Factors influencing consumers' purchase intention on organic foods via a Theory of Planned Behaviour approach

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Journal of Tourism, Culinary, and Entrepreneurship

e-ISSN: 2776-0928

Publisher:

School of Tourism, Universitas Ciputra Surabaya, Indonesia

Keywords:

Organic Food Young Generation Health Concern Theory of Planned Behaviour

ABSTRACT

Even though Asian countries are expected to become a dominant market for organic foods in the coming years, there are few studies which focused on young Asian consumers' organic food purchase behaviour. This study aims to investigate how attitude, subjective norm, perceived behavioural control, and health concerns influence consumers' intention to purchase and consume organic foods. A purposive sampling method was adopted for this study and a total of 289 usable questionnaires were collected for empirical testing of the postulated hypotheses using SPSS and structural equation modelling (SEM). The results showed that attitude, subjective norm, perceived behavioural control and health concern positively influenced intention. In addition, subjective norm positively influenced attitude while attitude played a partial mediation effect on the relationship between subjective norm and intention. Lastly, the theoretical and practical implications as well as the limitations of the study are discussed.

1. INTRODUCTION

With a rapidly developing economy, consumers' requirements the of the food they consume have been transforming from fresh to safe, which then translated into being pollution-free and green. Due to consumers' realization of the importance of consuming safe and beneficial food (Smith & Paladino, 2010) the concept of natural, pollution-free, and healthy food consumption has become a fashionable trend, which means that the demand for green organic food is rapidly rising (Nagappan & Getinet, 2015, Willer et al., 2021). Thus, consumers are more willing to choose safer, healthier and greener options in their food selection, leading to an increase in the market value of such foods (Jitrawang & Krairit, 2019). Sometimes, the This is an open access article distributed under the Creative Commons Attribution - Non Commercial - Share Alike 4.0 International License.

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prices of green and organic food are two to three times, or even seven to eight times higher than non-organic options, but it is still favoured by more and more consumers (Gabriel et al., 2021). Today, the organic food market is considered a growing and sustainable market (Agence, 2016), as the consumption of organic food is expanding in both developed and developing countries (Hengboriboon et al., 2022).

According to Saleki and Seydsaleki (2012), organic food is defined as safe to use, high quality and nutritious, produced using methods that care for animal welfare and the environment, while abiding by sustainable development principles. Organic food reduces the impact of the food supply on the environment as it contains few harmful chemicals and no genetically modified ingredients (Lockie et al., 2002), while at the same time, do not pose any health threats to the consumer or lead to unnecessary wastage of resources (Adrian, 1995). Hence, organic foods are equivalent to green, healthy, ecological and environmentally friendly products in marketing (Mohamad et al., 2014).

Findings from previous studies' have shown that human health, food safety, attitudes, awareness and willingness to pay a price premium are factors that influence one's willingness to purchase organic foods (Gabriel et al., 2021). Consumers' sustainability orientation, scepticism and environmentally conscious purchasing behaviour also play a part in influencing consumers' organic food purchasing behaviour (Siriattakul et al., 2019). However, the understanding of consumers' organic food purchasing behaviour is still in its preliminary stage (Wibowo et al., 2022) as most of the previous studies have not focused on a selective market (Suki, 2013). Indeed, there have been a dearth of studies on organic products purchasing behavior in Asian countries among young consumers (Suki, 2013), although Asian countries are expected to be the fastest growing market for organic foods in the coming years when compared with North American and European countries (Wibowo et al., 2022). Therefore, scientific information on rational factors that influence young consumers' intention to purchase organic food in developing countries is sorely needed, particularly in China, the biggest consumer market in the world.

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The theory of planned behaviour has been widely used in green marketing (Wang, 2022) as it considers a wider range of influencing factors (i.e., behavioural belief, normative belief, and control belief) (Wang et al., 2022d). More importantly, it allows researchers to incorporate additional constructs to explain a notable portion of the intention variance (Wang et al., 2021). Organic food consumption represents a healthy lifestyle practiced by a select group of environmentally conscious group of consumers who believe in the higher quality of organic foods when compared to regular foods (Wibowo et al., 2022). According to Bhutto et al. (2022), organic food consumption is considered as an investment in personal safety and health and hence, more research is needed to assess the effects of consumers' health concerns on their purchase intention towards organic foods. Therefore, an extension of the theory of planned behaviour model will be applied in this study due to the model's high predictive power for intention which has been demonstrated in various research contexts (Wang et al., 2022b).

This study attempts to contribute to the research literature by examining: 1) the influence of attitude, subjective norm, perceived behavioural control, and health concern on intention to purchase organic foods; and 2) the influence of subjective norm on attitude in the Chinese market context. This paper is structured as follows: section 2 provides the literature background for establishing the hypotheses; section 3 provides details of methodology; section 4 presents the findings of study; and lastly, section 5 concludes the discussion and implications of the study.

2. LITERATURE REVIEW

Attitude Towards Intention

Ajzen (1991) believes that attitude is the organization of an individual's motivational, emotional and perceptual processes towards certain phenomena in the world in which he/she lives. Attitude is the psychological emotion and positive/negative evaluation generated by individuals when they engage in certain behaviours (Chen & Tung, 2014). Accordingly, attitude encompasses the individual's self-judgment about whether the given behaviour under

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consideration is good or bad and whether he/she wants to perform the given behaviour (Wang et al., 2022d). Ajzen and Fishbein (1977) indicated that attitude is one of many factors that determine behaviour, and when social individuals have a more positive attitude towards a given subject, a more positive intention to consume/use will result. Consumers' attitudes lead to a propensity to learn, react to or act in unison with an object in a way that is either favourable or unfavourable and are influenced by an individual's values and beliefs (Anilkumar & Jelsey, 2015). In the same vein, the consumer market for organic food is mainly influenced by the consumers' attitudes which directly affect their purchase intention and behaviour (Saiful & Iffat, 2013). Certain studies have shown that consumers' attitudes positively influenced their organic food purchase intention, for example, Wibowo et al. (2022) indicated that consumers' attitudes positively influenced their organic coffee purchase intention in Indonesia whereas Sarabia-Andreu and Sarabia-Sánchez (2018) demonstrated that attitude positively influenced one's organic wine purchase intention. Therefore, the following hypothesis is proposed:

Subjective Norm towards Intention

*H*₁: Attitude positively influences intention.

Social pressure represented by subjective norm in the theory of planned behaviour may affect the intention of behaviour (Ajzen, 1991). In previous studies, Schultz (2001) defined norms as the beliefs/norms of how social individuals act in a specific social or natural environment, and could also be defined as a series of rules that define behaviours. An individual's subjective norm refers to the social pressure perceived by an individual when deciding on whether or not to implement a certain behaviour (Botetzagias et al., 2015; Indrianto et al., 2022), which reflects the influence of important others or groups on an individual's behavioural decision-making processes (Wang & Wong, 2021). Subjective norm can be a powerful motivator for consumers to purchase green products, for example, when Chu (2018) reported that subjective norm positively influenced Chinese consumers' intention to purchase organic foods and Varshneya et al. (2017) reported similar results in India.

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Therefore, the following hypothesis is proposed:

*H*₂: Subjective norm positively influences intention.

Subjective Norm towards Attitude

Several researchers have criticised the causalities of attitude, subjective norm, and intention under the theory of planned behaviour model (Sussman & Gifford, 2018; Wang et al., 2019). Some studies demonstrated the existence of a positive relationship between subjective norm and attitude (Wang et al., 2023; Wang & Wong, 2021), antithetical to studies reliant on theory of planned behaviour derived model. Liska (1984) indicated that beliefs might directly influence one's behaviour without being mediated by attitude. Therefore, the sequence causalities in theory of planned behaviour may not be correct (Wibowo et al., 2022), specifically, the mediating role of the theory of planned behaviour model's principle independent constructs has been overlooked (Wang et al., 2022c). Wang et al. (2022b) demonstrated that the Chinese, Korean, and Japanese populations are highly collectivistic, (Wang et al., 2020a) and their significant others' views on novel products' performance can influence one's attitude (Wang et al., 2019). Furthermore, their good or bad experience with such issues leads to increased or decreased intention (Wang et al., 2022b). Wang et al. (2019) reported that attitude mediated the relationship between subjective norm and intention toward green hotel selection while Wang et al. (2023) found similar results. Therefore, the following hypotheses are proposed for testing:

*H*₃: Subjective norm positively influences attitude.

H₄: Attitude mediates the relationship between subjective norm and intention.

Perceived Behavioural Control towards Intention

Perceived behavioural control refers to an individual's perception of how easy or difficult it is to perform a particular behaviour (Wang et al., 2021). It reflects an individual's perception of the factors that promote or hinder the performance of the given behaviour (Ajzen, 1991). An individual's perception of the difficulty of performing a certain behaviour is also related to an individual's perceived ability to perform that (Wang et al., 2022c). Thus, the more control a © This is an open access article distributed under the Creative Commons Attribution - Non Commercial - Share Alike 4.0 International License.

person has over the obstacles, the more engaged he/she will be in the behaviour (Botetzagias et al., 2015). The concept of perceived behavioural control can be understood as the personal belief that they have complete control to perform or carry out certain behaviours they want to do (Viceroy, 2021). Hence, the concept of perceived behavioural control is important in determining or ensuring that a particular behaviour can actually be performed (Herouxet et al., 2020). Lin et al. (2021) reported that perceived behavioural control positively influenced consumers' intention toward responsible environmental behaviour and Kumar (2021) found similar results in India. Therefore, the following hypothesis is proposed:

*H*₅: Perceived behavioral control positively influences intention.

Health Concern towards Intention

Health concern is related to a balanced lifestyle in which one makes wise choices that focus primarily on nutrition, exercise, smoking and alcohol consumption (Suki, 2013). Consumers who are concerned about their health will make food choices that are healthy or would rather skip an opportunity to eat (Suki, 2013) than indulge in unhealthy meals. For instance, health-concerned consumers choose small packages to limit their food consumption (Scott et al., 2008), take dietary and supplementary foods and nutrients, and are concerned with the impacts of changes in weight and health (Cawley, 2004). Thus, a high level of environmental concern is expected from such consumers due to their beliefs on health issues, product safety, and product friendliness to the environment (Ahmad, 2010). Organic food is often marketed as a healthy and environmentally friendly product which plays an important role in reducing the health risk of consumers (Lakkana et al., 2022). Some studies have confirmed that health concerns significantly influenced consumers' intention to purchase organic products; for example, Suki (2013) found that healthy food and a healthy way of life positively influenced one's ecological behaviour. Therefore, the following hypothesis is proposed:

*H*₆: Health concern positively influences intention.

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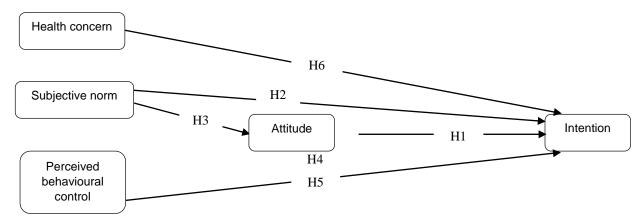


Figure 1. Conceptual Framework

3. METHODOLOGY

Data Collection

A purposive sampling technique was adopted for this study and the target samples were the Chinese younger generations who tend to possess strong purchasing power (Wang et al., 2022b) and are more concerned with environmental issues and, hence, can provide more meaningful insights into green purchasing behavior studies (Wang et al., 2022d). Data were collected from four universities in Xuzhou City, Jiangsu Province, China, from 1st October to 15th October 2022. Jiangsu Province was chosen as it had more than 1.1 million undergraduate students, the third-largest number of university students in China, with nearly one-fifth of the students dwelling in Xuzhou City (Wang et al., 2022b). An online survey in the Chinese language was posted on the largest free online platform (www.wenjuan.com) which is widely known among individuals, businesses, and organisations in China for gathering primary data. The sample size was set at 400 and a gift was given to the respondents for completing the questionnaire so as to improve the response rate. After eliminating invalid returned questionnaires (i.e., respondents reported that they did not purchase or consume organic foods before), a total sample of 289 respondents participated in the survey resulting in an overall response rate of 72.3%.

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Measures

To assure the translation quality of the questionnaire, the back translation method was used in this study. A close-ended questionnaire with validated measurement scales (See Appendix: Questionnaire items) was utilised in the current study. The first section focused on the exogenous variables: attitude, SN, PBC and health concern, where four items related to attitude were adapted from Chen and Tung (2014); three items related to subjective norm were adapted from Wang et al. (2023); three items related to perceived behavioural control were modified from Wang and Wong (2021); and four items related to health concern were adapted from Suki (2013). The second section focused on the endogenous variable (i.e., intention) in which four items related to intention were adapted from Wang et al. (2022b). The last section focused on demographic characteristics. The questionnaire items utilised a five-point Likert scale, ranging from "strongly disagree" to "strongly agree".

4. DATA ANALYSIS AND RESULTS

Descriptive Analysis

A total of 289 usable questionnaires were obtained for analysis. Table 1 provides details of the demographic make-up information. Normal distribution of data is observed when skewness ranges from -2 to +2 and kurtosis ranges from -7 to +7 (Byrne, 2016). Results showed that normality was present as skewness was between -1.493 and -0.59, and kurtosis was between -0.717 and 3.16. In addition, Kaiser-Meyer-Olkin and Bartlett's test of sphericity displayed sampling adequacy with 0.934 and p < 0.001 values. Furthermore, to demonstrate internal reliability, Cronbach's Alpha value should be more than 0.7, and the test results showed that internal reliability was achieved (See Table 2).

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Table 1. Respondents' Characteristics (N = 289)

Items	Characteristics	Frequency	Percentage (%)
Gender	Male	152	52.6
	Female	137	47.4
Educational level	Fresh	7	2.4
	Sophomore	44	15.2
	Junior	117	40.5
	Senior	88	30.4
	Other (master and	33	11.4
	above)		
Monthly expenditure	Below 1700	38	13.1
(Chinese yuan)	1701-2000	71	24.6
	2001-2500	92	31.8
	2501-3000	43	14.9
	Above 3001	45	15.6
Age	Below 18	0	0
-	19	4	1.4
	20	39	13.5
	21	131	45.3
	22	95	32.9
	Above 22	20	6.9

Measurement Model

To test the convergent reliability of the measurement model, the composite reliability (CR) and the average variance extracted (AVE) value should be high than 0.7 and 0.5 respectively (Hair et al., 2010). The discriminate validity was assessed by ensuring both the maximum shared squared variance (MSV) and the average shared square variance (ASV) should be less than the AVE. Also, the correlation between constructs should be less than 0.9 (Meyers et al., 2006). Thus, the convergent validity and discriminate validity were established based on results from Table 2 and Table 3. Moreover, the model fit indices generated for the measurement model are as follows: CMIN = 517.472, DF = 125, P < 0.001, CMIN/DF = 4.14, CFI = 0.927, PGFI = 0.607, PNFI = 0.741, PCFI = 0.758, NFI = 0.907, IFI = 0.928, TLI = 0.911, SRMR = 0.4. Hence, the results show a good measurement model fit.

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Table 2. Construct Validity of the Measurement Model

Construct	Item	Item loading	CR	AVE	Std. Deviation
(Cronbach's Alpha)	• • • •				
Attitude	Att1	0.870	0.936	0.784	0.815
	Att2.	0.870			0.795
	Att3.	0.895			0.898
	Att4.	0.906			0.846
SN	SN1.	0.947	0.959	0.886	1.285
	SN2.	0.958			1.257
	SN3.	0.919			1.156
PBC	PBC1.	0.664	0.810	0.590	1.026
	PBC2.	0.841			1.002
	PBC3.	0.788			1.257
Health concern	HC1.	0.889	0.913	0.724	0.906
	HC2.	0.881			0.859
	HC3.	0.853			0.978
	HC4.	0.775			1.108
Intention	Inten1.	0.902	0.942	0.803	0.898
	Inten2.	0.900			1.004
	Inten3.	0.883			0.942
	Inten4.	0.900			1.003

Table 3. Discriminate Validity of the Measurement Model

Construct	AVE	MSV	ASV	1	2	3	4	5
1. Attitude	0.784	0.627	0.378	0.885				_
2. PBC	0.590	0.501	0.341	0.551	0.768			
3. SN	0.886	0.501	0.355	0.543	0.708	0.941		
4. Health concern	0.724	0.324	0.246	0.536	0.421	0.442	0.851	
5. Intention	0.803	0.627	0.441	0.792	0.619	0.655	0.569	0.896

Structural Model Test

Next, structural equation modelling was performed for the hypotheses testing. The results of the SEM showed that CMIN = 697.478, DF = 128, P < 0.001, CMIN/DF = 5.449, CFI = 0.904, PGFI = 0.601, PNFI = 0.731, PCFI = 0.748, IFI = 0.905, TLI = 0.904, indicating a good model fit for the structural model. Accordingly, the results of the study are tabulated in Table 4.

Table 4. Hypotheses Testing Results

Hypothesis	Parameter	Estimate	p-value	C.R.	Decision
H1	Attitude> Intention	0.747	***	14.381	Supported
H2	SN> Intention	0.162	***	4.982	Supported
H3	SN> Attitude	0.503	***	12.292	Supported
H4	SN> Attitude> Intention		0.003 ^a		Supported
			0.001 ^b		
H5	PBC> Intention	0.070	0.020	2.321	Supported
H6	Health concern> Intention	0.133	***	4.416	Supported

Note: a denotes direct effect from SN to intention. b denotes indirect effect from SN to intention via attitude.

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5. DISCUSSION AND CONCLUSION

The results show that consumers' attitude positively influenced their intention to purchase organic food since $\beta = 0.747$, p < 0.001. This means that Chinese consumers perceive that purchasing organic foods is a desirable, pleasant, wise, and positive purchase decision. This result is consistent with those reported in previous studies that consumers' attitude is an important variable that influenced their pro-social and environmental behaviour (Wang et al., 2020b; Wibowo et al., 2022). Thus, H1 is supported. Findings from this study showed that consumers' subjective norm positively influenced their intention (β = 0.162, p < 0.001). This indicates that Chinese potential consumers' close-friends, colleagues, friends or relatives think that purchasing organic foods is the right decision and they will encourage them to continue purchasing them. This corresponds with past studies that showed subjective norm positively influenced consumers' intention to adopt organic products (Chu, 2018; Wibowo et al., 2022). Thus, H2 is supported. This study's results also show that consumers' subjective norm positively influenced their attitude to purchase and consume organic food (β = 0.503, p < 0.001). This means that Chinese consumers perceived social pressure from their significant others significantly influence their positive perception towards purchasing organic foods. This is consistent with previous studies which showed that an individual's subjective norm plays an important role in determining his/her attitude toward a particular behaviour (Wang & Wong, 2021; Wang et al., 2019). Thus, H3 is supported.

Findings from this study showed that perceived behavioural control is an important predictor of intention (β = 0.07, p < 0.05). Chinese consumers generally have a higher level of confidence to overcome the obstacles (e.g., time and financial constraints, opportunities, locations) to purchase organic foods. This is consistent with many previous studies which showed that perceived behavioural control is an important antecedent of one's intention (Paul et al., 2016; Wang et al., 2022a). Thus, H5 is supported. Our results also showed that health concern positively influenced intention to purchase or consume organic food (β = 0.133, p < 0.001). This demonstrates that Chinese consumers perceived organic foods as safe and

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healthy, thus resulting in their higher intention to purchase. This is consistent with past studies that showed that individuals who are concerned about their health conditions are more likely to purchase organic food (Suki, 2013). Thus, H6 is supported. In addition, the mediation effect of attitude was determined based on the direct and indirect effects of the two-tailed significance test using bootstrapping at 0.05 level. The results show that the direct relationship between subjective norm and intention was statistically significant (p = 0.003) whereas the indirect relationship between subjective norm and intention via attitude was also statistically significant (p = 0.001). This means that consumers' positive attitude towards purchasing organic foods is significantly influenced by their peers' opinion, which subsequently influenced their intention to purchase organic foods. Thus, the attitude was found to exhibit partial mediation on the relationship between subjective norm and intention, and H4 is supported.

Theoretical Contributions

Few studies have investigated the factors influencing consumers' intention to purchase and consume organic food in developing Asian countries, in particular among the younger generations (Suki, 2013), although the Asian region is ranked third in the growing global market for organic foods (Bhutto et al., 2022). Previous studies in the limited literature explain consumers consumption patterns of organic foods focused mainly on consumers in developed countries (Bhutto et al., 2022). The current study showed that positive attitude and subjective norm as well as high level of perceived behavioural control can positively influence intention. Thus, this study's findings provide a better understanding of the influence of attitude, subjective norm, and perceived behavioural control on young consumers' intention to purchase and consume organic food in developing countries in Asia (i.e., China).

Wibowo et al. (2022) demonstrated that the sequence causalities in theory of planned behaviour may not be correct, and the mediating role of the theory of planned behaviour model's principle independent constructs has been overlooked (Wang et al., 2022a). Hence, the results of this study showed that subjective norm significantly influenced one's attitude,

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while attitude plays a partial mediating role between subjective norm and intention. The study outcomes offer an alternative perspective on the relationship between attitude, subjective norm and intention under the theory of planned behaviour model for explaining consumers' eco-friendly purchasing behaviour.

Moreover, the theory of planned behaviour model provides a flexible platform for researchers to incorporate new variables into the model to improve its predictive power in marketing research (Wang et al., 2022c). This study incorporates health concern into the theory of planned behaviour model to predict consumers' intention to purchase and consume organic food. The results show that health concern can significantly influence one's intention to adopt organic food. Therefore, the results of this study can provide the basis for future research in replicating the study in other geographic regions and markets.

Practical Implications

A better understanding of the different aspects of organic food consumption can benefit organic food producers in developing effective marketing strategies for their products since the results of this study affirmed a significant relationship between health concern and intention. By highlighting the health benefits of organic foods in their promotional messages for their products, such as not using harmful chemicals and additives in their production process, organic food producers can enhance the confidence of consumers in their products.

As consumers' attitude positively influences their intention to purchase organic food, the consumers' understanding on how organic foods can contribute to environmental protection is a very important part in their purchasing decision-making process. If consumers hold positive perspectives about organic food, they will have a higher level of evaluative attributes about organic food which will then lead to a higher purchase intention. Therefore, organic food companies should adopt and highlight their pro-environmental business practices as part of their marketing communications strategy. For instance, organic food products can display their pro-environment and pro-social certifications on their product labels.

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Finally, subjective norm is an important predictor of attitude and intention toward organic food purchase intention. Potential organic food consumers are sensitive to their significant others' (e.g., close-friends, relatives, and co-workers') opinions. Organic food companies need to create a positive image for their products by distinguishing organic food from traditional food through their advertising and promotional messages. In addition, perceived behavioural control can significantly influence consumers' intention to purchase and consume organic food in this study. Therefore, organic food companies should emphasize in their promotional messages that organic food can provide better value than traditional products. They also need to increase the distribution channels for their organic food to potential consumers, thus making it easier for potential consumers to access such products. Also, the pricing strategy may need to be revised as a part of a promotional campaign to create a higher level of perceived behavioral control among its potential customers.

Limitations

This study was limited to one geographical region, focusing on Xuzhou City in Jiangsu Province, China. Hence, the results cannot be representative of the general population in other geographic areas. Furthermore, although intention is a robust predictor of an individual's behavior, an individual's actual purchasing behaviour does not always match with his/her intention. Future studies should therefore investigate consumers' actual organic food purchases and consumption behavior patterns. Another limitation of the study is that the sample respondents are limited to university students, again making the results ungeneralizable to the target population. Therefore, future studies should consider looking into the organic food purchasing behavior and intention of respondents in different demographic segments.

Conclusion

Increasing consumers favourable intention to purchase and consume organic foods is

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crucial for the success of organic food producers in the organic food industry. The current study successfully investigated the influence of attitude, subjective norm, perceived behavioural control on Chinese consumers' intention to purchase and consume organic foods. The results showed that all proposed antecedents have a significant influence on consumers' purchase intention towards organic foods; specifically, consumers' attitudes have a dominate role in the organic food purchasing decision-making processes. In addition, this study is one of the few studies that examined the influence of health concern on consumers purchase intention towards organic food. Consumers' concern about their health condition and organic foods' safety plays an important role in influencing the purchase decision of organic foods. Hence, this study contributes to a better understanding of a consumer's organic food purchasing decision making process.

6. REFERENCES

- Ahmad, S. N. B. B. (2010). Organic food: A study on demographic characteristics and factors influencing purchase intentions among consumers in Klang Valley, Malaysia. *International journal of business and management*, *5*(2), 105.
- Agence, B. L. B. E. F. (2016). Des Producteurs aux Consommateurs. Available online: http://www.agencebio.org/sites/default/files/upload/documents/4_Chiffres/BrochureCC/c c2016_france_1.pdf
- 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
- Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, *84*(5), 888-918. https://doi.org/10.1037//0033-2909.84.5.888
- Anilkumar, N.S., & Jelsey, J. (2015). A contrasting evaluation of consumer purchase attitude-behavior of urban-rural working women consumers towards white-brown durables, a study with specific relevance to Kochi, Kerala. *Journal of Global Economics*, 3(2), 1000142. https://doi.org/10.4172/2375-4389.1000142
- Bhutto, M. Y., Zeng, F., Khan, M. A., & Ali, W. (2022). Chinese consumers' purchase intention for organic meat: An extension of the theory of planned behaviour. *Asian Academy of Management Journal*, *27*(1), 155-174. https://doi.org/10.21315/aamj2022.27.1.7
- Botetzagias, I., Dima, A.-F., & Malesios, C. (2015). Extending the theory of planned behavior in the context of recycling: The role of moral norms and demographic predictors. *Resources, Conservation and Recycling*, 95, 58-67. https://doi.org/10.1016/j.resconrec.2014.12.004
- Byrne, B. M. (2016). Structural equation modeling with AMOS: Basic concepts, applications, and programming. Routledge. https://doi.org/10.4324/9781315757421
- Cawley, J. (2004). An economic framework for understanding physical activity and eating behaviors. *American Journal of Preventive Medicine*, *27*(3), 117-125.

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- https://doi.org/10.1016/j.amepre.2004.06.012
- Chen, M.-F., & Tung, P.-J. (2014). Developing an extended theory of planned behavior model to predict consumers' intention to visit green hotels. *International journal of hospitality management*, *36*, 221-230. https://doi.org/10.1016/j.ijhm.2013.09.006
- Chu, K. M. (2018). Mediating influences of attitude on internal and external factors influencing consumers' intention to purchase organic foods in China. *Sustainability*, 10(12), 4690.
- Gabriel, A. E., Abbyssinia, M., & Shehu F. G. Y. (2021). The willingness to consume organic food: A review. *Food and Agricultural Immunology, 32*(1), 78-104. https://doi.org/10.1080/09540105.2021.1874885
- Hair, J. F., Black, W. C., Babin, B. J., & Tatham, R. L. (2010). *Multivariate data analysis: A global perspective* (7th ed.). Pearson Prentice Hall.
- Hengboriboon, L., Naruetharadhol, P., Ketkeaw, C., & Gebsombut, N. (2022). The impact of product image, CSR and green marketing in organic food purchase intention: Mediation roles of corporate reputation. *Cogent Business & Management. 9*(1), 2140744. https://doi/org/10.1080/23311975.2022.2140744.
- Indrianto, A. T. L., A. Oktavio, and A. Nugroho. 2022. Pilgrimage Tourism Events in Indonesia: Examining The Relationship of Behavioral Belief, Motivation to Comply, Attitudes, Subjective Norms, and Intention to Partake. Jurnal Aplikasi Manajemen, 20(1), 54–65. http://dx.doi.org/10.21776/ub.jam.2022.020.01.06
- Jitrawang, P., & Krairit, D. (2019). Factors influencing purchase intention of organic rice in Thailand. *Journal of Food Products Marketing*, *25*(8), 805-828. https://doi.org/10.1080/10454446.2019.1679690
- Kumar, G. A. (2021). Framing a model for green buying behavior of Indian consumers: From the lenses of the theory of planned behavior. *Journal of Cleaner Production*, 295, 126487. https://doi.org/10.1016/j.jclepro.2021.126487
- Lakkana, H., Phaninee, N., Chavis, K., & Nathatenee, G. (2022). The impact of product image, CSR and green marketing in organic food purchase intention: Mediating roles of corporate reputation. *Cogent Business & Management, 9*(1), 2140744. https://doi.org/10.1080/23311975.2022.2140744
- Lin, Y.-C., Liu, G.-Y., Chang, C.-Y., Lin, C.-F., Huang, C.-Y., Chen, L.-W., & Yeh, T.-K. (2021). Perceived behavioral control as a mediator between attitudes and intentions toward marine responsible environmental behavior. *Water*, *13*(5), 580. https://doi.org/10.3390/w13050580
- Liska, A. E. (1984). A critical examination of the causal structure of the Fishbein/Ajzen attitude-behavior model. *Social Psychology Quarterly*, *47*(1), 61-74. https://doi.org/10.2307/3033889
- Lockie, S., Lyons, K., Lawrence, G., Mummery, K. (2002). Eating 'Green': Motivations behind organic food consumption in Australia. *Sociologia Ruralis, 42*(1), 23-40. https://doi.org/10.1111/1467-9523.00200
- Meyers, L. S., Gamst, G., & Guarino, A. J. (2006). *Applied multivariate research: Design and interpretation*. Sage.
- Mohamad, S. S., Rusdi, S. D., & Hashim, N. H. (2014). Organic food consumption among urban consumers: Preliminary results. Precedia Social and Behavioral Sciences, 130, 509-514. https://doi.org/10.1016/j.sbspro.2014.04.059
- Nagappan, R., & Getinet, M. (2015). Plant based biopesticides: Safer alternative for organic food production. *Journal of Agricultural Science and Food Research*, *6*(2), 1000e128. https://doi.org/10.4172/2471-2728.1000e128
- 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
- Saiful, M. I., & Iffat, Z. (2013). Consumer's attitude towards purchasing green food. European Journal of Business and Management, 5(9), 35-34. Avaiable from: https://www.iiste.org/Journals/index.php/EJBM/article/viewFile/5120/5203#:~:text=Cons
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- umers%E2%80%99%20willingness%20to%20buy%20green%20food%20is%20depending,strongly%20disagree%20and%2038%25%20people%20disagree%20with%20this.
- Saleki, Z. S., & Seydsaleki, S. M. (2012). The main factors influencing purchase behaviour of organic products in Malaysia. Interdisiplinary Journal of Contemporary Research in Business, 4(1), 98-116. Available from: https://journal-archieves18.webs.com/98-116.pdf
- Sarabia-Andreu, F., & Sarabia-Sánchez, F. J. (2018). Do implicit and explicit attitudes explain organic wine purchase intention? An attitudinal segmentation approach. *International Journal of Wine Business Research*, *30*(4), 463-480. https://doi.org/10.1108/IJWBR-09-2017-0063
- Saunders, M., Lewis, P., & Thornhill, A. (2011). *Research methods for business students* (5th ed.). Pearson Education.
- Schultz, P. W. (2001). The structure of environmental concern: Concern for self, other people, and the biosphere. *Journal of Environmental Psychology*, *21*(4), 327-339. https://doi.org/https://doi.org/10.1006/jevp.2001.0227
- Scott, M. L., Nowlis, S. M., Mandel, N., & Morales, A. C. (2008). The effects of reduced food size and package size on the consumption behavior of restrained and unrestrained eaters. *Journal of Consumer Research*, *35*(3), 391-405. https://doi.org/10.1086/591103
- Siriattakul, P., Thaiprayoon, K., & Harakan, A. (2019). Managing subjective well-being of organic food consumers through sustainability orientation, environmental consciousness, and skepticism in Thailand: Mediating role of organic food consumption. *World Food Policy*, *5*, 92-109. https://doi.org/10.1002/wfp2.12011
- Smith, S., & Paladino, A. (2010). Eating clean and green? Investigating consumer motivations towards the purchase of organic food. *Australasian Marketing Journal*, 18(2), 93-104. https://doi.org/10.1016/j.ausmj.2010.01.001
- Suki, N. M. (2013). Young consumer ecological behaviour: The effects of environmental knowledge, healthy food, and healthy way of life with the moderation of gender and age. *Management of Environmental Quality: An International Journal*, *24*(6), 726-737. https://doi.org/10.1108/MEQ-02-2013-0010
- Sussman, R., & Gifford, R. (2018). Causality in the theory of planned behavior. *Personality and Social Psychology Bulletin*, *45*(6), 920-933. https://doi.org/10.1177/0146167218801363
- Varshneya, G., Pandey, S. K., & Das, G. (2017). Impact of social influence and green consumption values on purchase intention of organic clothing: A study on collectivist developing economy. *Global Business Review*, *18*(2), 478-492. https://doi.org/10.1177/0972150916668620
- Wang, L. (2022). Determinants of consumers purchase attitude and intention toward green hotel selection. *Journal of China Tourism Research*, *18*(1), 203-222. https://doi.org/10.1080/19388160.2020.1816241
- Wang, L., Fu, C.-F., Wong, P. P. W., & Zhang, Q. (2022a). The impact of tourists' perceptions of space-launch tourism: An extension of the theory of planned behavior approach. *Journal of China Tourism Research*, *18*(3), 549-568. https://doi.org/10.1080/19388160.2021.1900972
- Wang, L., Shao, Y.-X., Heng, J.-Y., Cheng, Y., Xu, Y., Wang, Z.-X., & Wong, P. P. W. (2023). A deeper understanding of attitude and norm applicable to green hotel selection. *Journal of Quality Assurance in Hospitality & Tourism*, *ahead-of-print*(ahead-of-print), 1-33. https://doi.org/10.1080/1528008X.2023.2165594
- Wang, L., Wang, Z.-X., Zhang, Q., Jebbouri, A., & Wong, P. P. W. (2022b). Consumers' intention to visit green hotels A goal-framing theory perspective. *Journal of Sustainable Tourism*, 30(8), 1837-1857. https://doi.org/10.1080/09669582.2021.1977937
- Wang, L., & Wong, P. P. W. (2021). Marketing of environmentally friendly hotels in China through religious segmentation: A theory of planned behaviour approach. *Tourism Review*, *76*(5), 1164-1180. https://doi.org/10.1108/TR-08-2019-0327
- Wang, L., Wong, P. P. W., & Elangkovan, N. A. (2020a). Antecedents of green purchase
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- behaviour: An examination of altruism and environmental knowledge. *International Journal of Culture, Tourism and Hospitality Research*, *14*(1), 63-82. https://doi.org/10.1108/IJCTHR-02-2019-0034
- Wang, L., Wong, P. P. W., & Elangkovan, N. A. (2020b). The demographic impact of consumer green purchase intention toward green hotel selection in China. *Tourism and Hospitality Research*, *20*(2), 210-222. https://doi.org/10.1177/1467358419848129
- Wang, L., Wong, P. P. W., Elangkovan, N. A., & Chee, W. M. (2019). Green hotel selection of Chinese consumers: A planned behavior perspective. *Journal of China Tourism Research*, *15*(2), 192-212. https://doi.org/10.1080/19388160.2018.1553743
- Wang, L., Wong, P. P. W., & Zhang, Q. (2021). Travellers' destination choice among university students in China amid COVID-19: Extending the theory of planned behaviour. *Tourism Review*, *76*(4), 749-763. https://doi.org/10.1108/TR-06-2020-0269
- Wang, L., Zhang, Q., Ding, Y.-Y., & Wong, P. P. W. (2022c). The effect of social and personal norm on intention to patronize green hotels: Extension of theory of planned behavior. *Journal of China Tourism Research*, *ahead-of-print*(ahead-of-print), 1-24. https://doi.org/10.1080/19388160.2022.2070567
- Wang, L., Zhang, Q., & Wong, P. P. W. (2022d). Purchase intention for green cars among Chinese millennials: Merging the value—attitude—behavior theory and theory of planned behavior. *Frontiers in Psychology*, *13*, 786292. https://doi.org/10.3389/fpsyg.2022.786292
- Wibowo, S. F., Najib, M., Sumarwan, U., & Asnawi, Y. H. (2022). Rational and moral considerations in organic coffee purchase intention: Evidence from Indonesia. *Economies*, *10*(12), 308. https://doi.org/10.3390/economies10120308
- Willer, H., Travnicek, J., Meier, C., & Schlatter, B. (2021). The world of organic agriculture 2021-statistics and emerging trends. *Research Institute of Organic Agriculture FiBL and IFOAM*. Available from: https://www.organic-world.net/yearbookl/yearbook-2021.html

Appendix: Questionnaire items

Attitude items: Chen and Tung 1. For me, consuming organic food is Extremely undesirable (1)/Extremely (2014).desirable. 2. For me, consuming organic food is Extremely unpleasant (1)/Extremely pleasant. 3. For me, consuming organic food is Extremely foolish (1)/Extremely wise. 4. For me, consuming organic food is Extremely negative (1)/Extremely positive. Subjective norm items: Wang et al. 1. Most people who are important to me think I should consume organic food. (2023).2. Most people who are important to me would want me to consume organic food. 3. People whose opinion I value would prefer me to consume organic food. Perceived behavioural control items: Wang and 1. I am confident that if I want, I can consume organic food. Wong (2021). 2. Whether or not I consume organic food is entirely up to me. 3. I have resources, time and opportunities to consume organic food.

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Health concern items: Suki (2013).

- 1. I control the salt ingestion.
- 2. I try not to eat precooked food.
- 3. I try to eat food without additives.
- 4. I check my health voluntarily.

Intention items: Wang et al.

- 1. I am willing to consumer organic food. (2022b).
- 2. I plan to consume organic food.
- 3. I plan to recommend organic food to others.
- 4. I will make an effort to consume organic food.

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