

The Impacts of Environmental Knowledge and Green Perceived Value on Chinese Consumer Green Purchasing Behaviour

Shucheng Lu

Ph.D Candidate, Faculty of Business Administration, Rajamangala University of Technology Thanyaburi, Pathum Thani, Thailand, 12110.

ORCID: <https://orcid.org/0009-0000-2112-2865>

Email: lu_sh@mail.rmUTT.ac.th

Kanokporn Chaiprasit *

Professor, Faculty of Business Administration, Rajamangala University of Technology Thanyaburi, Pathum Thani, Thailand, 12110.

ORCID: <https://orcid.org/0000-0003-2794-3108>

Email: kanokporn_c@rmUTT.ac.th

*Corresponding Author Email: kanokporn_c@rmUTT.ac.th

Received Date: 19-09-2024; Accepted Date: 21-01-2025; Publication Date: 30-03-2025

Abstract

Green purchasing represents an economic consumption model aimed at fostering a resource-efficient and environmentally sustainable society. It seeks to address green development challenges at their root, integrating green growth elements within a sustainable and ecologically balanced economic framework. Traditionally, environmental knowledge has been regarded as the primary factor influencing consumers' engagement in environmentally responsible purchasing behaviour. However, the perceived value of green products has emerged as a crucial determinant of consumers' intentions to purchase such products. This study explores the relationship between environmental knowledge, green perceived value, and consumer behaviour in green purchasing. The research employs quantitative analysis methods to test its proposed hypotheses. Data were gathered through a survey questionnaire, yielding a total of 550 first-hand responses, which were subsequently processed and analysed using AMOS and SPSS statistical software. The findings confirm that all hypotheses are supported.

Keywords: Green Perceived Value, Environmental Knowledge, Green Purchasing Behaviour, Chinese Consumers, Green Purchasing.

How to cite (APA):

Lu, S., Chaiprasit, K. (2025). The Impacts of Environmental Knowledge and Green Perceived Value on Chinese Consumer Green Purchasing Behaviour. *International Journal of Instructional Cases*, 9(1), 131-146.



**International Journal
of Instructional Cases**

Introduction

Green purchasing, while essential for economic expansion, poses significant challenges to environmental sustainability due to the increasing extraction of natural resources. Many nations rely on natural resources as a source of income and employment. However, global environmental concerns necessitate the shared responsibility of governments, non-governmental organisations, consumers, international bodies, businesses, and local communities. Green and sustainable development concepts focus on preserving ecological balance and ensuring a healthy environment. Under the policy framework of the 20th National Congress of the Communist Party of China, sustainable development requires collective efforts from all sectors of society to achieve meaningful progress ([Zhang & Xi, 2024](#)). Green consumption, characterised by environmentally friendly and sustainable purchasing behaviour, is gradually gaining acceptance. Many countries actively advocate and promote it as an emerging consumption model.

Environmental knowledge is widely recognised as the primary driver of green consumer behaviour across various studies. In addition, knowledge of environmental consciousness and the impacts related to purchasing eco-products promote the use of such products ([Rustam et al., 2020](#)). Green perceived value is the overall worth in the eyes of the consumers by the benefits received from the green products and services with costs, involved when switching to environmentally friendly products and services ([Amin & Tarun, 2021](#)). The current research investigates on the following objectives: exploring the construct of green perceived value, exploring the consumers' knowledge of environment and pattern of green purchasing, analyzing Chinese consumers' attitude and intention to purchase eco-friendly products. Evaluations by the consumers on green consumption are considered important regarding their effect on green purchase intentions ([Trong Nguyen et al., 2023](#)). Thus, existing research identifies a significant "attitude-behaviour gap" in the move from the attitudes towards environmentally friendly products to actual buying behaviour. Certain theorists have opined that while it is possible to develop a favorable perspective towards the conservation of the environment, the society does not necessarily exhibit a similar level of favourable behaviour when carrying out their shopping ([Borusiak et al., 2021](#)).

In order to respond to the formation mechanisms of green purchasing behaviour, the classical theory of attitude-behaviour has been extended to turn into "attitude-green purchase intention". Though this theory has been discussed or examined by previous scholars such as [Zhao et al. \(2024\)](#), their work has failed to elucidate the mechanism by which green purchasing behavior is cultivated. Therefore, these studies have not been very effective in the improvement the remand of green consumptions as a pattern in the market. These are some of the reasons for the said gap between green attitudes and green purchasing behaviour including lack of knowledge and lack of perception

of green value. While it is known that consumers are conscious of the environmental benefits of green consumptions, consumers do not always display such behaviour consistently.

- RO1: To examine the impact of environmental knowledge and green perceived value on consumer green purchasing behaviour.
- RO2: To assess the empirical model fit to evaluate the influence of these factors on green purchasing behaviour.

Literature Review

Environmental Knowledge on Consumer Green Purchasing Behaviour

Environmental knowledge can be demarcated into two forms of knowledge: the environmental protection knowledge and green product knowledge. According to the norm activation model, consumers that have perception on the positive effect of green products and feel committed to decreasing pollution will buy the products (Sun et al., 2022). Environmental consciousness pertains to the consumers' perception towards the quality and certain issues to the environment, making them more inclined to purchase environmentally friendly products (Degirmenci & Breitner, 2017; Higuera-Castillo et al., 2019). Awareness of damage caused by road fuel vehicles creates also focus on green products' positive impact on the environment (Yeow & Loo, 2022). Information that is considered important by consumers include; price, type, brand and greenness of the product according to Kojčić and Kuzmanović (2022). According to Amin et al. (2015), functional qualities and emotional values are two significant aspects of product positioning in the green products market. Eco-label in the green product decision making has been revealed with consumers becoming more label savvy (Kumar & Basu, 2023). Based on this, the study proposes the following hypothesis:

H1: The environmental knowledge has a significant impact on consumers' green purchasing behaviour.

H0: Environmental knowledge has no substantial impact on consumers' green purchasing behaviour.

The Influence of the Green Perceived Value on Consumer Green Purchasing Behaviour

Purchasing decision making is actually a conclusion of a cycle which includes the accumulation of information and the evaluation and decision making process and all of these are governed by consumer behaviour. As stated by Dang et al. (2021), consumer behaviour is a set of psychological processes including cognitive, emotional and social factors that argue consumers' decisions. From another angle, the perceived value by a consumer is crucial when it comes to consumer business/organization relations. Research done in the past years suggest that one of the factors that have been altered in recent times includes perceived value, which depends on the actual

behaviour of the product (Doszhanov & Ahmad, 2015; Yusoff et al., 2023). In addition, the emergence of green products is considered a norm, and consumers are willing to pay a premium price for such products since the attributes tied to these products play key roles in decision-making processes and consumption behavior. However, several of these products do not attract a high value from the users hence the challenge of circulating and selling the products. Based on this literature, the following hypothesis is proposed:

- H2:** The green perceived value has a significant impact on consumers' green purchasing behaviour.
- H0:** Green perceived value does not have a strong impact on consumers' green purchasing behaviour.

Figure 1 displays the conceptual framework of the current study.

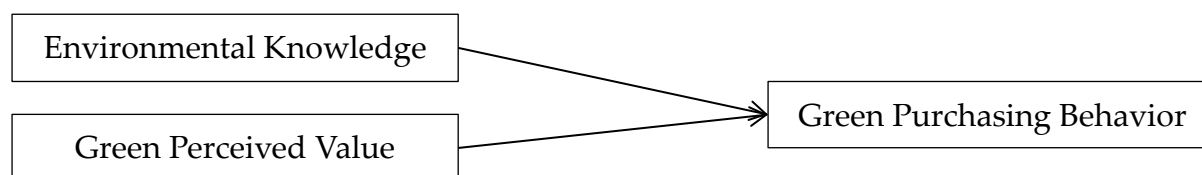


Figure 1: Conceptual Framework.

Research Methodology

The research aims at investigating Chinese customers green purchasing behaviour and the moderating role of environmental consciousness and green perceived value. In order to achieve this, the quantitative research method measures the relationships between the pertinent variables through structural equation modelling (SEM). Included in the study technique are aspects such as the target population, the sampling procedures and justifications, as well as the determination of sample size. It also included the sections on data collecting, instrumentation, ethical considerations and case study method in compliance with the submission criteria of the journal which favors case based studies.

Research Method

With regards to the approach in this study, it is purely quantitative in that it involved the analysis of the correlations between multiple variables in a large population. Probability sampling is used in this method so that the selected sample reflects the population density accurately. The purpose of this research is thus to explore Chinese consumer green purchasing behaviour in terms of their knowledge on environmental concerns and perceived green value. Therefore, the use of SEM is effective in dealing with the complexities that are brought about by the existence of multiple variables most of which are made of latent constructs. especially used in consumer behaviour since it enables one to conduct tests on hypothesized connections and has the avenues of direct and indirect effects to consumer decisions (Nurhidayati & Sukri, 2025).

Sampling and Population

This study takes sample on the consumer in china who have bought the green products meaning those products that have less negative impact when used, produced and disposed by conformance to sustainable practices such as; resource conservations, pollution control and ecosystem protection (Yeow & Loo, 2022). All the green product consumers in China cannot be recruited because of the large population and population diversity in China. Therefore, the random sampling method is adopted for this study because it selects every unit in the population with equal probability. It is a technique that enables one to make broad conclusions regarding the entire population after conducting research on the sample (Sarstedt et al., 2018).

Sample Size

Sample size is a significant factor for SEM investigations since its efficiency depends on the sample size. It is suggested that the minimum number of cases should be 200, but this can vary depending on the intricacies of the models used (Whittaker & Schumacker, 2022). Since it is recommended that one should have up to 10 participants per variable, 55 being the total number of variables in this study, then 550 participants would suffice as a viable sample size. It increases the possibility of finding significance of the relationship between the variables, decrease the error variance and increases the generality of the findings (Nurhidayati & Sukri, 2025).

Data Collection

In order to achieve the objectives of this study, an online questionnaire was developed and distributed to Chinese consumers who have made a purchase any green product. This is because the survey was developed for the specific purpose of testing the subjects' level of environmental literacy, their attitude towards the value of green products, as well as the frequency of their purchases of green products. Therefore, the survey was carried out in both English and Chinese to increase the odds of getting more combination responses. It was shared through common Chinese social media platforms such as We Chat and Taobao so that it could reach out to the target population. To minimize the influence of misconceptions by the respondents, the survey was also targeted to people with prior knowledge and experience of consuming green products through the use of relevant websites of environment awareness and green products. The study used both snowball sampling and random sampling techniques. They were advised to fill the survey and what about any person they knew to meet other characteristics required in the study as a way of reaching out to more people (Gregar, 2016).

Instrumentation

The key constructs measured in this study are environmental knowledge, green perceived value, and green purchasing behaviour, with multiple measurement scales employed. These scales were adapted from previous research, with modifications

made to suit the Chinese context.

1. **Environmental concern:** The environmental knowledge scale which is adapted from Zhao et al. (2020) in addition to Yang et al. (2022). It consists of two parts, environmental protection theory, and green product theory. These dimensions measure the participant's general knowledge concerning environmental aspects and performance concerning green products.
2. **Green perceived value:** The green perceived value framework has five dimensions formulated by Nadifa and Hati (2023). These dimensions cover the various ways or aspects through which green products yield advantage.
3. **Green Purchasing Behaviour:** This research instrument classifies green purchasing behaviour based on the consumers' attitude, their intention and actual buying behaviour developed from Zhang and Dong (2020). It encompasses a number of behavioral characteristics about green product acquisition and or other components that determine such purchases.

Ethical Considerations

The importance of ethical consideration in research with human subjects is an imperative one. This experiment followed the ethics of the Institutional Review Board (IRB). In order to support confidentiality, all answers were anonymized and did not require participants to disclose information that would identify them. Collected data were stored safely, and the personnel could only be a research team.

Results and Discussion

Preparation of Data

Table 1 presents the abbreviations used in the study.

Table 1: Variable Abbreviation.

Variable Name	Abbreviation
Environmental Knowledge	EK
Green Perceived Value	GPV
Green Purchasing Behaviour	GPB
Environmental Protection Knowledge	EPK
Green Product Knowledge	GPK
Functional Value	FV
Emotional Value	EV
Social Value	SV
Green Value	GV
Economic Value	ECV

Demographic Characteristics

The demographic data are presented in Table 2.

Table 2: Characteristics of the Sample.

Demographic Characteristics		Frequency	Percentage (%)
Gender	Male	239	43.5
	Female	311	56.5
Age	Under 18 years old	2	0.4
	18-25 years old	166	30.2
	26-30 years old	234	42.5
	31-40 years old	87	15.8
	Over 41 years old	61	11.1
Monthly Income	Below RMB 3,000	139	25.3
	RMB 3000-5000	107	19.5
	RMB 5001-8000	179	32.5
	RMB 8,001-15,000	104	18.9
	RMB 15,000 and above	21	3.8
Educational Background	High school students and below	54	9.8
	High school or junior college degree	209	38.0
	Bachelor's degree	149	27.1
	Postgraduate degree and above	138	25.1
Marital Status	Unmarried	144	26.2
	Married	268	48.7
	Others	138	25.1
Occupation	Student	53	9.6
	Corporate staff	23	4.2
	Civil servant or public institution employee	66	12.0
	Housewife	209	38.0
	Retirees	174	31.6
	Others	25	4.5

Reliability and Validity Tests

Reliability Test

Table 3 displays the dependability of the study variables. All variables assessed in this study exhibit satisfactory internal consistency, as evidenced by Cronbach's α values. The Cronbach's α values for all variables are below 0.7, indicating satisfactory reliability (Izah et al., 2024).

Table 3: Summary of Reliability Test.

Variables	No. of Items	Cronbach's Alpha	Remarks
EK	10	0.914	Excellent
GPV	19	0.929	Excellent
GPB	4	0.812	Good

Confirmatory Factor Analysis of the Three Variables

From [Table 4](#), it is observed that all indicators of the confirmatory factor analysis (CFA) measurement model achieve an acceptable level.

Table 4: Model Fit Indicators of CFA Measurement Model.

Model Fit Indicators	Threshold	Estimate
RMSEA	<0.08	0.054
GFI	>0.9	0.938
CFI	>0.9	0.956
TLI	>0.9	0.945
IFI	>0.9	0.956
NFI	>0.9	0.931
χ^2/DF	[1,5]	2.617

Convergent Validity Analysis

The AVE for constructs was computed and assessed to evaluate convergent validity. A construct attains convergent validity when its AVE value is equal to or greater than 0.5 ([Baharum et al., 2023](#)). CR quantifies the degree to which underlying variables influence the construct in Structural Equation Modelling ([Kalkbrenner, 2023](#)). [Izah et al. \(2024\)](#) assert that for a latent concept to exhibit internal consistency and CR, the value must be ≥ 0.6 . From [Table 5](#), it is observed that the standardised factor loadings of each measurement item meet the required criteria. Consequently, this study confirms high convergent validity across the five variable scales used.

Table 5: The Results of Convergent Validity Analysis

Latent Variable	Observation Variable	Standardized Factor Loading	S.E.	C.R.	P	CR	AVE
EK	EPK	0.743				0.7417	0.5897
	GPK	0.792	0.083	13.312	0.000		
GPV	FV	0.715				0.8388	0.5105
	EV	0.703	0.071	14.942	0.000		
	SV	0.74	0.062	15.666	0.000		
	GV	0.66	0.062	14.081	0.000		
	ECV	0.751	0.076	15.866	0.000		
GPB	GPB1	0.745				0.8137	0.5223
	GPB2	0.686	0.055	14.767	0.000		
	GPB3	0.749	0.055	16.01	0.000		
	GPB4	0.709	0.053	15.23	0.000		

Discriminate Validity Analysis

According to [Purwanto and Sudargini \(2021\)](#), discriminant validity is assessed by

comparing each scale with other dimensions. The AVE square root appears diagonally, while correlation coefficients are below. Discriminant validity is confirmed if the AVE square root exceeds the correlation coefficients (Purwanto & Sudargini, 2021). Table 6 demonstrates good discriminant validity.

Table 6: Discriminant Validity.

	EK	GPV	GPB
EK	0.7679		
GPV	0.453	0.7145	
GPB	0.454	0.492	0.7227

Descriptive Analysis

From Table 7, the mean scores range from 3.00 to 5.00, indicating moderate levels for all variables (Nave & Franco, 2021). This suggests varying respondent perspectives on the studied variables.

Table 7: Summary of Descriptive Finding.

Variables	Minimum	Maximum	Mean	Standard Deviation
EK	1	5	3.4029	0.86588
GPV	1	5	3.3935	0.70737
GPB	1	5	3.6645	0.74534

SEM

Model Fit Indicators of the SEM

The framework analysis and verification are conducted using SEM (Figure 1). Before examination, the goodness-of-fit index is applied to ensure the model's suitability. Results confirm that SEM is appropriate for this study. Scholars (Goretzko et al., 2024; Kline, 2023; Nurhidayati & Sukri, 2025) outline fit standards, summarised in Table 8.

Table 8: Goodness of Fit Index of the SEM.

Goodness of Fit Index	Estimate Required	Measurement Model
RMSEA	<0.08	0.054
GFI	>0.9	0.938
CFI	>0.9	0.956
TLI	>0.9	0.945
IFI	>0.9	0.956
NFI	>0.9	0.931
χ^2/DF	[1,5]	2.617

SEM Diagram

Figure 2 presents the SEM diagram.

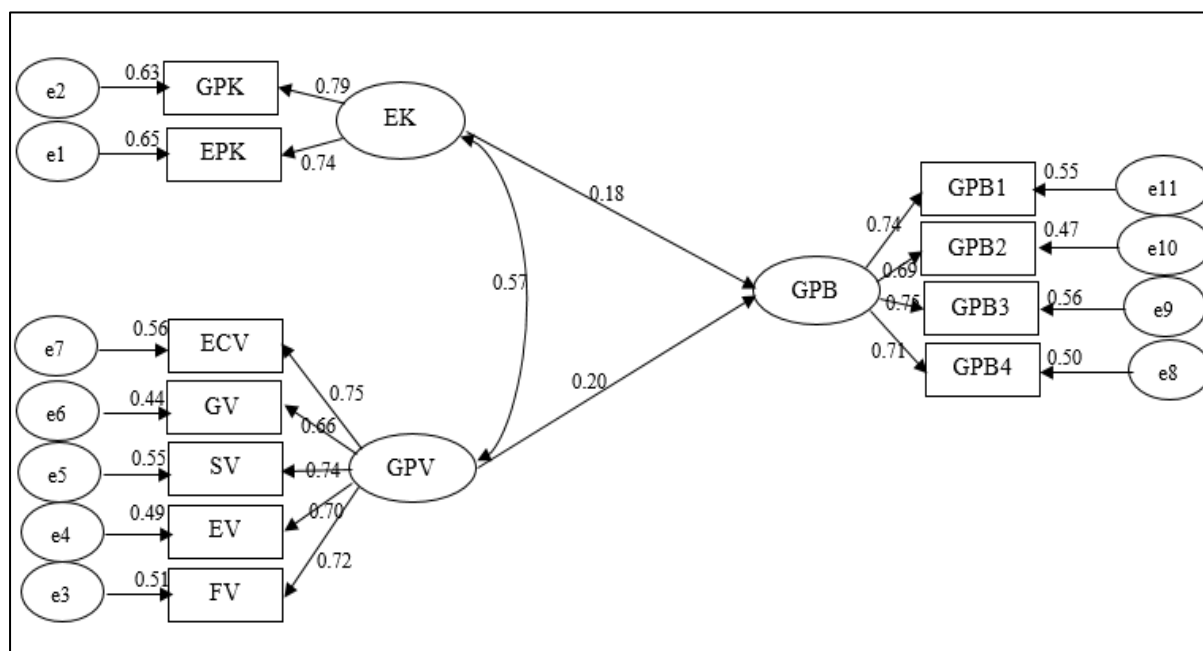


Figure 2: SEM Diagram.

Direct Effect Analysis

Table 9 indicates that environmental knowledge positively influences green purchasing behaviour ($B = 0.183$, $p < 0.01$), supporting H1. Similarly, green perceived value has a significant positive effect ($B = 0.196$, $p < 0.01$), leading to the rejection of the null hypothesis for H2 and confirming its support.

Table 9: Direct Effect Analysis.

Direct Effects	Standardized Estimate (B)	S.E.	C.R.	P	Hypothesis
EK → GPB	0.183	0.078	2.525	0.012	H1
GPV → GPB	0.196	0.081	2.947	0.003	H2

Discussion

The impact of environmental knowledge on consumer green purchasing behaviour

The empirical analysis confirms that environmental knowledge positively predicts green purchasing behaviour, supporting H1. This aligns with [Gkargkavouzi et al. \(2019\)](#) and [Meyer \(2015\)](#), who highlight environmental knowledge as a key predictor of sustainable consumption. Additionally, higher environmental knowledge enhances pro-environmental behaviour ([Macias, 2015](#); [Rusyani et al., 2021](#)).

The impact of green perceived value on consumer green purchasing behaviour

The empirical analysis confirms that green perceived value significantly influences green purchasing behaviour, supporting H2. This aligns with [Sun et al. \(2022\)](#) and [Ban et al. \(2022\)](#). In TPB, intention to act is influenced by attitudes ([Hagger et al., 2022](#)), with perceived value positively correlating with purchasing behaviour ([Bizon et al., 2023](#)). Higher perceived value increases consumer intention to act ([Wanping & Eunmi, 2024](#)). [Tanrikulu \(2021\)](#) highlight that perceived value addresses consumer needs, exchange value, and purchasing decisions. As a subjective perception, it shapes behaviour through emotional responses and consumption experiences ([Wondirad et al., 2023](#)). The results support H1, confirming that environmental knowledge strongly predicts green product adoption. This aligns with [Gkargkavouzi et al. \(2019\)](#) and [Meyer \(2015\)](#), who identified environmental knowledge as key in sustainable consumption. A positive link exists between higher environmental knowledge and pro-environmental behaviour ([Macias, 2015](#); [Rusyani et al., 2021](#)).

Environmental knowledge raises awareness and fosters sustainable consumption ([Rustam et al., 2020](#)). Informed consumers are more likely to recycle, reduce waste, and buy eco-friendly products. Consumers' education means, therefore, how they were educated or informed to be green through either formal learning system and or informative undertaking ([Varela-Candamio et al., 2018](#)). Environmental literacy in learning and training processes helps to increase awareness and promote green purchases ([Trong Nguyen et al., 2023](#)). Albeit the fact that there is a relationship between environmental knowledge and green purchase behaviour, there is attitude-behaviour gap where the environment knowledge does not necessarily translate into practice ([Borusiak et al., 2021](#)). It is important to note that other factors may interact with this relation and these include; convenience, price sensitivity and social influence. It is suggested that consumers get social values in green products, but there are factors that deter them such as availability and the price, and also what other people are using. Consequently, there is a need for business and policy strategies to ensure sustainable products are affordable and reachable in order to promote changes in public behaviour.

There is further an elaboration on green perceived value that comprises of the economic, functional, emotional, and social values ([Zhao et al., 2024](#)). It's in this perception that consumers judge these attributes while using them to consider the cost/benefit analysis of green products. For instance, if green product characteristic involves durability and cost and the health benefits of the product, consumers are likely to purchase the product. This share similar with [Dang et al. \(2021\)](#) where they argue that perceived utility of sustainability concerns helps in increasing the perceived value of the green product. Theoretically, how marketing messages of green values, in terms of social benefit for product consumption can increase the green perceived value by other factors like protection of the environment, low carbon footprints and

supporting the ethical business can attract more consumers into opting for green consumption.

Conclusion and Implications

Conclusion

The primary objective of this study was to integrate constructs derived from prior research that had not yet been consolidated into a unified model. Specifically, factors such as environmental knowledge and green perceived value were examined for their influence on green behaviour. The research hypotheses were tested quantitatively, utilising a survey questionnaire to collect 550 first-hand responses. The data were processed and analysed using AMOS statistical software. Existing literature supports the significance of these factors, with environmental knowledge enhancing awareness and responsibility, while green perceived value influences purchasing decisions. Additionally, the study identified the 'attitude-behaviour gap', revealing that accessibility and affordability, alongside attitude, significantly impact actual buying behaviour. The findings hold implications for markets, governments, and educational stakeholders. Policymakers are encouraged to promote environmental education and ensure the availability and affordability of green products. Future research should incorporate additional psychological and socio-economic factors affecting green purchasing behaviour to deepen understanding of consumers' sustainable behaviour.

Study Implication

Theoretical Implications

Research on green purchasing behaviour has largely centred on Western contexts, with limited exploration in non-Western settings. Cross-cultural studies are essential to understanding how cultural factors influence green consumption. Such research would enable comparisons between Western and non-Western cultures while examining how cultural values shape individuals' environmental behaviours and green purchasing decisions.

Managerial Implications

Integrating environmental education into the basic education system is crucial for fostering long-term green awareness. This foundational step can support China's sustainable development by shaping environmentally responsible behaviours early. Social organisations should also promote green education and cultivate a pro-environmental social atmosphere. Additionally, the media should play a role in discouraging non-green behaviours by emphasising their negative impacts. Strategic reporting can enhance public support for environmental regulations and encourage green consumer behaviour.

Limitations and Future Direction

This study has several limitations. First, as the sample consists solely of Chinese consumers, the findings may not be generalisable to other cultural or economic contexts. Future research could adopt a cross-cultural approach to compare green purchasing behaviour across regions. Experimental or observational methods may offer more accurate insights into consumer behaviour. Lastly, while this study focuses on environmental knowledge and green perceived value, it does not examine financial constraints, regulatory policies, or technological advancements. Future studies could explore the long-term effects of environmental education, the role of digital marketing in green product adoption, and the influence of developments such as the circular economy and sustainable packaging on consumer preferences in emerging markets.

References

- Amin, M., Uthamaputhran, S., & Ali, F. (2015). The effectiveness of green product positioning and marketing strategies towards purchase intention in Malaysia. *International Journal of Innovation and Learning*, 17(4), 516-528. <https://doi.org/10.1504/IJIL.2015.069634>
- Amin, S., & Tarun, M. T. (2021). Effect of consumption values on customers' green purchase intention: a mediating role of green trust. *Social Responsibility Journal*, 17(8), 1320-1336. <https://doi.org/10.1108/SRJ-05-2020-0191>
- Baharum, H., Ismail, A., Awang, Z., McKenna, L., Ibrahim, R., Mohamed, Z., & Hassan, N. H. (2023). The study adapted instruments based on Confirmatory Factor Analysis (CFA) to validate measurement models of latent constructs. *International Journal of Environmental Research and Public Health*, 20(4), 2860. <https://doi.org/10.3390/ijerph20042860>
- Ban, J., Kim, H. J., Sheehan, B., & Prideaux, B. (2022). How service quality and perceived value affect behavioral intentions of ecolodge guests: The moderating effect of prior visit. *Journal of Vacation Marketing*, 28(2), 244-257. <https://doi.org/10.1177/13567667211042641>
- Bizon, E., Didier, M., Mamnuat, N., Newman, J., Radziszewski, M., & Sharan, M. (2023). *Buying Into Comparative Pricing: Exploring Purchase Intention and Satisfaction*. <https://dx.doi.org/10.14288/1.0435787>
- Borusiak, B., Szymkowiak, A., Lopez-Lluch, D. B., & Sanchez-Bravo, P. (2021). The role of environmental concern in explaining attitude towards second-hand shopping. *Entrepreneurial Business and Economics Review*, 9(2), 71-83. <https://doi.org/10.15678/EBER.2021.090205>
- Dang, V. T., Nguyen, N., & Wang, J. (2021). The impact of retailers' indoor environmental quality on consumer purchase decision. *International Journal of Retail & Distribution Management*, 49(6), 772-794. <https://doi.org/10.1108/IJRDM-04-2020-0130>

- Degirmenci, K., & Breitner, M. H. (2017). Consumer purchase intentions for electric vehicles: Is green more important than price and range? *Transportation Research Part D: Transport and Environment*, 51, 250-260. <https://doi.org/10.1016/j.trd.2017.01.001>
- Doszhanov, A., & Ahmad, Z. A. (2015). Customers' Intention to Use Green Products: the Impact of Green Brand Dimensions and Green Perceived Value. *SHS Web of Conferences*, 18, 01008. <https://doi.org/10.1051/shsconf/20151801008>
- Gkargkavouzi, A., Halkos, G., & Matsiori, S. (2019). Environmental behavior in a private-sphere context: Integrating theories of planned behavior and value belief norm, self-identity and habit. *Resources, Conservation and Recycling*, 148, 145-156. <https://doi.org/10.1016/j.resconrec.2019.01.039>
- Goretzko, D., Siemund, K., & Sterner, P. (2024). Evaluating model fit of measurement models in confirmatory factor analysis. *Educational and Psychological Measurement*, 84(1), 123-144. <https://doi.org/10.1177/00131644231163813>
- Gregar, J. (2016). Research Design (Qualitative, Quantitative and Mixed Methods Approaches). *e-Pedagogium*, 16(4), 80-83. <https://e-pedagogium.upol.cz/pdfs/epd/2016/04/08.pdf>
- Hagger, M. S., Cheung, M. W. L., Ajzen, I., & Hamilton, K. (2022). Perceived Behavioral Control Moderating Effects in the Theory of Planned Behavior: A Meta-Analysis. *Health Psychology*, 41(2), 155-155. <https://doi.org/10.1037/hea0001153>
- Higuera-Castillo, E., Liébana-Cabanillas, F. J., Muñoz-Leiva, F., & García-Maroto, I. (2019). Evaluating consumer attitudes toward electromobility and the moderating effect of perceived consumer effectiveness. *Journal of Retailing and Consumer Services*, 51, 387-398. <https://doi.org/10.1016/j.jretconser.2019.07.006>
- Izah, S. C., Sylva, L., & Hait, M. (2024). Cronbach's Alpha: A Cornerstone in Ensuring Reliability and Validity in Environmental Health Assessment. *ES Energy and Environment*, 23, 1057. <https://doi.org/10.30919/esee1057>
- Kalkbrenner, M. T. (2023). Alpha, Omega, and H Internal Consistency Reliability Estimates: Reviewing These Options and When to Use Them. *Counseling Outcome Research and Evaluation*, 14(1), 77-88. <https://doi.org/10.1080/21501378.2021.1940118>
- Kline, R. B. (2023). *Principles and Practice of Structural Equation Modeling*. Guilford Publications. <https://books.google.com.pk/books?id=t2CvEAAQBAI>
- Kojčić, I., & Kuzmanović, M. (2022). Conjoint analysis of green consumer preferences for electronic products. *International Journal for Quality Research*, 16(2), 559-575. <https://doi.org/10.24874/IJQR16.02-14>
- Kumar, A., & Basu, R. (2023). Do eco-labels trigger green product purchase intention among emerging market consumers? *Journal of Indian Business Research*, 15(3), 466-492. <https://doi.org/10.1108/IJBR-09-2022-0248>
- Macias, T. (2015). Risks, Trust, and Sacrifice: Social Structural Motivators for Environmental Change. *Social Science Quarterly*, 96(5), 1264-1276. <https://doi.org/10.1111/ssqu.12201>

- Meyer, A. (2015). Does education increase pro-environmental behavior? Evidence from Europe. *Ecological Economics*, 116, 108-121. <https://doi.org/10.1016/j.ecolecon.2015.04.018>
- Nadifa, A. P., & Hati, S. R. H. (2023). Effect of consumption value on green purchase intention of organic food: The mediation role of attitude and green trust. *Jurnal Manajemen dan Pemasaran Jasa*, 16(2), 309-324. <https://doi.org/10.25105/v16i2.17134>
- Nave, E., & Franco, M. (2021). Cross-border cooperation to strengthen innovation and knowledge transfer: An Iberian case. *Innovation: The European Journal of Social Science Research*, 37(4), 1013-1031. <https://doi.org/10.1080/13511610.2021.1964354>
- Nurhidayati, S., & Sukri, A. (2025). Validation of Students' Green Behavior Instrument Based on Local Potential Using Structural Equation Modeling With Smart Partial Least Squares. *European Journal of Educational Research*, 14(1). <https://doi.org/10.12973/eu-jer.14.1.215>
- Purwanto, A., & Sudargini, Y. (2021). Partial Least Squares Structural Equation Modeling (PLS-SEM) Analysis for Social and Management Research : A Literature Review. *Journal of Industrial Engineering & Management Research*, 2(4), 114-123. <https://www.jiemar.org/index.php/jiemar/article/view/168>
- Rustam, A., Wang, Y., & Zameer, H. (2020). Environmental awareness, firm sustainability exposure and green consumption behaviors. *Journal of Cleaner Production*, 268, 122016. <https://doi.org/10.1016/j.jclepro.2020.122016>
- Rusyani, E., Lavuri, R., & Gunardi, A. (2021). Purchasing eco-sustainable products: Interrelationship between environmental knowledge, environmental concern, green attitude, and perceived behavior. *Sustainability*, 13(9), 4601. <https://doi.org/10.3390/su13094601>
- Sarstedt, M., Bengart, P., Shaltoni, A. M., & Lehmann, S. (2018). The use of sampling methods in advertising research: A gap between theory and practice. *International Journal of Advertising*, 37(4), 650-663. <https://doi.org/10.1080/02650487.2017.1348329>
- Sun, Y., Li, T., & Wang, S. (2022). "I buy green products for my benefits or yours": understanding consumers' intention to purchase green products. *Asia Pacific Journal of Marketing and Logistics*, 34(8), 1721-1739. <https://doi.org/10.1108/APJML-04-2021-0244>
- Tanrikulu, C. (2021). Theory of consumption values in consumer behaviour research: A review and future research agenda. *International Journal of Consumer Studies*, 45(6), 1176-1197. <https://doi.org/10.1111/ijcs.12687>
- Trong Nguyen, L., Nguyen, T. H., Ngoc Nguyen, H., Dai Nguyen, L., Thi Thu Nguyen, D., & Duy LE, L. (2023). Determinants of green consumer behavior: A case study from Vietnam. *Cogent Business & Management*, 10(1), 2197673. <https://doi.org/10.1080/23311975.2023.2197673>
- Varela-Candamio, L., Novo-Corti, I., & García-Álvarez, M. T. (2018). The importance of environmental education in the determinants of green behavior: A meta-

- analysis approach. *Journal of Cleaner Production*, 170, 1565-1578.
<https://doi.org/10.1016/j.jclepro.2017.09.214>
- Wanping, Z. E. N. G., & Eunmi, K. I. M. (2024). The Effect of Last-Mile Logistics Services Quality on Customer Loyalty in Fresh Food E-Commerce: Evidence from China. *East Asian Journal of Business Economics (EAJBE)*, 12(3), 1-10.
<https://doi.org/10.20498/eajbe.2024.12.3.1>
- Whittaker, T. A., & Schumacker, R. E. (2022). *A beginner's guide to structural equation modeling* (5th ed.). Routledge. <https://doi.org/10.4324/9781003044017>
- Wondirad, A., Wu, K., Teshome, E., & Lee, T. J. (2023). What drives the consumption of cruise ship tourism? Analyzing factors that motivate visitors to participate in cruise ship holidays through a content analysis of selected journal publications. *Cogent Social Sciences*, 9(2), 2282411.
<https://doi.org/10.1080/23311886.2023.2282411>
- Yang, M., Chen, H., Long, R., & Yang, J. (2022). The impact of different regulation policies on promoting green consumption behavior based on social network modeling. *Sustainable Production and Consumption*, 32, 468-478.
<https://doi.org/10.1016/j.spc.2022.05.007>
- Yeow, P. H. P., & Loo, W. H. (2022). Antecedents of green computer purchase behavior among Malaysian consumers from the perspective of rational choice and moral norm factors. *Sustainable Production and Consumption*, 32, 550-561.
<https://doi.org/10.1016/j.spc.2022.05.015>
- Yusoff, N., Alias, M., & Ismail, N. (2023). Drivers of green purchasing behaviour: a systematic review and a research agenda. *F1000Research*, 12, 1286.
<https://doi.org/10.12688/f1000research.140765.1>
- Zhang, W., & Xi, B. (2024). The effect of carbon emission trading on enterprises' sustainable development performance: A quasi-natural experiment based on carbon emission trading pilot in China. *Energy Policy*, 185, 113960.
<https://doi.org/10.1016/j.enpol.2023.113960>
- Zhang, X., & Dong, F. (2020). Why do consumers make green purchase decisions? Insights from a systematic review. *International Journal of Environmental Research and Public Health*, 17(18), 6607. <https://doi.org/10.3390/ijerph17186607>
- Zhao, H., Furuoka, F., Rasiah, R. A. L., & Shen, E. (2024). Consumers' purchase intention toward electric vehicles from the perspective of perceived green value: An empirical survey from china. *World Electric Vehicle Journal*, 15(6), 267.
<https://doi.org/10.3390/wevj15060267>
- Zhao, R., Wu, D., & Patti, S. (2020). A bibliometric analysis of carbon labeling schemes in the period 2007–2019. *Energies*, 13(16), 4233.
<https://doi.org/10.3390/en13164233>