Academic Journal of Management and Social Sciences
ISSN: 2958-4396 | Vol. 5, No. 2, 2023

Study on the Influencing Factors of Green Purchasing Intentions among College Students in a University in Guangdong

Chunjiang Liu [1, 2]

[1] School of Business and Economics, University of San Carlos, Cebu City, 6000 Cebu, Philippines
[2] School of E Dongguan University of Technology, Dongguan Guangdong, 523808, China

Abstract: The Industrial Revolution has led to a continuous decline in global environmental quality, exacerbating environmental issues in recent years and gradually drawing public attention to ecological concerns. In the context of promoting sustainable development globally, green purchasing behavior, particularly among the millennial generation of college students, is gaining increasing attention due to its minimal negative impact on the environment. This article, based on extensive literature review and a case study of a university in Guangdong Province, employs the Theory of Planned Behavior and utilizes SPSS software for data analysis. It concludes that college students' environmental knowledge, ecological values, perceived self-efficacy, and group pressure significantly influence their green purchasing intentions. The study aims to provide support and reference for related research.

Keywords: Environmental Knowledge; Ecological Values; Perceived Self-Efficacy; Group Pressure; Green Purchasing Intentions.

1. Introduction

In the 1980s, the United Nations introduced the concept and model of "sustainable development," which has become well-known today. However, issues like environmental pollution, energy crises, and global warming persist, closely linked to people's consumption habits. Correct and rational consumer choices are significantly impactful for environmental protection. Although scholars domestically and internationally have extensively studied green purchasing behavior, there is limited literature focusing on specific consumer groups, and the influencing factors of consumption behavior vary among different groups. College students, as future main consumers, exhibit influential and exemplary green purchasing behaviors. However, this aspect has not received much attention in previous research. Therefore, exploring the factors affecting college students' green purchasing intentions and promoting their green purchasing are crucial for improving the environment and fostering the development of a low-carbon economy.

2. Factors Influencing Green Purchasing Intentions and Model Construction

Green purchasing is an environmentally responsible behavior manifested in the realm of consumption. Personal values, the core of human cognition and behavior, are crucial for understanding consumer behavior [1]. These values or internal moral standards drive individual consciousness and actions, and studies have shown their significant impact on green purchasing intentions [2-3]. Research by [4] demonstrated that environmental values effectively predict green purchasing behavior. Kim (2011) [5] explored the influence of environmental knowledge, values, and attitudes on green purchasing through structural equation modeling. This study hypothesizes:

H1: Environmental knowledge significantly impacts the intention to purchase green products. Previous studies indicate environmental knowledge as a key factor influencing the intent to buy green products, with environmental knowledge also being an indicator of social and environmental sustainability. This awareness provides motivation for green purchasing behavior [Bhattacharya, H. (2019)], and previous findings have shown a positive impact of environmental knowledge on the intention to purchase green products [Kanchanapibul, M., Lacka, E., Wang, X., Chan, H.K. (2014)]. Additionally, green brand knowledge is a crucial determinant in purchasing green products [Mohd Suki, N. (2016)].

H2: Ecological values positively influence green purchasing intentions. Based on the Theory of Planned Behavior and related research, perceived behavioral control positively impacts behavioral intentions and is considered a determinant of green behavior. Lokhov (2013) [6] found that consumer innovativeness influences green purchasing intentions and behavior through attitudes, subjective norms, and perceived control. Perceived behavioral control and perceived self-efficacy are similar in the context of green purchasing, where consumer self-efficacy refers to their psychological expectation of the environmental protection effect of their green consumption behavior. Hence, consumers with high perceived self-efficacy have a strong intention towards green purchasing.

H3: Perceived self-efficacy has a positive impact on green purchasing intentions. Cultural factors also influence green purchasing behavior, with studies indicating significant impacts of subjective norms under Chinese cultural backgrounds on consumers' green purchasing intentions [7-8]. Subjective norms refer to the extent to which an individual's behavior is influenced by others, considering social group pressures. Research has found that group pressure faced by consumers affects their green purchasing [9]. In the Chinese context, subjective norms are divided into face consciousness and group conformity. University students, keen to maintain

interpersonal relationships, often strive for conformity with their peers, and their green purchasing intentions are influenced by their social groups [10]. Thus, the following hypothesis is proposed:

H4: Group pressure positively influences green purchasing intentions. Consumers' environments significantly impact their values and consumption patterns. Studies have found similarities between college students and their parents in consumption motives, attitudes, and behaviors, with consumer intentions always influenced by the consumption habits of those around them. Research also shows that family members' attitudes and behaviors affect other members' green purchasing intentions [11], with parents' words and actions having a significant positive impact on their children's attitudes towards purchasing green products. Additionally, after entering university, students' behavior is influenced by the campus culture, including teachings, school promotions, and peer groups, thus affecting their values and green purchasing intentions. Therefore, the following hypothesis is proposed based on the literature:

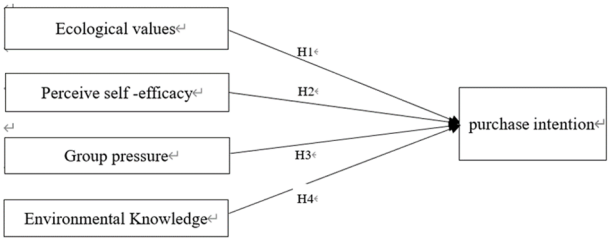

Figure 1. Theoretical framework of college students green purchase intention influencing factors

3. Empirical Survey Analysis

3.1. Questionnaire Design

The questionnaire, in addition to collecting basic personal information such as age, gender, and grade level of respondents, primarily comprised 12 questions to measure the variables in the model. Following the studies of [12], [13], and [14], the questionnaire items were set and measured using a Likert scale.

3.2. Data Collection

Data was collected via a survey method, with the questionnaire designed on an online platform and distributed at a university in Guangdong Province. Out of 500 distributed questionnaires, 450 were retrieved, and after verification, 431 valid questionnaires were obtained, resulting in a 95.8% validity rate.

3.3. Reliability and Validity Test

Table 1. Differential validity test

	Perceive self-efficacy	Environmental knowledge	Ecological values	Group pressure	purchase intention
Perceive self-efficacy	0.82				
Environmental knowledge	0.49	0.92			
Ecological values	0.66	0.32	0.84		
Group pressure	0.62	0.43	0.5	0.95	
purchase intention	0.6	0.55	0.48	0.54	0.87

The study used Cronbach's Alpha coefficient to test the reliability of the data. A Cronbach's Alpha coefficient greater than 0.7 indicates high reliability. The test showed that the Cronbach's Alpha coefficients of all variables exceeded the standard value, and the composite reliability exceeded 0.8, indicating reliable statistical analysis data.

Validity testing, which examines the accuracy of the scale in reflecting the effectiveness of the variables, revealed that the Average Variance Extracted (AVE) values of each variable exceeded 0.6, and the loadings of all measurement items surpassed the 0.7 threshold, indicating good discriminant validity among the latent variables.

3.4. Structural Equation Model Testing

The structural equation model was tested using SmartPLS software. The validation of the theoretical model is determined based on the coefficient of determination (R2), path coefficients, and significance levels. A higher R2 value indicates a greater degree of explanation of the latent variables by the internal model, with values above 0.5 considered ideal. As shown in Figure 2, [the details of the results would typically be described here, but they are not provided in your prompt.

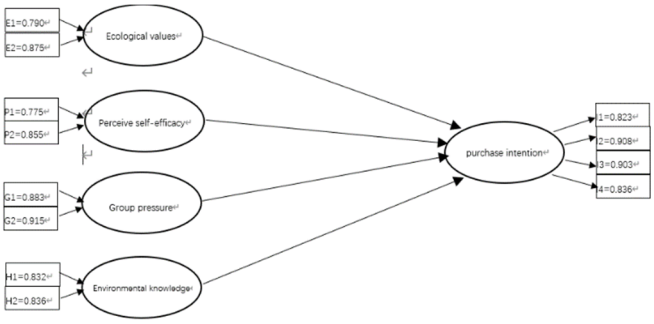

Figure 2. Factor path test diagram

The test results indicate that ecological values, perceived self-efficacy, group pressure, and environmental knowledge can explain 50.4% of green purchasing intentions (R2= 0.504), suggesting a good fit of the model. All path coefficients in the model are significant at the P<0.05 level, indicating that these factors positively influence green purchasing intentions. Specifically, ecological values (β=0.14), perceived self-efficacy (β=0.18), group pressure (β=0.19), and environmental knowledge (β=0.19) all significantly impact green purchasing intentions. Among these, group pressure shows the most significant positive effect, followed by environmental knowledge, ecological values, and perceived self-efficacy.

4. Limitations and Shortcomings of the Study

This research focuses on college students at a university in Guangdong Province, China. Due to the geographical scope and age range of the subjects, the conclusions may not apply to consumer groups of different ages in other regions or cultural backgrounds. Factors like historical background, cultural heritage, economic development, family income, and consumer awareness differ by region, which could limit the applicability of the study's findings in other countries, regions, or among different age groups.

5. Conclusion and Suggestions

Based on literature research and the Theory of Planned Behavior, this study constructed a structural equation model and collected data through questionnaires, analyzed using SPSS software. The results show that ecological values,

perceived self-efficacy, group pressure, and environmental knowledge positively influence green purchasing intentions. Environmental knowledge has the most significant impact on college students' green purchasing intentions, highlighting group pressure and environmental knowledge as decisive factors. Therefore, enhancing campus environmental education and fostering a green-conscious environment is crucial for influencing students' green purchasing intentions.

Specific measures to improve college students' green purchasing behavior include:

Strengthening curriculum development and promotion: Schools can offer mandatory and elective courses on green and environmental protection, promoting green knowledge through classroom discussions, campus posters, and bulletin boards.

Enhancing green student organizations: Encourage green student groups to organize debates, lectures, video viewings, and participate in green activities, raising awareness about the environmental harm of non-green consumption.

Setting an example at the institutional level: Schools should focus on energy-saving and environmentally friendly approaches in campus infrastructure, management activities, and teaching, shaping a green campus culture.

Establishing role models for green consumption: Recognize teachers and students who embrace green practices, encouraging them to implement green concepts, thereby creating group pressure and internal green moral constraints within the campus, influencing the green behavior of students and staff. Continuously enhance students' perceived self-efficacy in green practices to strengthen their green purchasing intentions and promote green purchasing behavior.

References

[1] Homer P M, Kahle L R. A structural equation test of the value-attitude-behavior hierarchy[J]. Journal of Personality and so cial Psychology, 1988, 54(4): 638.

[2] Kim Y.Understanding green purchase: The influence of col lectivism, personal values and environmental attitudes, and the moderating effect of perceived consumer effectiveness[J]. Seoul Journalof Business, 2011, 17(1): 65.

[3] Balderjahn I. Personality variables and environmental attitudes as predictors of ecologically responsible consumption paterns [J]. Journal of Business Research, 1988, 17(1):51-56.

[4] Barrutia J M, Gilsanz A. Electronic service quality and value: Do consumer knowledge - related resources matter? [J]. Journal of Service Research, 2013, 16(2):231-246.

[5] Bagozzi R P, Ue H M, VanLoo M E. Decisions to donate bone marrow: The role of attitudes and subjective norms across cultures[J]. Psychology and Health, 2001, 16: 29~56.

[6] Chen F Q, Jiang A Q. The consumers' knowledge of product, knowledge acquisition channels and consuming behaviorbased on 1803 residents tea consumption survey data of Hangzhou[J]. Journal of Business Economics, 2013, 1(01):52-57.

[7] Chan R Y K. Determinants of chinese consumers' green purchase behavior[J]. Psychology & Marketing, 2001, 18(4): 389–413.

[8] Chen Y S, Chang C H. Enhance green purchase intentions: The roles of green perceived value, green perceivedrisk, and green trust[J]. Management Decision, 2012, 50, 502–520.

[9] Chan R Y K. Determinants of chinese consumers' green purchase behavior[J]. Psychology & Marketing, 2001,18(4): 389– 413.

[10] Chang S H. The influence of green viral communications on green purchase intentions: The mediating role of consumers' susceptibility to interpersonal influences[J]. Sustainability, 2015, 7(5):4829-4849.

[11] Fraj E, Martinez E. Ecological consumer behavior: an empirical analysis[J]. International Journal of Consumer Studies, 2007, 31(1):26-33.

[12] Fielding K S et al. Integrating social identity theory and the theory of planned behaviour to explain decisions to engage in sustainable agricultural practices[J]. British Journal of Social Psychology, 2008, 47(Pt 1):23-48.

[13] Fu F Q, Elliott M T. The moderating effect of perceived product innovativeness and product knowledge on new product adoption: An integrated model[J]. Journal of Marketing Theory & Practice, 2013, 21(21):257-272.

[14] Gleim M R et al. Against the green[J]. Journal of Retailing, 2013, 89(1): 44-61.