., & Li, X. (2019). Development and challenges of green food in China. *Frontiers of Agricultural Science and Engineering*, 7(1). <https://doi.org/10.15302/J-FASE-2019296>.

- He, Q., Duan, Y., Wang, R., & Fu, Z. (2019). Factors affecting consumers' purchase intention of eco-friendly food in China: The evidence from respondents in Beijing. *International Journal of Consumer Studies*, 43(5), 457–470. <https://doi.org/10.1111/ijcs.12525>
- Hu, Ping & Bhuiyan, Miraj & Rahman, Muhammad & Hossain, Mohammad & Akter, Shaharin. (2022). Impact of COVID-19 pandemic on consumer behavioural intention to purchase green products. *PLoS ONE*. 17. 10.1371/journal.pone.0275541.
- Huang, M., Mohamad Saleh, M. S., & Zolkepli, I. A. (2023). The Moderating Effect of Green Advertising on the Relationship between Gamification and Sustainable Consumption Behavior: A Case Study of the Ant Forest Social Media App. *Sustainability (Switzerland)*, 15(4). <https://doi.org/10.3390/su15042883>
- Hussain, S. A., Haq, M. A. U., & Soomro, Y. A. (2020). Factors Influencing Consumers' Green Purchase Behavior: Green Advertising as Moderator. *Marketing and Management of Innovations*, 4, 144–153. <https://doi.org/10.21272/mmi.2020.4-11>
- Hwang, J., Choe, J. Y. (Jacey), Kim, H. M., & Kim, J. J. (2021). Human baristas and robot baristas: How does brand experience affect brand satisfaction, brand attitude, brand attachment, and brand loyalty? *International Journal of Hospitality Management*, 99. <https://doi.org/10.1016/j.ijhm.2021.103050>.
- Jasaraï, L., Bakshi, I., & Sharma, A. (2022). An Empirical Study on The Impact Of E-WOM On Purchase Intention of Green Products. In *Journal of Positive School Psychology (Vol. 2022, Issue 3)*. <http://journalppw.com>
- Jiang, J., Yang, Q., Aidara, S., Hayat, N., Al Mamun, A. (2023). Green Purchase Intention: The Exploration of Chinese Food Consumers. In: Mansour, N., Bujosa Vadell, L.M. (eds) *Finance, Accounting and Law in the Digital Age. Contributions to Management Science*. Springer, Cham. https://doi.org/10.1007/978-3-031-27296-7_22.
- Keller, E., Fay, B., (2012). Word-of-Mouth Advocacy. *J. Advertising. Res.* 52(4), 459-464.
- Kim, W., Cha, S., Rizzo, C., & Piper, L. (2021). How Attributes of Green Advertising Affect Purchase Intention: The Moderating Role of Consumer Innovativeness. <https://doi.org/10.3390/su>
- Kim, Y., Han, H., 2010. Intention to pay conventional-hotel prices at a green hotel-a modification of the theory of planned behavior. *J. Sustain. Tour.* 18 (8), 997–1014.
- Krejcie, R.V, and Morgan, D. W. (1970). Determining Sample Size for Research Activities. 30 (3), 607-610.
- Lee, V., Park, S., & Lee, D. (2022). The Effect of E-commerce Service Quality Factors on Customer Satisfaction, Purchase Intention, and Actual Purchase in Uzbekistan. *Global Business and Finance Review*, 27(3), 56–74. <https://doi.org/10.17549/gbfr.2022.27.3.56>.
- Leggett, A. (2020). Bringing green food to the Chinese table: How civil society actors are changing consumer culture in China. *Journal of Consumer Culture*, 20(1), 83–101.
- Leong, T.P. & Mariadass, A.M. (2019). Factors Affecting Young Adults' Purchase Intention of Green Food Products in Malaysia. *Journal of Tourism, Hospitality & Culinary Arts*, 11(2), 20-45.
- Maichum, K., Parichatnon, S., and Peng, K.C., (2017). Factors Affecting on Purchase Intention towards Green Products: A Case Study of Young Consumers in Thailand. *International Journal of Social Science and Humanity*, Vol. 7, No. 5, 330-335.
- Mohammadi, A. (2019). Intervening Role of Loyalty Reward Programs and E-Word-of-Mouth on Smartphone Brand Loyalty in Malaysia. Thesis presented in fulfilment of the requirement for the degree of Doctor of Philosophy, Universiti Putra Malaysia.
- Mohammadi, A., Saeedikondori, A., Nezakati, H., Sabermajidi, N., & Jantan, A. H. (2021). An investigation on cloud computing adoption within information technology companies. In *Handbook of Research on Future Opportunities for Technology Management Education* (pp. 266–287). IGI Global. <https://www.igi-global.com/chapter/an-investigation-on-cloud-computing-adoption-within-information-technology-companies/285370>.
- Pedersen, S. T., Razmerita, L., & Colleoni, E. (2014). Electronic Word-of-Mouth communication and consumer behaviour: an exploratory study of Danish social media communication influence. In *LSP Journal (Vol. 5, Issue 1)*.
- Putten, A., Yogananda, Y., & Nair, P. B. (2019). SOCIAL SCIENCES & HUMANITIES Green Food Product Purchase Intention: Factors Influencing Malaysian Consumers. *Pertanika J. Soc. Sci. & Hum*, 27(2), 1131–1144.
- Qi, X. (2021). Green food consumption: Studies on consumer purchase intentions and intention-behavior gap in the Chinese context. Thesis presented in fulfilment of the requirement for the degree of Doctor of Philosophy, Kassel University, Germany.

- Rao, Y., Saleem, A., Saeed, W., & Haq, J. (2021). Online Consumer Satisfaction During COVID-19: Perspective of a Developing Country. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.751854>.
- Rizwan, Muhammad, Usman M, Hammad S and Arham T 2014, 'An Empirical Study about Green Purchase Intentions', *Journal of Sociological Research*, 5 (1) ISSN 1948-5468
- Rustagi, P., & Prakash, A. (2022). A review on consumer's attitude & purchase behavioral intention towards green food products. *International Journal of Health Sciences*, 6(S1), 9257-9273. <https://doi.org/10.53730/ijhs.v6nS1.7092>.
- Sadia, K., (2020). The intervening role of Customer satisfaction among E- banking Services Quality and Customer Purchase intention; Evidence from the Qatar Banking Sector, Master dissertation of Jilin University.
- Sekaran, U., and Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Shao, J. B., Li, Z. Y., and Gao, Z. Q., (2019). The Impact of Luxury Value Perception for Parent Brand on Purchase Intention for Extended Product: The Chain Mediating Effect of Customer Satisfaction and Brand, *FORECASTING*, 38(3). doi: 10.11847 /fj. 38. 3. 38.
- Sosanuy Wannalak/Siripipatthanakul Supaprawat/Nuritramont Wasutida/Phayaphrom Bordin. (2021). Effect of electronic word of mouth (e-WOM) and perceived value on purchase intention during the COVID-19 pandemic: the case of ready-to-eat food. *International Journal of Behavioral Analytics*, 1(2)(10), 1–16.
- Stadlthanner, K. A., Andreu, L., Ribeiro, M. A., Font, X., & Mattila, A. S. (2022). The effects of message framing in CSR advertising on consumers' emotions, attitudes, and behavioral intentions. *Journal of Hospitality Marketing and Management*, 31(7), 777–796. <https://doi.org/10.1080/19368623.2022.2065399>
- Statista. (2023). Total population of Shandong province, China from 2000 to 2022. From Statista website
- Sun, H., Soh, K. G., Mohammadi, A., Wang, X., Bin, Z., & Zhao, Z. (2022). Effects of mental fatigue on technical performance in soccer players: A systematic review with a meta-analysis. *Frontiers in Public Health*, 10, 922630.
- Sun, Xixiang & Su, Weihuan & Guo, Xiaodong & Tian, Ziyuan. (2021). The Impact of Awe Induced by COVID-19 Pandemic on Green Consumption Behavior in China. *International Journal of Environmental Research and Public Health*. 18. 543. 10.3390/ijerph18020543.
- Suphasomboon, T. and Vassanadumrongdee, S., (2022). Toward sustainable consumption of green cosmetics and personal care products: The role of perceived value and ethical concern, *Sustainable Production and Consumption*, Volume 33, Pages 230-243, ISSN 2352-5509, <https://doi.org/10.1016/j.spc.2022.07.004>.
- Tekin, O. A., & Kalkan, A. (2017). The Relationship Between Service Orientation and Five Factor Personality Traits: A Study on Hotel Employees Hizmet Odaklılık ve Beş Faktör Kişilik Özellikleri Arasındaki İlişkiler: Otel Çalışanları Üzerine Bir Araştırma. In *Journal of Yasar University* (Vol. 12).
- United Nations, (2023). Your guide to climate action: Food. Take Action, official website.
- Ur Rehman, S., Bano, T., & Bhatti, A. (2019). Factors Influencing Online Purchase Intention with The Mediating Role of Customer Satisfaction. *International Journal of Economics, Management and Accounting*, 27(1), 235–252. Retrieved from <https://journals.iium.edu.my/enmjjournal/index.php/enmj/article/view/653>.
- Vera-Martínez, J., Alvarado-Herrera, A., & Currás-Pérez, R. (2022). Do Consumers Really Care about Aspects of Corporate Social Responsibility When Developing Attitudes toward a Brand? *Journal of Global Marketing*, 35(3), 193–207. <https://doi.org/10.1080/08911762.2021.1958277>.
- Waddock, S., (2004). Parallel Universes: Companies, Academics, and the Progress of Corporate Citizenship, *Business and Society Review*, 109(1), p5-42. <https://doi.org/10.1111/j.0045-3609.2004.00002.x>
- Willer, H., & Lernoud, J. (2020). The world of organic agriculture: statistics and emerging trends 2020. Retrieved from <http://www.organic-world.net/yearbook/yearbook-2020.htm>
- World Meteorological Organization, (2022), 2021 one of the seven warmest years on record, WMO consolidated data shows, official website.
- Xing, Y., Li, M., & Liao, Y. (2022). Trust, price sensitivity and consumers' organic food purchasing behaviour in China. In *Food Science and Technology (Brazil)* (Vol. 42). Sociedade Brasileira de Ciencia e Tecnologia de Alimentos, SBCTA. <https://doi.org/10.1590/fst.42422>.
- Xu, D.W., Mohammadi, A., Li, H.B., Jantan, A. H., and Sun, H. (2023). Do Mental Health and Environmental Factors Mediate the Relationship Between Job Satisfaction Performance Efficiency? A Study in The Microchip Market. *Journal of International Business and Management* 6(10): 01-16.

- Xu, J., Zhang, Z., Zhang, X., Ishfaq, M., Zhong, J., Li, W., Zhang, F., & Li, X. (2020). Green food development in china: Experiences and challenges. In *Agriculture (Switzerland)* (Vol. 10, Issue 12, pp. 1–15). MDPI AG. <https://doi.org/10.3390/agriculture10120614>
- Yang, X., Weber, A., & Grimm, A. K. (2022). The effects of green consumer empowerment in advertising on corporate evaluations and purchase intention: the case of organic food. *Review of Managerial Science*, 16(6), 1877–1909. <https://doi.org/10.1007/s11846-021-00495-4>
- Zayed, M. F., Gaber, H. R., & el Essawi, N. (2022). Examining the Factors That Affect Consumers' Purchase Intention of Organic Food Products in a Developing Country. *Sustainability (Switzerland)*, 14(10). <https://doi.org/10.3390/su14105868>
- Zhou, Mohammadi, Jantan, Amer Hamzah, Nezakati, Hossein, Irfan, Muhammad. (2022). The Intervening Role of Communication Satisfaction and Trust in Leader on the relationship between Leadership Communication and Employee Turnover Intention in Sichuan, China. *Journal of International Business and Management*, 5(12), 1–20. <https://doi.org/10.37227/jibm-2022-11-5588>

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