# Toward Sustainable Design: A Study on Consumer Preferences for Design Characteristics of Chinese Spring Festival Clothing

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#### Abstract

Based on a questionnaire survey and analysis of consumers' preferences for Spring Festival clothing, this study attempts to compare the traditional design characteristics with the art-derived design characteristics to test whether the latter is more in line with consumers' preferences, and thus can be more sustainable. A questionnaire survey was conducted concerning festival costume consumption during the period when consumers most intensively purchased Spring Festival products for the 2022 Chinese Spring Festival. The survey results indicated that consumers have greater interest in incorporating classic artworks (art-derived design characteristics) into the costumes than simply incorporating obvious auspicious symbol elements (traditional design characteristics). In addition, it was found that the tradition of purchasing and wearing new clothes still prevails in China nowadays, and Spring Festival clothing continues to be in great demand. Because of this, research about how to design sustainable festival costumes is of great social and practical value.

Keywords: Spring Festival Clothes, Art Derivatives, Fashion Design Characteristics, Consumers' Preferences

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### Introduction

Since ancient times, China has a tradition of new clothes during the Spring Festival. The intense clothing consumption of 1.4 billion Chinese in the New Year represents a huge business opportunity. However, from the perspective of environmental protection and sustainable design, festive clothing has caused a great waste of resources. This is because many of the clothes with a strong Spring Festival flavor are not suitable for daily wear after the Spring Festival is over. In the Spring Festival of the following year, new-year clothes will be purchased again, resulting in a low utilization rate and a serious waste of clothes. Besides, the Spring Festival is in the coldest season of the year, and most of the clothes consume more materials and are harder to degrade than the clothes for other seasons. However, there are very few studies on Spring Festival clothing from the perspective of sustainable design. Therefore, this study is of great research value not only from the perspective of market economy and enterprise demand but also from the perspective of environmental resources. The main purpose of this study is to propose a sustainable design of Chinese Spring Festival clothes based on consumers' preferences. To that end, this study seeks to answer two questions: What are the preferences of consumers at different ages in purchasing Spring Festival clothing (RQ1)? Can the design characteristics combining art derivation and Spring Festival theme better meet the preferences of consumers (RQ2)?

### 1. Literature review

# 1.1 Spring Festival costume research

Since ancient times, there has been a tradition in China of dressing up for festivals (Yang, 1998). The theme of the Spring Festival is farewell to the old year and welcome to the new year. In the process of inheriting and remembering festival culture, people gradually form a distinct festival consciousness (Xiao, 2013), and the custom of wearing new clothes to celebrate the New Year has been formed. As can be seen from many traditional Chinese poems, Chinese people attach great importance to the tradition of new clothes during the Spring Festival (Feng, 2009).

The traditional Chinese Spring Festival culture is mostly studied from the perspectives of regional Spring Festival customs, comparison, and inheritance of Spring Festival culture. Xiao (2016) and Ren (2021) analyzed the changes and development direction of Chinese Spring Festival customs. However, there is a lack of research on festival culture from the perspective of clothing and accessories. Jia (2016) made a detailed analysis of the styles and customs of the headdress in the ancient Spring Festival. Feng (2009) summarized the styles and customs of festival clothing described in Chinese classical poems. The characteristics of festival clothing recorded in ancient poems are helpful for this study to understand the characteristics of traditional festival clothing. In spite of a huge Spring Festival clothing demand, the research on Spring Festival costume design is scarce. Ma (2020) proposed that design innovation should be carried out on the emotional characteristics of Chinese New Year festival, such as bidding farewell to the old year and welcoming the New Year, remembering ancestors and exchanging gifts. Chen (2015) analyzed the colors and patterns of the hosts' clothes for the Spring Festival gala. However, the gala's costumes are mostly custom-made ceremonial clothes, which has limitations in guiding public Spring Festival costume design.

# 1.2 Consumption during Chinese Spring Festivals

In recent years, the relevant data of the Spring Festival consumption survey show that people's consumption of Chinese fashion clothing and accessories during the Spring Festival continues to rise. But the homogenization of traditional Spring Festival product design is serious, and there is a lack of unique product design, it is suggested that festival product design should focus on forming emotional resonance with consumers. (Li, 2021). Gao et al. (2018) analyzed the consumption of emotional symbols in the Spring Festival and believed that the current festival consumption is mature and consumers pay attention to spiritual aspects in products.

From the perspective of the demands of the Chinese Spring Festival, Zhang (2021) explored the social media users' perception of Spring Festival culture and analyzed the users' emotional perception during the Spring Festival by means of high-frequency words. Li (2019) believed that the Spring Festival is the time when people's emotions are most concentrated, reflecting people's spiritual pursuit of life ideals. Lai (2021) asserted that under the influence of social media, it is particularly important for contemporary young people to express their emotions during the Spring Festival, as well as emotional recall and resonance of collective consciousness.

# 1.3 Research on Sustainable Fashion Design

Fashion is irrational, and its key feature is the pursuit of 'new', which leads to the tragedy of fashion consumption (Svendsen, 2010). Chapman (2009, 31) stated that there is a trend from "Human-to-human engagement" to "Human-to-product engagement", which contributes to endless desire. There is always a gap between the image of the latest fashion products promoted by the media and the actual function of products, which leads to the continuous desire for fashion consumption (Barthes, 1990; Kawamura, 2018). Fortunately, more and more scholars advocate for ethical fashion (Russell, 2003), and the overlap of fashion and sustainability started a movement in the early 2000s. Fletcher (2013) believed that sustainable fashion lies not only in the sustainable research of materials and styles but also in the sustainable research of consumers' consumption behaviors. Fletcher (2013) also indicated that there is no practical benefit for the fashion industry in extending the product's life cycle, so it is effective for consumers to extend the durability of fashion products proactively.

The study of Chinese Spring Festival costume design is important for both Chinese local designers and international brands preparing to enter the Spring Festival consumer market. Many scholars pay attention to the research of sustainable fashion, but there are few studies that analyze the correlation between the inheritance and development of the traditional festival and sustainable design.

#### 2. Method

In this study, questionnaire survey was used to collect relevant data. The specific research process includes three stages: questionnaire design, questionnaire investigation, and questionnaire data analysis. As shown in Figure 1, in order to answer the two research questions raised in this study, the designed questionnaire was mainly divided into two parts: understanding of consumers' preference for spring festival clothing at different ages (RQ1) and comparison of traditional and art-derived design characteristics based on consumer preference for spring festival clothing (RQ2). In addition, the respondents were divided into

three age groups: 18-25, 26-35, and 36-45. The study analyzed whether there is a significant difference in the response across different age groups.

## 2.1 Questionnaire design

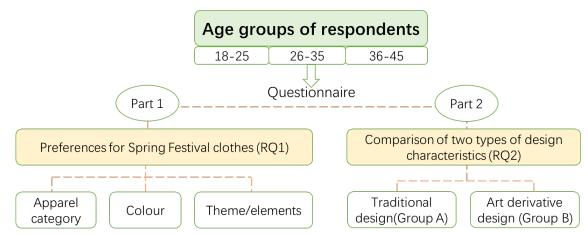


Fig. 1: The relationship between the questionnaire and the research questions

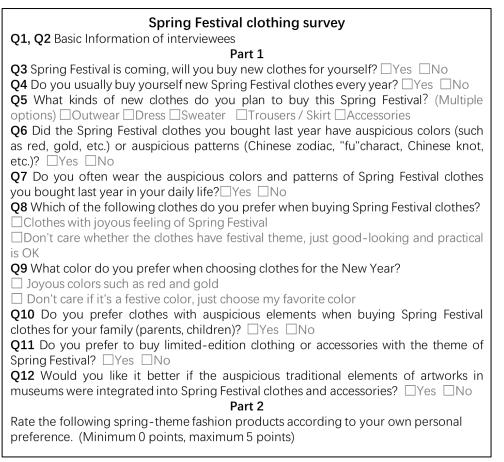


Fig. 2: Survey questions

As Figure 2 shows, Part 1 consisted of ten questions (excluding two general demographic questions). The purpose of these questions was to understand the consumers' tendencies toward buying Spring Festival clothes, and their preferences for categories, styles, and colors of spring festival clothes among different age groups.

The second part of the questionnaire evaluates the preference of the respondents for products grouped according to two design characteristics: clothings with traditional design characteristics and clothings with artistically derived design characteristics. From a large number of Spring Festival fashion products available in the market, the authors selected ten Spring Festival costumes with different characteristics to be evaluated by the respondents.

The sample of ten pieces of clothing was divided into two equal groups for analysis. Clothing items in Group A were of traditional festival style and two obvious features could be observed. Firstly, bright colors such as rich red and golden color were frequently employed as the main color in the product design. Secondly, the Spring Festival elements were prominent as well. For example, elements like zodiac images were often adopted straightforwardly and displayed prominently, so that people can feel the theme of the Spring Festival at a glance.

Clothing items in Group B had a more artistic style of design expression. Three of the five items were jointly created by artists and fashion brands (No.6, 7, and 8). No. 9 is a museum art derivative, and No. 10 is an artistic silk scarf created by students of art colleges based on the theme of the Spring Festival. Group B expressed the elements of the Spring Festival in a restrained or implicit way. The colors used are not limited to traditional red and gold, but are more diverse, such as high-brightness colors, black and white colors, as well as Chinese blue and white porcelain colors. The design of Group B did not directly highlight the festive atmosphere of the Spring Festival but presented it in a romantic, free and implicit way. Take the zodiac theme for example, the image of the zodiac in No.1 highlighted the festive atmosphere with bright red and gold colors. However, the same zodiac theme in No. 6, 7, and 8 did not explicitly create any festival atmosphere in design.



Fig. 3: Grouping of sample clothing items according to their design characteristics

Finally, it should be noted that when designing the questionnaire, the authors deliberately presented the disordered two groups of products in a disordered way to avoid potential bias in the responses.

## 2.2 Questionnaire survey process

We published the questionnaire on the largest questionnaire platform in China, Questionnaire Star, and obtained the research data by combining the offline random questionnaire. The researchers collected 36 valid questionnaires (29%) from random customer surveys at two shopping malls in northeast China. Secondly, the researchers published an online questionnaire through a website and received a total of 90 (71%) valid questionnaire responses from different regions of China.

A key aspect of this questionnaire survey was timing. In order to truly understand the preferences of consumers during the holiday period, the researchers decided to conduct the survey from January 10 to February 4, 2022. This questionnaire survey period is from the Laba Festival of the Chinese lunar calendar until the first solar term of spring. This is the time when people make preparation for the Spring Festival. Thus, the data obtained during this period was accurate to analyze the consumer preferences for the purchase of Spring Festival clothing.

#### 3. Results

A total of 40 males and 86 females participated in the questionnaire survey. In addition, in terms of the age of the participants, 40%(51) were aged between 18 and 25 years, 23%(29) were aged between 26 and 35 years, and 46(36) were aged below 36 years.

### 3.1 Results of Part 1

Table 1 shows that for Q3 and Q4, more than 70% (90) of respondents plan to buy Spring Festival clothes during the Spring Festival in 2022. Besides, 53% (67) of respondents stick to the tradition of buying new clothes every year. However, researchers compared respondents' feedback in three age groups on Q3 and Q4. Through the chi-Square test, the P-value is .18, which means the analysis result was not significant. The result shows that consumers of different ages have demands for Spring Festival clothes, and the traditional custom of wearing new clothes during the Spring Festival has been inherited by consumers of different ages.

Age Groups	Q (Will you buy Spi clothes for	ring Festival new	Q Will you buy y Festival cloth	Row Totals	
	YES	NO	YES	NO	
18-25	39 (36.43) [0.18]	12 (14.57) [0.45]	30 (27.12) [0.31]	21 (23.88) [0.35]	102
26-35	19 (21.43) [0.28]	11 (8.57) [0.69]	20 (15.95) [1.03]	10 (14.05) [1.17]	60
36-45	32 (32.14) [0.00]	13 (12.86) [0.00]	17 (23.93) [2.01]	28 (21.07) [2.28]	90
Column Totals	90	36	67	59	252

The chi-square statistic is 8.7321. The p-value is .189213. The result is not significant at p < .05.

Table 1: Feedback from different age groups on Q3 and Q4

Q5 Clothing category	Outwear	Dress	Sweater	Trousers / Skirt	Accessories
18-25	25 (22.22)	26 (21.78)	25 (28.00)	20 (24.44)	24 (23.56)
	[0.35]	[0.82]	[0.32]	[0.81]	[0.01]
26-35	6 (10.93)	10 (10.71)	14 (13.77)	17 (12.02)	12 (11.58)
	[2.22]	[0.05]	[0.00]	[2.06]	[0.02]
36-45	19 (16.85)	13 (16.51)	24 (21.23)	18 (18.54)	17 (17.86)
	[0.27]	[0.75]	[0.36]	[0.02]	[0.04]
Column Totals	50	49	63	55	53

The chi-square statistic is 8.0947. The p-value is .424272. The result is not significant at p < .05.

Table 2: Relationship between age groups and the category needs of Spring Festival clothing

As for the demand for clothing category for The Spring Festival, the data shows there is no significant difference in the demand for clothing items for different age groups (Table 2). There are more people who choose sweaters and trousers or skirts. For the future Spring Festival clothing design, it is suggested to pay more emphasis on these categories.

However, when we compare consumers' preference for traditional Spring Festival elements and the preference for artistically derived Spring Festival elements, we can find obvious differences in respondents' answers (Table 3). For Q8, consumers' preferences for clothes with traditional Spring Festival elements, such as lucky patterns, zodiac patterns, and other distinctive thematic patterns, 59 people chose to answer "Clothes with a joyous feeling of Spring Festival", there are 69 respondents choose "Don't care whether the clothes have a festival theme, just good-looking and practical is OK". But when it came to the Q12, 96 chose "like it better if the auspicious traditional elements of artworks in museums were integrated into Spring Festival clothes and accessories". In addition, Table 4 shows that there is no significant difference between different age groups in their preferences for these two types of Spring Festival clothes, and all three age groups are more interested in artistic Spring Festival clothes.

	Lik	xe .		Dis	like		Row Totals
Traditional Spring Festival-themed clothes(Q8)	55	(75.50)	[5.57]	71	(50.50)	[8.32]	126
Art-derived Spring Festival theme clothing (Q12)	96	(75.50)	[5.57]	30	(50.50)	[8.32]	126
Column Totals	151			101			252

The chi-square statistic is 27.776. The p-value is < .00001. The result is significant at p < .05.

Table 3: Comparison of preferences for traditional Spring Festival clothing and art-derived Spring Festival clothing

#### 3.2 Results of Part 2

	Traditional Sprin	ng Festival-themed	Art-derived Spr	ing Festival theme	Row Totals		
	clothes(Q8)		clothing (Q12)				
	Like	Dislike	Q12 Like	Q12 Dislike			
18-25	20 (23.69) [0.58]	31 (27.71) [0.39]	41 (38.55) [0.1	10 (12.05) [0.35]	102		
			6]				
26-35	18 (14.17) [1.04]	13 (16.57) [0.77]	23 (23.06) [0.0	7 (7.20) [0.01]	61		
			0]				
36-45	21 (21.14) [0.00]	25 (24.72) [0.00]	32 (34.39) [0.1	13 (10.75) [0.47]	91		
			7]				
Column	59	69	96	30	254		
Totals							

The chi-square statistic is 3.9236. The p-value is .687017. The result is not significant at p < .05.

Table 4: The relationship between age and preference of Q8 and Q12

	Traditional Spring Festival-themed clothes				Art-derived Spring Festival clothes					
	NO.1	NO.2	NO.3	NO.4	NO.5	NO.6	NO.7	NO.8	NO.9	NO.10
Rate 5										
18-25	5	14	10	10	10	15	12	13	18	9
26-35	5	7	13	5	7	6	5	4	9	8
36-45	6	3	7	7	14	12	9	8	6	8
SUM	16	24	30	22	31	33	26	25	33	25
Rate 1										
18-25	7	3	6	12	6	3	5	3	4	7
26-35	1	2	3	6	2	3	3	2	2	4
36-45	7	5	12	8	4	4	7	4	5	5
SUM	15	10	21	26	12	10	15	9	11	16

Table 5: The number of respondents with the highest and lowest evaluation scores

Based on the data analysis of Part 1, the researchers sorted out consumers' feedback in Part 2. The researchers The researchers calculated the number of respondents with the highest evaluation score. (Rate 5) and the lowest evaluation score (rate 1), which can be shown in Table 5. It could be seen that all five products in Group B obtained good evaluation scores. In addition, two designs (No. 7 and No.9) that obtained more Rater 5 (the highest evaluation score) were all from Group B. In comparison, the lowest evaluation (Rate 1) data shows the two designs (No.3 and No.4) that receive more Rate 1 were all from Group 1.

In addition, the researchers took a further analysis of the two groups (Table 6), and the results show that there is a significant correlation between the design characteristics and consumers' preferences. And the art derivatives design characteristics generally received higher evaluation scores and less negative judgment.

	Traditional Spring	Art-derived Spring Festival	Row Totals	
	Festival-themed clothes	clothes		
Rate 5\4	252 (272.06) [1.48]	275 (254.94) [1.58]	527	
Rate 1\2	209 (188.94) [2.13]	157 (177.06) [2.27]	366	
Column Totals	461	432	893 (Grand Total)	
701 1 1		. 00.6346 FFI 14 1 16 4		

The chi-square statistic is 7.4579. The p-value is .006316. The result is significant at p < .05.

Table 6: The relationship between two groups of products and evaluation

### Conclusion

The results of the questionnaire survey and data analysis can answer the two questions raised by the study.

To answer the first question: What are consumers' preferences at different ages in purchasing Spring Festival clothing? The results show that Chinese consumers continue the tradition of new clothes for the Spring Festival regardless of their age. This emotional attachment to traditional blessings is still very important nowadays. However, a lot of consumers will not choose clothes with strong traditional elements of happiness and luck. Fashion products derivative from traditional art may capture the interests of more consumers.

For question 2 (Can the design characteristics combining art derivation and the Spring Festival theme better meet the preferences of consumers), by comparing respondents' preference for the costumes in auspicious theme of the Spring Festival with their preference for the art-derived Spring Festival costumes, the researchers found that most consumers are more inclined toward the art-derived Spring Festival costumes. This result was consistent with the second part of the questionnaire, which rated the preferences for the two design characteristics.

## **Implications and limitations**

Based on the statistic of the questionnaire, for the main research purpose, the researchers suggest that it is important for fashion brands to understand the consumers' demands and preferences. For the sustainable design of Spring fashion products, the brands can take inspiration from the traditional art related to the Spring Festival rather than adopt straightforward traditional auspicious and blessing elements in design. In this way, the spring festival clothing could appeal to more consumers with their unique artistic flavor and cultural connotation.

There are some shortcomings in the research. The questionnaire design is not perfect. As the preference for buying clothes for family members (Q10) is not strongly correlated with the research purpose. And there are many different factors that need to take into consideration when buying clothes for family members than buying clothes for oneself. The content of Question 11 (Q11) and question 12 (Q12) are repetitive, and the results are also quite similar. In addition, this study only explores the Spring Festival clothes as a popular commodity to convey the Spring Festival culture and meet people's demand but has not taken the design characteristics of high-end Spring Festival clothes into concern.

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