# Study of Attitude on Environmentally Friendly Clothing of Chinese Urban Consumers

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**Abstract:** With the development of China's economy, Chinese consumers, especially urban consumers, have a better understanding of environmental protection and environmental friendly clothing. This study investigated the local urban consumers in China by questionnaire. It is optimistic to found that most urban consumers had a positive attitude on environmental protection and environmental protection clothing, and they had encouraging willingness to purchase such products in the future. The acceptance of the price of this kind of products for them had relative improvement space. This research will inspire the academic research in this field. Constructive reference data is also provided for the fashion business community.

#### 1. Introduction

In 1999, British scholar John Elkington proposed the concept of Triple bottom line which is the unification of corporate profitability, social responsibility and environmental responsibility [1]. This concept has been recognized by all walks of life, including the business, government, NGO, consumer, etc. With the improvement of the living standards of Chinese people, especially the urban Consumers who have received good education, have broader views and consumption capacity, they have more awareness of environmental and social responsibility nowadays [2].

In the field of consumption, whether the products they consume are environmentally friendly is entering the field of vision of more and more Chinese urban Consumers. As one of the important daily necessities, the whole life cycle of clothing, such as manufacturing, consumption, disposal, and recycling, has important relevance with the environment [3]. Supply chain of garment all around the world have trying to fulfil the concept of Triple bottom line and produce more sustainable products of clothing [4]. As a huge consumption market of clothing, it is meaningful to study the attitude of the Chinese urban Consumers on environmentally friendly clothing as not much attentions had been paid on this area.

## 2. Research Method

In this study, research method of questionnaire had been adopted to find out the Chinese urban Consumers on environmentally friendly clothing. This quantitative approach is a relatively reliable way to testing subjective attitudes of consumers [5].

## 2.1 Questionnaire design

In this questionnaire study, three major parts had been designed, including the first part, the basic information of the Chinese urban Consumers, the second parts, their attitude on environmentally friendly clothing, and the third part, how will they react to environmentally friendly clothing. There were 16 questions had been designed in the above three areas. This study had been conducted online. All the questionnaires had been distributed via social media, such as WeChat. For the first part, there were 6 questions to know the gender, region, age, education level, average monthly

income, and average monthly spending on clothing. This is a basic map of the questionnaire respondents and help to filter valid questionnaires. There were 6 questions in the second parts to test their attitude, cognition, past consumer behavior and future consumption willingness on environmentally friendly clothing. The third part was about the acceptable unit price range, acceptable premium ratio, product type and the way of buying environmentally friendly clothing.

## 2.2 Questionnaire distribution

This questionnaire study had been conducted for two weeks and more than four hundreds. 318 valid responds to the questionnaires had been selected for further study.

Number	City	City in total	Percentage of the respondents
1, First-tier city	Beijing, Shanghai, Guangzhou, Shenzhen	4	57.22%
2, New First-tier city	Chengdu, Hangzhou, Wuhan, Chongqing, etc.	15	23.1%
3, Second-tier cities	Xiamen, Fuzhou, Wuxi, Hefei, etc.	30	19.69%

Table 1. Region of the respondents

According to the Latest Chinese City Rankings released by New First-tier City Research Institute of First Financial in 2018 [6], respondents from the above three kinds of cities were Mainly studied. About 60% of the respondents were from First-tier city including Beijing, Shanghai, Guangzhou and Shenzhen. Almost 40% of the respondents were from New First-tier city. All of the 318 respondents were from the Chinese urban cities with 61.42% female and 38.58% male respondents. The age range were from 18 to 55 years old. All the respondents had received college or above education. The majority average monthly income was below 20,000 RMB and about 40% were ranging from 2,000 RMB to 10,000 RMB. 90% of the average monthly spending on clothing were below 2,000 RMB.

## 3. Results on the Attitude on Environmentally friendly Clothing of Chinese Urban Consumers

According to the results from the questionnaire, the attitude of Chinese Urban Consumers on environmentally friendly clothing and their future consumption willingness on it are shown as blow.

## 3.1 The attitude of Chinese Urban Consumers on environmentally friendly clothing

When asked if you agree with environmental protection, 93.18% of the respondents agreed with it and the rest kept themselves in a neutral position. None of them disagreed with it. On the question of do you like environmentally friendly clothing, 48.29% of them liked it and 50.92% of them were neutral. Less than 1% disliked it. This feedback reflected that the majority of the Chinese Urban Consumers had a positive attitude on environmental protection and environmentally friendly clothing

The question of the cognition on environmentally friendly clothing was do you understand what is environmentally friendly clothing. In this question, as shown in Figure 1, 74.02% of the respondents were not sure and 14.96% of them fully understood. The rest 11.02% of them totally didn't understand. It means that most consumers have no clear understanding on environmentally friendly clothing.

A multiple-choice question was designed to further testing their understanding on what kind of actions would help to protect environment. 43.78% of the respondents agreed that the fabrics and accessories of the garment are biodegradable materials. 46.41% of them thought that the packaging material of the garments were made of recycled or biodegradable material and 49.76% of them hoped the production process of clothing was less polluting to the environment. 31.58% of the respondents thought that the production process of the garment consumes less material and 31.10% of them regarded that recycling energy or energy saving in garment production and retail processes were environmentally friendly. 31.58% of the respondents agreed that reducing energy and water consumption when they were washing clothing may help to protect environment. 29.43% of them

thought recycled clothes after use were helpful to environment too. 32.54% of them agreed that all of the above actions were environmentally friendly.

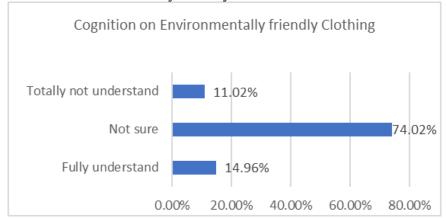


Figure 1. Cognition on Environmentally friendly Clothing

About the past consumer behavior on environmentally friendly clothing, 17.85% of the respondents never bought before and 59.58% of them were not sure if they had bought this kind of garments. 18.64% and 3.94% of them said they bought it sometimes and frequently. It was shown that more than one fifth of the respondents had experiences of environmentally friendly clothing and they clearly knew that the clothes they bought were environmentally friendly.

# 3.2 The attitude of Chinese Urban Consumers on future consumption willingness of environmentally friendly clothing

When asked if you will buy environmentally friendly clothing in the future, 70.87% of the respondents may buy it and 27.3% of them said they will buy it. Less than 2% of them would not buy this kind of clothing. This feedback showed optimistic future consumption willingness of the Chinese Urban Consumers on environmentally friendly clothing.

When the respondents were asked if you bought environmentally friendly clothing in the future, what price range would you accept for a single piece of clothing, the price range of 200RMB or below and 201RMB to 500RMB respectively were acceptable to 33.60% and 44.36% respondents, see Figure 2. 14.96% of them accepted price range of 501 RMB to 1000RMB. Less than 5% thought 1001 RMB to 2000 RMB were acceptable. About 2% of them would pay more than 2000RMB for a piece of environmentally friendly clothing. It can be concluded that highest price for more than 90% respondents was 1000RMB to buy one piece of this kind clothing.

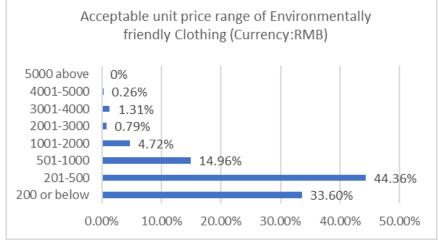


Figure 2. Acceptable unit price range of environmentally friendly Clothing

When the respondents were asked what percentage of the price of environmentally friendly clothing is higher than normal one do you think was acceptable, as shown in Figure 3, more than

half of them only would accept below 10%. Less than one third of them would accept below 20%. About 10% of them would not pay premium ratio for environmentally friendly clothing.

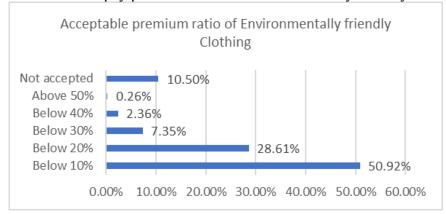


Figure 3. Acceptable premium ratio of environmentally friendly Clothing

In the multiple-choice question of what potential product type of environmentally friendly clothing would you select if you decided to buy this kind of clothing, men's, women's and children's wear had respectively gained 58.13%, 73.21% and 40.43% of preference from the respondents. Accessories had got 41.15%. The consumers would like to select different kinds of environmentally friendly clothing and men's wear had got more attentions. When asked the way of buying this kind of clothing, 21.77% of the respondents preferred offline store and 18.18% of them liked online shop. 60.05% of them selected both offline and online shops. It means that people had their own ordinary shopping place and two-thirds like both of offline and online shopping palace.

### 4. Conclusion

In this study, the results show that the majority of the Chinese Urban Consumers had a positive attitude on environmental protection and environmentally friendly clothing. Most of they may not fully understand what environmentally friendly clothing it. But they still can tell what kinds of actions are environmentally friendly, such as adoption biodegradable and recycled materials, non-polluted production process, material and energy saving garment product life cycle, recycling clothes after use, etc. It is optimistic to see that a part of Chinese Urban Consumers had fully cognition on this kind of clothing and had been a real consume in this market. Most of the Chinese Urban Consumers have positive buying attitude on environmentally friendly clothing in their future purchase decision. The price is still an important part to pay attention, as unit price for one piece of this kind clothing may not be high, as well as the premium ratio. Product type and shopping place for this kind clothing maintain consistency openness for those consumers. Different product types, offline and online shopping palace are acceptable for them. This study focused on local Chinese urban consumers and found out their attitude and future purchase possibilities on environmentally friendly clothing, which will theoretically establish foundation on the study of this area and practical help the related clothing industry to understand the local consumers and developing acceptable products.

#### **Acknowledgments**

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