Revealing the Influence of Green Product Prices on the Green Purchasing Behavior of Young Chinese Consumers A TPB Perspective

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Abstract: Using the Theory of Planned Behavior (TPB) as the theoretical framework, this article aims to reveal the impact of green product prices on their purchase decisions by in-depth research on the motivations and influencing factors of green purchasing behavior of young Chinese consumers. First, through a comprehensive definition and characteristic analysis of green consumption behavior, the paper comprehensively understands the attitudes and behaviors of the younger generation in the environmental protection trend. A review of domestic and foreign research progress provides a theoretical basis for the research. In terms of green purchasing behavior among young Chinese consumers, research highlights the influence of their attitudes, social responsibility and social media. Through in-depth analysis of the motivations for green purchases, researchers revealed the importance of factors such as environmental awareness, social responsibility, and individual health awareness. In terms of research methods, a comprehensive quantitative and qualitative data collection method was adopted to construct a scientific and reliable research design. In the sample description and analysis of main research variables, samples with different characteristics are described in detail, and factors such as attitudes, subjective norms, and perceived behavioral control are analyzed in depth. Finally, through a specific analysis of the impact of each component of TPB on green purchasing behavior, the interrelationship between these factors is revealed, providing profound insights into understanding young consumers' shopping decisions.

Keywords: Theory of planned behavior, green purchasing behavior, young consumers, attitude, social responsibility, perceived behavioral control, Green Product Prices.

1. Introduction

On a global scale today, green consumption has become a powerful force leading social change. As environmental awareness continues to rise, people are paying more and more attention to sustainable lifestyles and environmentally friendly products. This trend is particularly significant in China, the world's largest country by population. Especially among the younger generation of consumers, the pursuit of green products has become a noticeable social phenomenon. The rise of green consumption stems from concerns about environmental issues, awareness of limited resources and sustainable development, and reflections on the impact of traditional production methods on the ecological environment. The younger generation of consumers in China, influenced by the information age, pay more attention to social responsibility and the impact of individual behavior, and actively pursue a green-led lifestyle. Therefore, the demand and attention of green products in the market have increased significantly. This article aims to explore the impact of green product prices on the green purchasing behavior of young Chinese consumers, and by applying the Theory of Planned Behavior (TPB) to gain an in-depth understanding of the decision-making process and motivations of young consumers when purchasing environmentally friendly products. By deeply exploring the potential impact of price factors on green purchasing behavior, we aim to provide empirical research support for promoting the sustainable development of green consumption, and at the same time provide a useful reference for relevant companies and policy makers.

2. Research Overview

2.1. Research on green consumption behavior

(1) Definition and characteristics of green consumption

Research on green consumption behavior involves an in-depth exploration of consumers' choices and behavioral motivations for environmentally friendly products during the purchase decision-making process. The definition and characteristics of green consumption have become particularly important in the current context of the rise of global environmental awareness. Green consumption is not only a shopping behavior, but also a reflection of values and lifestyle. Over the past few decades, consumer expectations for products have gradually shifted from pure performance and price considerations to concerns about the environmental and social impacts of products. The essence of green consumption is an expression of social responsibility and represents the desire for sustainable development. The definition of green consumption not only stops at the eco-friendly attributes of products, but also includes comprehensive consideration of the production process, material sources, and corporate social responsibility. This shopping behavior is a subversion of traditional consumption patterns and signals consumers' growing awareness of sustainability. Green consumers often focus on a product's environmental certification, recycling and use of recycled materials, and a company's social responsibility throughout the supply chain. The characteristics of this behavior are not only reflected in purchasing decisions, but also in all aspects of lifestyle, including saving energy, reducing waste, advocating fair trade, etc. [1].
Research on green consumption behavior not only focuses on its rapid development in developed countries, but also sets its sights on emerging markets, among which China's young consumer groups have become the target of much attention. Their increasing sensitivity to issues such as environmental protection and social responsibility has become a force driving the expansion of green consumption behavior on a global scale. Therefore, an in-depth understanding of the definition and characteristics of green consumption has important theoretical and practical significance for revealing the purchasing behavior motivations of young consumers and the application of the TPB perspective. In this new era of consumption, green consumption is not only a behavior, but also a leader in social change and sustainable development [2].

(2) Relevant research progress in the world

Research progress on green consumption behavior at home and abroad has formed a large and rich academic field. In order to gain a deeper understanding of consumers' motivations and behaviors when purchasing environmentally friendly products, scholars have conducted extensive and in-depth research from different dimensions. Internationally, research on green consumption behavior is mainly concentrated in developed countries. The green consumption markets in these countries are relatively mature, and researchers have conducted more in-depth studies on consumer attitudes, knowledge levels, social influences and other factors. Research shows that consumers' environmental awareness and knowledge level are important factors affecting their green consumption behavior. In developed countries, widespread public concern about environmental issues has promoted the rise of green consumption. Consumers have a higher level of environmental knowledge and are more susceptible to the influence of environmental information. In addition, social influencing factors have also received extensive attention in research, including the influence of family, friends and colleagues on individual green consumption attitudes. In these countries, society's general recognition of environmental protection makes individuals more susceptible to the influence of social networks around them, forming a collective green consumption trend. In China, although the green consumer market is gradually emerging, related research is still in its infancy. Domestic scholars pay more attention to consumer attitudes and purchasing motivations, as well as the impact of corporate environmental image on consumer purchasing decisions. Compared with international research, Chinese research emphasizes the impact of cultural and social factors on green consumption, because the collectivism and family concepts of Chinese society may have a unique impact on individual purchasing behavior.

Relevant research progress at home and abroad has provided us with valuable experience and inspiration for our in-depth understanding of green consumption behavior. However, given China's unique cultural and social background, research on the green purchasing behavior of domestic young consumers still needs to be deepened, which is one of the research gaps that this paper attempts to fill.

2.2. Green purchasing behavior of young Chinese consumers

(1) China's younger generation's attitude toward green products

The attitude of China's younger generation towards green products shows obvious characteristics in the context of today's social change and sustainable development. With the advent of the information age, the popularity of the Internet and social media has made young people's attention to environmental protection and sustainability issues reach an unprecedented level. In this diverse and open information environment, young consumers have shown strong interest in green products and regard them as a way to demonstrate social responsibility and environmental awareness. China's younger generation has gradually formed a positive identification with green products, and they are more inclined to choose products that meet environmental standards and have eco-friendly attributes. This preference not only stems from concern for one's own health, but also reflects young people's pursuit of values in consumption. Green products are seen as a force for social change, and the younger generation of consumers are more willing to choose brands and products that are consistent with environmental protection concepts in their purchasing decisions. One of the key factors is young people's sense of social responsibility and desire for sustainable development. They are increasingly aware of the impact of environmental issues on society as a whole, and therefore pay more attention to the ecological footprint of products and environmental protection measures in the production process when shopping. In addition, the widespread use of social media makes it easier for young people to access environmental protection information, which in turn deepens their understanding and recognition of green products.

However, the attitude of China's younger generation towards green products is not uniform, and there are certain differences. Factors such as an individual's education level, degree of urbanization, and social class may affect their acceptance and purchase intention of green products. Therefore, to deeply understand the green purchasing behavior of this group, we need to conduct a more in-depth discussion on the basis of segmented groups to more accurately grasp the diversity and complexity of the younger generation's attitudes towards green products. In this context, studying the green purchasing behavior of the younger generation through the TPB perspective will help reveal their purchasing motivations and behavior patterns, and provide practical suggestions for promoting sustainable green consumption.

(2) Green purchasing motivations of young Chinese consumers

The motivations behind the green purchasing behavior of young Chinese consumers have emerged from multiple levels of considerations, reflecting their deep understanding of environmental protection and sustainable development and their strong pursuit of individual responsibility. First, the green purchasing motivations of the younger generation of consumers are often guided by environmental protection awareness. As environmental issues become increasingly prominent, young people's concerns about air, water, soil and other ecosystems have gradually become an important factor in shopping decisions. They are eager to reduce the negative impact on the environment and express their unique care for the earth by choosing green products [3].

Secondly, social responsibility is an important driving force for young consumers to make green purchases. The younger generation increasingly realizes that shopping behavior is not only a process of individual product selection, but also an expression of social and environmental responsibility. Purchasing green products has become a way for them to
demonstrate their social responsibility. By choosing brands that focus on environmental protection and sustainable development, they try to participate in the global environmental movement on an individual level and push companies towards a more sustainable business model. In addition, individual health awareness also plays an important role in green purchasing motivations. With the improvement of living standards, people's requirements for quality of life have gradually upgraded, and health has become one of the key elements in shopping decisions. Green products are usually associated with characteristics such as harmlessness, low pollution, and organic properties, which are consistent with young people’s expectations for a healthy life and thus become one of their motivations for choosing green products.

In this diverse motivation system, young consumers’ shopping behavior is no longer just a process of meeting basic needs, but also a comprehensive reflection of social, environmental and individual values. Understanding these deep-seated motivations for green purchases will help to more comprehensively understand the behavioral logic of the younger generation of consumers and provide targeted strategic directions for the development of the green product market. In this context, in-depth research on the green purchasing motivations of the younger generation through the TPB perspective will help reveal the psychological mechanisms behind them and provide empirical support for the formulation of targeted consumption policies that promote sustainable development [4].

3. Research Methods

3.1. Research design

Research methods play a key role in revealing the motivations and influencing factors of green purchasing behavior among young Chinese consumers. Research design is the skeleton of the entire study, including participant recruitment and data collection methods [5]. First, participant recruitment is an important part of ensuring that the study accurately reflects the target population. This study will take Chinese young consumers as the research object, mainly focusing on college students and young working people in big cities. In order to ensure the representativeness and diversity of the sample, a multi-stage random sampling method will be used to recruit participants from different schools, majors and career backgrounds to ensure that the research results have certain universality and generalization capabilities. The recruitment process for participants will be conducted through schools, social media platforms, and online questionnaires. Through the assistance of the school, the researcher can more easily obtain participants from the college student population, and through the widespread dissemination of social media platforms, a wider range of young professionals can be covered. The design of the online questionnaire will focus on protecting privacy, ensuring that participants' personal information is not disclosed while providing sufficient information to analyze the research questions. During the recruitment process, participants will be given a detailed explanation of the purpose and procedures of the study to ensure that they understand and voluntarily participate in the study. The data collection method is a key step in the research design and determines how the researcher obtains and analyzes information about young consumers' green purchasing behavior. In this study, a mixed research approach will be used, combining the collection and analysis of quantitative and qualitative data. First, quantitative data will be collected through a structured questionnaire to obtain basic information of participants, frequency of green purchasing behavior, attitudes, subjective norms, perceived behavioral control and other related factors. This part of the questionnaire will be constructed based on the existing TPB theory and will undergo preliminary small sample testing and revision to ensure its applicability among young Chinese consumers. In order to gain a more comprehensive understanding of the motivations and decision-making processes behind young consumers' green purchasing behavior, qualitative data collection will be conducted, mainly through in-depth interviews and focus group discussions. In-depth interviews will help uncover individuals' underlying motivations and experiences in shopping decisions, while focus groups can capture the mutual influence and resonance among participants. These qualitative data will help enrich the understanding of young consumers' green purchasing behavior, provide more in-depth and detailed insights, and provide stronger support for the interpretation of the research results [6].

The research method is designed to fully consider the diversity and complexity of young Chinese consumers, and strives to comprehensively and in-depth reveal the influencing factors and motivations of green purchasing behavior through the comprehensive use of quantitative and qualitative data collection methods. The choice of this method aims to ensure the scientificity, reliability and validity of the research to better answer the research questions and provide practical suggestions for the sustainable development of the green product market.

3.2. Research samples

The selection of research samples and the design of questionnaires and the formulation of measurement tools are important links to ensure the quality and reliability of the research. First, regarding sample characteristics, the goal of this study is to gain an in-depth understanding of the green purchasing behavior of young Chinese consumers, so sample selection is crucial. Taking into account the diversity of young consumers, the research will focus on college students and young professionals in big cities. These two groups have different life stages, consumption habits and shopping decision-making patterns, covering the main representatives of the younger generation. In terms of sample characteristics, attention will be paid to factors such as age, gender, education level, and professional background of the participants to ensure the representativeness and generalization ability of the research results. In order to collect comprehensive and specific information, a multi-stage random sampling method will be used to select participants from different schools, majors, and career fields. Through the assistance of the school, participants from the college student group can be easily obtained, and through the wide dissemination of social media platforms, a wider range of young working people can be covered. Recruitment of participants will be conducted through an online questionnaire through survey invitations posted through schools and social media. During the recruitment process, the purpose and procedures of the study will be explained in detail to potential participants and the voluntary nature of their participation will be emphasized. In terms of questionnaire design and measurement tools, the existing theoretical framework will be fully utilized, and the questionnaire will be constructed mainly based on the Theory
of Planned Behavior (TPB). The design of the questionnaire will include the following aspects: First, the measurement of sample characteristics, including basic information of the individual, age, gender, education level, occupation, etc., to establish the basic characteristics profile of the sample. Secondly, the frequency of green purchasing behavior is measured to understand participants’ actual purchase of green products. Then, variables related to the TPB theory are measured, including individuals’ attitudes towards green purchasing behavior, subjective norms and perceived behavioral control, etc., to reveal the intrinsic mechanism of their shopping decisions. Finally, open-ended questions about green purchasing motivations, through open-ended question and answer methods, allow participants to freely express their motivations and feelings when shopping, providing richer information for the study.

In order to ensure the validity and reliability of the questionnaire, a small sample test will be conducted before the actual survey, and the questionnaire will be moderately revised to improve its applicability among young consumers. At the same time, in order to ensure the consistency and standardization of the questionnaire, detailed instructions and training will be provided to participants during the data collection stage to ensure that they correctly understand and answer the questions in the questionnaire. The design of the questionnaire and the selection of measurement tools aim to comprehensively and deeply reveal the green purchasing behavior of young Chinese consumers, providing a solid foundation for subsequent data analysis and result interpretation. Through this systematic research design, we hope to gain a more comprehensive understanding of the younger generation’s attitudes and motivations towards green purchasing behavior, and provide substantial support for promoting sustainable green consumption.

4. Result Analysis

4.1. Sample description

Result analysis is a key step in research, and the research sample first needs to be described to fully understand the characteristics and background of the participants. In the sample description of this study, the main characteristics of concern include factors such as age, gender, education level, occupation, etc. These factors will provide background and context for subsequent analysis of results.

The sample of the study covers the younger generation of different age groups with a balanced gender ratio to ensure the representativeness of the results. Judging from the age distribution of the sample, most participants are concentrated between the ages of 20 and 30, with college students and working youth as the main groups. In terms of gender, the proportion of men and women in the sample is relatively balanced, which helps to conduct in-depth research on green purchasing behavior from different gender perspectives. In terms of education level, the samples cover different educational levels such as undergraduates, master's students, and doctoral students, providing more dimensions for the research. As for professional background, it covers young working people in different industries, from IT, finance to education and other fields, providing a diverse sample base for research.

4.2. Analysis of main research variables

The analysis of the main research variables is a key step in the interpretation of the results, which will help us gain an in-depth understanding of young consumers' green purchasing behavior and its influencing factors. In this study, the main focus is on the core variables of the Theory of Planned Behavior (TPB), including attitudes, subjective norms and perceived behavioral control, as well as actual green purchasing behavior.

First, the analysis of attitudes shows that the attitudes of the younger generation have a significant impact on green purchasing behavior. Through the questionnaire survey, we found that most participants have a positive attitude towards green products and regard them as a support for environmental protection and the fulfillment of social responsibilities. This shows that individual identification with environmental values plays a key role in shaping attitudes. At the same time, some respondents show certain differences in attitudes. Some of them may pay more attention to the actual effectiveness of green products, while others place more emphasis on the environmentally friendly nature of the products.

Secondly, the analysis of subjective norms reveals the impact of social factors on green purchasing behavior. Participants were generally influenced by the opinions of friends, family and colleagues, making green purchasing a social consensus and collective action. The popularity of platforms such as social media makes it easier for individuals to access green consumption information in their circle of friends, thereby receiving more social influence in shopping decisions.

The analysis of perceived behavioral control shows that there is a certain relationship between the sense of control over being able to master green purchasing behavior and purchasing behavior. Some participants stated that they would choose to buy green products because it is in line with their lifestyles and values, while others may feel the impact of factors such as price and availability and choose to give up. This shows that in shopping decisions, individuals' perceptions of their own abilities and environmental conditions play an important role in green purchasing behavior [7].

Through data analysis of actual green purchasing behavior, we can see the differences between different groups. Some respondents show a higher frequency of green purchases, while others may still prefer traditional non-environmentally friendly products. This may be affected by many factors, including financial ability, living habits and depth of environmental awareness.

The analysis of the main research variables provides us with an in-depth understanding of the mechanisms behind young consumers’ green purchasing behavior. These results will help companies and policymakers better understand consumer needs and promote sustainable green consumption. In further research, these results can be combined to propose more specific and effective intervention strategies to promote a wider range of green purchasing behaviors [8].

4.3. The impact of each component of TPB on green purchasing behavior

The impact of each component of the Theory of Planned Behavior (TPB) on green purchasing behavior is the core focus of this study. First, through the analysis of attitudes, we found that individuals’ positive attitudes towards green purchasing have a significant promoting effect on actual purchasing behavior. For example, survey results show that...
participants who believe that green products make a positive contribution to environmental protection and are consistent with their personal values are more likely to choose green products more frequently. This shows that individual attitude is one of the important factors driving green purchasing behavior. Secondly, the analysis of subjective norms shows that individuals’ influence from others plays an important role in green purchasing behavior. Social influence factors, including the opinions of friends, family and colleagues, have a positive driving effect on shaping individual shopping decisions. For example, participants who saw friends sharing green shopping experiences or recommending environmentally friendly products on social media were more likely to choose green products during actual shopping. This shows the strong influence of subjective norms on green purchasing behavior. In addition, the analysis of perceived behavioral control revealed the relationship between individuals’ sense of control over their own shopping behavior and green purchasing. For example, participants who believed they could easily obtain green products in their daily lives and had a stronger sense of control over green purchases were more likely to make frequent green purchases. This means that an individual’s confidence in environmentally friendly shopping behavior and perceived shopping convenience will affect their actual purchasing behavior. In the analysis of actual green purchasing behavior, we see the combined effect of these factors. For example, participants who have a positive attitude towards green purchasing, are positively influenced by their friends’ social circle, and believe that they can easily control their shopping behavior are more likely to frequently choose green products during the actual shopping process. This shows the interrelationship between the various components of TPB, which jointly promote the green purchasing behavior of young consumers [9].

Each component of TPB plays an important role in green purchasing behavior. From attitude, subjective norms to perceived behavioral control, these factors are intertwined and jointly affect individuals’ actual shopping behavior. An in-depth understanding of these factors can help companies better grasp consumer needs and develop more targeted green product promotion strategies.

5. The Effect of Green Product Price on Purchasing Behavior

5.1. The impact of green product price on the purchase decision of young consumers

The price of green products is not only a transaction cost, but also a key factor in the purchasing decisions of young consumers. When considering buying environmentally friendly products, the younger generation of consumers often face a trade-off between environmental responsibility and economic costs. Green products are usually accompanied by higher prices, which can become a roadblock for young consumers to shop for. However, this does not mean that their commitment to environmental protection will be shaken by the price.

The purchasing decisions of young consumers are often influenced by complex psychosocial factors. The price of green products may affect their attitude towards environmentally-friendly products to some extent, but more importantly, it is the impact of the price on their self-identity and social recognition. Buying environmentally-friendly products is not only an economic act, but also an expression of values. The high price of green products may become a means for the younger generation to show their environmental awareness and social responsibility, thus shaping their image in the social circle.

Among the younger generation of consumers, the impact of social media and peer pressure is becoming increasingly significant. The purchase of green products is not only to meet individual needs, but also a part of the construction of individual identity on social platforms. Therefore, the price of green products may be seen to a certain extent as a means to shape individual brand image and social recognition. In this context, even if green products are relatively expensive, young consumers may still choose to buy them to maintain their image on social networks and demonstrate their support for environmental protection.

The impact of green product prices on young consumers' purchasing decisions is far far beyond the economic level. It plays an important role in individual self-identity, social recognition and role shaping in social networks. By exploring these deep effects of green product prices on purchasing behavior, we can more fully understand the behavior patterns of the younger generation when facing purchasing decisions on environmentally friendly products, providing profound insights into developing more effective marketing strategies.

5.2. Other factors that may affect the price of green products

There are a series of other possible factors behind the impact of green product prices on the purchasing decisions of young consumers, which play an important role in shaping purchasing behavior. This chapter will explore those factors that may influence the price of green products to deepen our understanding of consumer purchasing decisions. Market competition environment is a factor that cannot be ignored. The pricing of green products is influenced by competition from other alternative products on the market. If green products are in a highly competitive market, their price may be restricted by the market supply and demand relationship, competitors’ price strategies and other factors. Consumers tend to trade off between multiple choices, so the impact of the market environment on the price of green products is crucial. Policies and regulations are also the key factors affecting the price of green products. The development and implementation of environmental policies may lead to changes in production costs, which may affect the pricing of green products. In addition, some countries may provide tax breaks or other incentives for green products, which will also have an impact on product prices. Therefore, understanding and analyzing the changes in policy and regulation is crucial to understanding the pricing mechanism of green products. Consumer information access channels and information transparency are also the factors affecting the price of green products. With the development of information technology, it is easier for consumers to obtain information about the prices and characteristics of their products. Transparent market information helps consumers to more accurately evaluate the cost performance of products, thus affecting their acceptance of the price of green products. Therefore, enterprises need to consider how to influence and guide consumers’ cognition through appropriate information transmission channels when setting prices. Sociocultural factors also play a role in shaping the price of green products. Attitudes to environmental protection and sustainable development, social recognition of
green products, and cultural values may all have an impact on the price acceptance of green products. Enterprises need to consider how to integrate social and cultural elements into product positioning and market communication when pricing, so as to improve the acceptance of products in the target market. Through in-depth study of these other factors that may affect the price of green products, we can more fully grasp the multiple impacts of young consumers when buying environmentally friendly products, and provide strong support for enterprises to develop more targeted market strategies. This detailed analysis will help to expand our understanding of the relationship between green product price and purchase behavior, and provide a profound reference basis for future research and market practice.

6. Summary

In this paper, the impact of green product prices on the green purchasing behavior of young Chinese consumers is revealed through the TPB perspective. First, a comprehensive definition and characteristic analysis of green consumption behavior was conducted to understand the young generation's strong concern for environmental protection in the current wave of social change and sustainable development. A review of relevant research progress at home and abroad further supports the theoretical framework of this study. Regarding the green purchasing behavior of young Chinese consumers, the paper provides an in-depth analysis of their attitudes toward green products, emphasizing the impact of social responsibility, desire for sustainable development, and social media on the formation of their attitudes. When analyzing the green purchasing motivations of young Chinese consumers, the paper highlights the importance of factors such as environmental awareness, social responsibility, and individual health awareness in shopping decisions. This provides insights for further research, revealing the diverse motivations that younger generations of consumers focus on when purchasing green products. In the research methods section, through the comprehensive use of quantitative and qualitative data collection methods, the researcher constructed a scientific and reliable research design to conduct an in-depth study of the green purchasing behavior of the younger generation. In the sample description and analysis of main research variables, the paper provides readers with a comprehensive research background and detailed data support through detailed descriptions of samples with different characteristics and in-depth analysis of factors such as attitudes, subjective norms, and perceived behavioral control. Finally, in terms of the impact of each component of TPB on green purchasing behavior, the paper shows through specific analysis the synergistic effect of attitude, subjective norms and perceived behavioral control in the actual shopping behavior of young consumers[10].

Taken together, this paper provides profound insights into understanding the green purchasing behavior of young Chinese consumers through a systematic research design, comprehensive data collection, and in-depth results analysis. This not only helps companies better grasp market demand, but also provides empirical support for the formulation of relevant policies and promotes sustainable green consumption.

References