

# Green Clothing Products Sense Quality • Consumption Emotion • Purchase Intention

Qihui Hu\*

College of Clothing and Costume Design, Art and Media, HENGXING university, Qingdao,266100, China

\*Corresponding author. Email: 1604509356@qq.com

Abstract. At the present stage, in the era of global consumerism, the emergence of "green clothing" is a concrete manifestation of the transformation of the market economy in the field of textiles and clothing. The transformation of the development model of enterprises and consumers' experience of green clothing products have put forward higher requirements. Based on the literature, the article constructs a theoretical discussion on three levels of green apparel product perception, consumer emotion and purchase intention based on the perspective of green apparel product perception through survey method and quantitative analysis. The research results show that green clothing product perceptions have a significant positive influence on consumers' consumption emotion and purchase intention, and the influencing factors can be listed as environmental responsibility > brand image > green clothing knowledge in order.

**Keywords:** green clothing; products sense quality; consumer emotion; purchase intention; brand development

#### 1 Introduction

In recent years, the deterioration of the world's ecological environment has aroused the unanimous concern of governments, enterprises and consumers from all sides, and many changes caused by environmental problems have spawned a green market with great potential. Green clothing, also known as "ecological clothing" or "environmentally friendly clothing", refers to clothing that does not pose pollution and harm to the environment and the human body in the whole process from production to consumption to post-processing. At present, the textile and garment industry has become one of the largest waste and waste industries, resulting in serious environmental pollution problems, for enterprises, how establishing a competitive advantage in the green market, is a new breakthrough for each enterprise to achieve the transformation of the development model. At the same time, with the rapid development of social economy, the level of consumer demand has also changed from simple pure material needs to diversified, high-grade inner spiritual needs, emotions

<sup>©</sup> The Author(s) 2024

P. Dou and K. Zhang (eds.), Proceedings of the 2023 International Conference on Economic Management, Financial Innovation and Public Service (EMFIPS 2023), Advances in Economics, Business and Management Research 287.

have also become one of the important factors affecting consumer behavior, for the green clothing image on consumer willingness to buy is also influential. Products that meet the value of consumer perception quality can increase the willingness to buy, it is necessary to re-understand and study how consumers perceive the specific green product of green clothing.

#### 1.1 Research Basis

China's 13th Five-Year Plan emphasizes the initial establishment of a textile recycling system for recycled fibers, making the recycled textile recycling industry has become a hot topic, green development has become China's textile industry development background requirement. This study provides a theoretical reference for the research of green clothing brands, through the theoretical research of green clothing brand sense quality and consumer emotion and purchase willingness, combined with the current scientific research methods, the inner connection between green clothing sense quality value and consumer emotion and purchase willingness, put forward targeted suggestions for the shaping and dissemination of the green brand image of clothing enterprises, so that the shaping of green clothing brand image is more in line with consumers 'cognitive needs. To ensure the reliability and validity of the study, the theories used in the study are from the mature theories, theories and reference sources in previous papers. See Table 1.

Table 1. Research theory

Element	Author	Theoretical arguments	Reference
Green	Liu	Consumers ' product attitude	New Chinese Clothing
clothing	Hongwen,	plays a complete mediating role	Sense, Consumer
products sense	Li Xiaohong	between the qualitative elements	Product Attitude and
quality		of new Chinese clothing products	Purchase Intention [1]
		and purchase intention	
consumption	Mu Yun,	The stronger the consumer	The impact of women's
emotional	Zhang	emotion in the live broadcast, the	clothing brand live
	Yuting, Pan	higher the level of purchase	broadcasting on
	Zhengzheng,	willingness of the viewer.	consumers' purchase
	Meng Jiru	Consumer emotions have an	willingness [2]
		intermediary effect on the factors	
		affecting the purchase willingness	
		of women's clothing brands.	
	Xiong Putao	In terms of the physical shopping	Research on the
		environment, the consumer's	Relationship between
		consumption sentiment has a bad	Physical Shopping
		impact, which may reduce the	Environment and
		frequency of customers visiting	Consumer Sentiment in
		shopping malls.	Shopping Malls[3]
	Chen Zaifu	Consumer emotion has a	Research on the
		significant positive impact on	Relationship between
		customer satisfaction, and	Store Impression,
		satisfaction has a significant	Consumption Emotion

		positive impact on consumer	and Consumer
		willingness to patronize.	Patronage Intention [4]
purchase	Chen	Creating a live broadcast platform	The impact of the
willingness	Xiaona, Liu	with a sense of spatial presence	characteristics of
	Jing	will enhance the realism of	e-commerce live
		clothing consumers watching live	broadcasting platforms
		broadcasts and promote the	on the purchase
		achievement of purchase	willingness of clothing
		intentions.	consumers[5]
	Wang	Style, classical aesthetics,	Research on the
	Jingjin,	functionality and culture have a	influence of clothing
	Wang	significant positive impact on	product attributes on
	Hongyan,	consumer purchase intention;	consumers' purchase
	Hu	superiority plays a partial	intentions[6]
	Shouzhong	mediating role in the relationship	
		between classic aesthetics,	
		functionality and culture and	
		consumers ' purchase intention,	
		and plays a fully mediating role	
		in the relationship between style	
		and consumers ' purchase	
		intention.	

From this table, most scholars believe that consumer product attitudes play a completely mediating role between the texture elements of clothing products and purchase intention, consumer consumption emotions have significant positive guidance for purchase intentions, and there is a certain relationship between clothing product texture, consumer emotions and purchase intentions. This article will conduct a more in-depth study between the texture of green clothing products, consumer emotions and purchase intentions.

## 1.2 Analysis of the Current Situation of Green Clothing Brands

The market tends to change with the influence of the social environment, and the green clothing industry has been developing rapidly in recent years, but from the overall perspective of the industry, its market size is still small. Therefore, to control the information deficiency of the research subjects due to the lack of cognitive experience of green clothing brands, this study selected four green clothing brands that are currently being marketed for analysis, see Table 2.

Clothing brands	Fabric	Raw materials	environmental protection way	Social responsibility
Keel Keel	Wool, cotton, hemp, silk, etc.	Environmental wool, environmental cotton, environmental silk, etc.	Raw materials environmental protection, process environmental protection.	Cooperation and production with ethnic minorities or groups through non-profit organizations.

Table 2. Analysis of green clothing brand fabrics and environmental protection

Allbirds	Wool, environ mentally friendly synthetic materials , etc.	Merino wool, eucalyptus fiber, Brazil sugarcane Canadian snow crab, etc.	Raw materials environmental protection, process environmental protection	Carbon reduction, emission reduction offset, renewable agriculture, renewable raw materials.
Patagonia	Silk, cashmer e, environ mental protectio n fiber, etc.	Organic silk, organic silk, recycled materials to produce polyester fiber.	Raw materials environmental protection, process environmental protection, recycling.	Recycling available cotton products, recycling available wool products, recycling down products.
ICICLE	Cotton, linen, silk, etc.	Colored cotton, long-staple cotton, cotton poplin, cotton zhigong, linen, dew linen, ramie.	Raw materials environmental protection, process environmental protection	Development of environmentally friendly chemicals to reduce water and energy consumption.

Therefore, at this stage, the environmental protection of green clothing is mainly reflected in the environmental protection of raw materials, processes and recycling, and the production cost is high, the market scale is small. Therefore, it is necessary to increase the publicity of green clothing, increase the information exchange with the public about green clothing, awaken the environmental awareness of enterprises and consumers, and create a good public opinion atmosphere for purchasing green clothing. Enhance the level of green clothing design in order to improve the enthusiasm of consumers to buy. In view of the current development of green products in the clothing industry at home and abroad, this paper lists the representative clothing brands and makes Table 3 as follows:

**Table 3.** Green clothing brand category and price analysis

Green clothing brand	main category	product display	price (yuan)
KeelKeel	Clothes, trousers and fabric products ( neck braces, towels, blinders, etc. ).		Summer: 500-4000 Winter: 1000-10000

Allbirds	Clothes, trousers and fabric products.	800-1500
Patagonia	Tops, pants and shoes.	500-5000

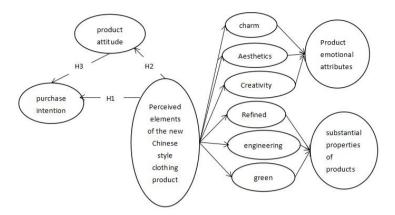


It can be obtained that green clothing brand category compared to ordinary clothing brand category limitations, and most of them are minimalist styles; Green clothing is more expensive than ordinary clothing; Green clothing brands cover a small range compared to the general clothing market. Therefore, clothing brands and enterprises should adopt green marketing methods when marketing, highlight the attributes of reducing resource waste, emphasize the harmlessness of products, and improve the sense of achievement brought by consumers to buy products, thereby improving the market competitiveness of products, and It is particularly important to consider the perceived value of consumers between green products and brands.

# 2 Empirical Research

# 2.1 Analysis of Green Product Sensory Elements

In this study, purchase intention refers to the overall evaluation of consumers' consumption emotion on whether the sensory elements of green clothing products can meet their purchase motivation. In the existing research, Liu Hongwen and Li Xiaohong's "New Chinese Clothing Texture, Consumer Product Attitude and Purchase Intention" explores consumer attitudes and purchase intentions, and its authors believe that the core connotation of product texture theory is people-oriented, and emphasizes that the perspective of consumers to meet their desires and desires, and constructs a research model of new Chinese clothing product texture elements and product attitudes, purchase intentions[7], as follows:



**Fig. 1.** Theoretical model of the influence of the sensory elements of new Chinese clothing products on consumers' purchase willingness

The article "Research on Green Clothing Purchase Intention and Influencing Factors" by Qian Zhang discusses the purchase intention and influencing factors of green clothing, and constructs a theoretical model of green clothing purchase intention and psychological factors as follows[8].

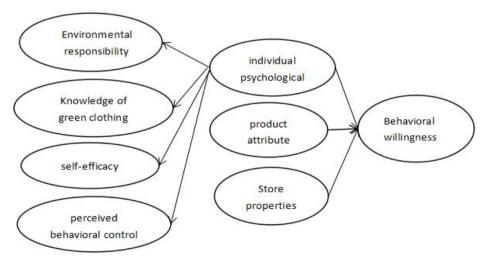
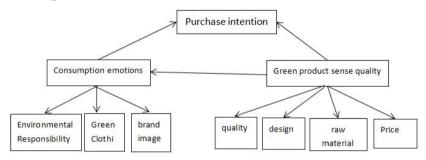


Fig. 2. Theoretical model of individual psychological factors on green clothing purchase intention

In view of the different considerations of the sensory value of green clothing in the current theory of green consumption behavior, this study refers to the research conducted by scholars Wang Yaqi and others on the popular cycle of green clothing consumption behavior, which shows that the introduction of various environmentally friendly clothing products is an inevitable trend, and a correct understanding of the

popular cycle can grasp the sustainable development of the clothing industry[9], as well as the clothing consumers' Scholars Shao Peng and Zhang Yuanyuan believe that green consumption policies focus on the production and recycling stages of products and pay less attention to sales and use, and that green consumption policies are inadequate at the level of consumption patterns[10].

In summary, through the theoretical analysis of green clothing sense quality value, green clothing consumer emotion and purchase intention, the internal linkage between green clothing sense quality value and consumer emotion and purchase willingness should be further investigated in conjunction with consumer emotion and purchase willingness to fill the research gap in the internal linkage between green clothing sense quality value and consumer emotion and purchase willingness. Through much literature and data, this study tries to deduce that the sensory elements of green products are divided into four parts: quality, design, raw materials and technology, and lists the following theoretical models. Consumption emotion is divided into three parts: environmental responsibility, green clothing knowledge and corporate image, as shown in Figure 3.



**Fig. 3.** Theoretical model of the relationship between green clothing sensory value and green clothing consumption emotion and purchase intention

## 2.2 Research Sample Analysis

In order to explore the impact of the sensory value of green clothing products on consumers, three variables are obtained according to the literature and data analysis, and a market questionnaire survey is conducted on the three variables to be measured, as shown in Table 4:

Variable	Item	reference source
consumption emotion	Environmental considerations when buying clothes	Mi Lingyun.2011
	For low carbon environmental protection, is willing to sacrifice some personal interests	

Table 4. Items and variable analysis

purchase intention	Does buying and wearing green clothing make you feel like you are protecting the environment  To understand the degree of green clothing compared with ordinary clothing, whether the quality of green clothing is better  How to See the Future Prospect of Green  Clothing  Are you worried and anxious about the future of green clothing  Do you think green clothing is better than ordinary clothing  Understanding the extent of green clothing  Whether the awareness and social responsibility of the clothing enterprise will affect the willingness to buy the enterprise green clothing  How many green clothing brands you know, care about or have bought	BANG H K,et al,2000 HE X,et al,2011  Dodds,1991 Roberts and Bacon,1997
Green clothing	Will you choose green clothes with higher	
product texture	price than ordinary clothes	
	Which aspect of the clothing is the most	
	important	
	The green brands you known	

The final questionnaire consists of two parts, the first part is the basic information of the respondents, and the second part is the market survey analysis. The questionnaires were distributed through the questionnaire star platform, 250 questionnaires were distributed, 235 questionnaires were collected, 235 valid questionnaires were obtained, and the efficiency rate of the collected questionnaires was 94%. The overall distribution of this research sample is in line with the distribution law. The specific information is as follows (Table 5).

Table 5. Basic information table of respondents

Problem narrative	Options	Proportion	Number of samples
Gender	Male / female	23.83%/76.17%	56/179
Age	Under 18 / 18-24 / 24-30 / over 30	2.55%/73.19%/8.94% /15.32%	6/172/21/36

Highest education	Doctoral and above / master / university undergraduate and junior college / technical secondary school and high school / junior high school education and below	2.98%/6.38%/76.17% /13.19%/1.28%	7/15/179/31/3
Current career	Students / teachers / civil servants / employees of state-owned enterprises / private employees / self-employed / unemployed / other	62.13%/2.13%/3.4% /2.98%/7.66%/11.06% /1.28%/9.36%	146/5/8/7/1 8/26/3/22

According to this table, most of the respondents are female, the age group is about 18-24, 30 years old or older, the highest degree is in the university undergraduate and junior college, and the occupation is more students and self-employed. Therefore, exploring the components of consumers' green quality value and understanding consumer needs will help clothing brands to launch special products that are more cater to consumers, so as to obtain a larger market under the sustainable consumption model, as shown in Table 6.

Table 6. Market research analysis

Problem narrative	Option	Proportion	Number of samples
Awareness of green clothing	Completely unknown / a little understanding /	31.91%/60.85%	75/143/17
	very understanding	77.23%	
Do you	First	13.19%/12.34%	31/29/119/56
consider the environmental	considerations/key	/50.64%/23.83%	
factors when	al considerations/no		
buying clothes	considerations		
Will you	Yes/No	68.94%/31.06%	162/73
choose green			
clothing that is			
more expensive			
than ordinary			
clothes			
What is the	Style / quality / price	21.7%/21.28%	51/50/11/7
most important	/ brand / functionality /	/4.68%/2.98%/0.43%	/1/30/6/79
aspect of the costume	comfort / practicality / whether it suits you	/12.77%/25%/33.62%	

The price	Within	57.02%/32.7%	134/77/24
range of green	200/200~500/500 or		134////24
clothing can be	more	/10.21%	
accepted	more .		
How to see the	Still stuck in a small	22.98%/58.3%	54/137/44
future prospects	part of the population /	/18.72%	
of green clothing	will gradually become	/18./2%	
	known and popularized /		
	will gradually become		
	known but difficult to		
	popularize		
Are you	Worrying / Doesn 't	85.96%/14.04%	202/33
worried and	matter		
anxious about the			
future prospects			
of green clothing			
For low carbon	Willing / unwilling	83.4%/16.6%	196/39
environmental			
protection, is			
willing to			
sacrifice some			
personal interests			
Do you think	Yes / No	72.77%/27.23%	171/64
green clothing is			
better than			
ordinary clothing	37 /37		100/25
Whether the	Yes / No	84.26%/15.74%	198/37
awareness and			
social			
responsibility of			
the clothing enterprise will			
affect the			
willingness to buy			
the enterprise			
green clothing			
Does buying	Yes / No	82.98%/17.02%	195/40
and wearing green	133/110	02.90/0/17.02/0	175/10
clothing make you			
feel like you are			
protecting the			
environment			

How many green clothing brands you know, care about or have	0/1-3/4-7/7 or more	51.06%/41.7% /5.96%/1.28%	3 120/98/14/
bought			
The green brands you known	Kleeklee/Allbirds/Pat agonia/ICICLE/UNNA/ Tentree/YOMT/Reform ation/Sezane/Ninety Percen/Mammut/Hot water savage/Everlane	29.79%/20.43% /14.47%/23.4% /14.89%/12.77% /14.04%/7.66% /7.66%/7.66% /36.17%/11.49%	70/48/34/5 5/35/30/33/18 /18/18/85/27/ 17

This table combined with Table 5 shows that 68.09% were consumers somewhat aware and very knowledgeable about green clothing in the clothing market, while 31.91% know nothing about it; consumers occasionally consider environmental protection when buying clothing; under the environment of environmental protection advocacy, consumers will choose green clothing with higher prices than ordinary clothes; consumers pay most attention to whether the clothing suits them; they can accept The price range of green clothing is mostly within 200, and only 10.21% of people can accept a price of more than 500; 58.3% of consumers think that green clothing will gradually become known and popular in the future, 41.7% of consumers think that green clothing will remain in a small group of people in the future or will gradually become known but difficult to popularize; 85.96% of consumers are worried and anxious about the future prospects of green clothing 83.4% of consumers are willing to sacrifice some personal interests for low-carbon environment protection; 72.77% of respondents think that the quality of green clothing is better compared with ordinary clothing; 84.26% of respondents think that the popularity and social responsibility of clothing companies will affect the willingness to buy green clothing from them; 82.98% of respondents think that buying and wearing green clothing is in protect the environment; 51.06% of the respondents know nothing about green clothing brands, and only 1.28% are concerned about or have bought more than 7 green clothing brands; respondents are more familiar with the green brands of Mammut Mammoth, ICICLE's Harvest and Allbirds. Therefore, in order to comply with the era of sustainable economy, clothing brands, enterprises accelerate green transformation, by improving product production technology and efficiency to reduce the production costs of green clothing products, in brand publicity and promotion, try to convey to consumers an overall lifestyle that relies on natural environmental protection, to establish values of green fashion life for consumers, and to guide consumers to purchase green clothing through a multi-channel and multi-angle approach.

## 3 Recommendations

This study takes into account the consumer perception value factor between green products and the environment in the perceptual value study, which is conducive to improving brand value, indirectly increasing brand competitiveness, and helping clothing brands to launch more characteristic products that cater to consumers, so as to obtain a larger market under the sustainable consumption mode. As far as the clothing industry is concerned, spreading environmental knowledge to consumers to enhance consumers 'sense of responsibility for environmental protection and enhance brand image has become a good way for the transformation and sustainable development of clothing enterprises.

Therefore, in terms of brand publicity and promotion, the influence mechanism of green clothing brand image on consumers' purchase intention should give the direction of shaping the green image of clothing brand; in terms of consumers, to convey to consumers a relying on natural environmental protection of the overall lifestyle, for consumers to establish a green fashion life values, guide consumers to buy green clothing; in terms of the market, to clarify the environmental attributes of clothes to consumers, to provide consumers with as detailed as possible with the environmental indicators related to green clothing, so that consumers are clear about the environmental performance of clothing, to enhance consumer trust and increase purchase intention.

In the course of the project research, it was found that there are still deficiencies in the development of green clothing in the market, and the existing research is aimed at a single consumer scenario and product type, especially in the field of textile and clothing. There are few related studies and the division is not detailed. With the rapid development of environmental protection materials in recent years, different types of green clothing products have emerged, and the existing research on the value of consumer green sense in textile and clothing cannot meet the needs of the textile industry development. Therefore, in the follow-up research, the research on the perceived quality value of green clothing in the market should be more perfected in response to the market demand, so that the green brand value and brand competitiveness can be stronger and help the clothing brand to launch more characteristic products that cater to consumers, to obtain a larger market under the sustainable consumption mode.

#### 4 Conclusions

Through the analysis of green clothing sense-quality value data, it is concluded that the sensory elements of green clothing products have a significant positive impact on consumers 'consumption emotion and purchase intention. The influencing factors can be listed as follows: environmental responsibility > brand image > green clothing knowledge. It shows that consumers 'purchase of green clothing is biased towards irrational consumption, and more towards its intangible spiritual value than the tangible material value of green clothing.

## References

- 1. Liu Hongwen, Li Xiaohong. Quality of New Chinese style clothing, Consumer's product attitude and purchase intention [J]. Silk, 2020,57(11):58-65.
- 2. Mu Yun, Zhang Yuting, Pan Zhengzheng, Meng Juoru. Influence of women's wear brand live broadcast on consumers' purchase intention [J]. Journal of Beijing Institute of Fashion Technology (Natural Science Edition). 222,42(01):55-64.
- 3. [XIONG B T. Research on the relationship between physical shopping environment and consumer sentiment in shopping centers. Donghua University.2013(06):115.
- 4. Chen Z F. The relationship between store impression, consumer sentiment and consumers' willingness to patronize [J]. Journal of Zhangzhou Normal University (Philosophy and Social Sciences Edition). 2011,25(04):37-43.
- 5. Chen Xiaona, Liu Jing. The influence of the characteristics of e-commerce live streaming platform on the purchase intention of apparel consumers [J]. Wool Technology. 2021,49(11):88-93.
- 6. Wang Jingjin, Wang Hongyan, Hu Shouzhong. Research on the Influence of clothing product attributes on Consumers' purchase intention: A mediating variable of high quality perception [J]. Journal of Beijing Institute of Fashion Technology (Natural Science Edition). 2021,41(02):71-76.
- 7. Liu Hongwen, Li Xiaohong. Quality of New Chinese style clothing, Consumer's product attitude and purchase intention [J]. Silk, 2020,57(11):58-65.
- 8. Zhang Qian. Research on Purchase Intention and Influencing Factors of Green Clothing [D]. Beijing Institute of Fashion Technology. 2013.
- 9. Wang Yaqi, Song Minrong. Cui Yuhua Fashion Cycle Research on Green Consumption Behavior of Apparel Consumers [J]. Western Leather.2018.
- 10. Shao Peng, Zhang Yuanyuan. The policy system of green consumption and its enlightenment to the green consumption of clothing [J]. Journal of Textile Science and Technology. 222,43(1).
- 11. Zhang Qian. Research on Purchase Intention and Influencing Factors of Green Clothing [D]. Beijing Institute of Fashion Technology. 2013.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

