

Research On Appearance Design Of Nixing Pottery Tea Ware Based On Consumers' Aesthetic Needs

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Abstract:

In order to understand the consumers of Nixing Pottery and their aesthetic needs for the appearance design of Nixing Pottery tea ware, this paper provides references for designers and producers in the appearance design of Nixing Pottery tea ware. Under the background of introducing the craft and artistic characteristics of Qinzhou Nixing Pottery and the quiet changes of domestic tea consumption groups in China; The elements of product appearance design and the relationship between appearance design and consumers' aesthetic demand were discussed through literature. By questionnaire, 108 consumers of Nixing Pottery tea ware in Guangxi were collected from two aspects: basic information and aesthetic demand tendency of Nixing pottery appearance design. Through data analysis, it is concluded that the main consumer groups of Nixing Pottery tea ware are middle-aged and young male groups with stable jobs, higher education and good income, and the aesthetic demand of consumers for the appearance design of Nixing Pottery tea ware is shifting to the direction of minimalism.

Keywords: Appearance design ; Nixing Pottery; Tea ware; Aesthetic demand of consumers.

Introduction

Nixing pottery, a traditional ceramic craft in Qinzhou city in

China's Guangxi Zhuang autonomous region, is known for its long history and unique craft. Qinzhou City is located in the southern coastal area of Guangxi Zhuang Autonomous Region, facing the Beibu Gulf, which has been an important port on the "China Maritime Silk Road" to Southeast and South Asian countries since ancient times, and is the most convenient sea passage in the great Southwest. As one of the important ports of origin of the ancient Maritime Silk Road, Qinzhou had close trade contacts with Southeast Asian countries as early as one thousand years ago, and was located at the node and front of the contacts between Southwest and South Central Asia and Southeast Asia. Driven by the maritime trade, ceramic products were the main commodities of China's foreign maritime trade in ancient times. The ceramic industry gradually flourished in Qinzhou.

Guangxi is far away from the political and cultural center of ancient China. Due to geographical barriers, the characteristics of prehistoric pottery firing craft are well preserved: local clay formula is used, and no raw materials from other places are mixed into the cement pottery. The firing temperature was low, no glaze decoration was used, and the artificial surface grinding and polishing process of the Stone Age was followed. Therefore, Nixing pottery has high historical and cultural value. The Nixing pottery not only has higher historical and cultural value, but also has higher artistic value. The artistic value of Nixing pottery is mainly reflected in "natural pottery color, carving art, bronzing pottery Browning and pottery art modeling", which are the exquisite basis of Nixing pottery and can be called "Four treasures of Nixing" (Chen Xiangjin, 2016). Natural glaze means that Nixing pottery does not need to be coated with glaze, and "natural pottery color" is produced by kiln transformation after firing at a high temperature of 1100° or above. The art of pottery carving refers to the clay of Nixing pottery with moderate water content, fine texture, strong plasticity, strong lubrication, which makes the clay body firm but not brittle, hard but not loose, neither too hard, nor too soft, tough but not sticky. It is a high-quality grey material of carving art. The craftsmen use knife as pen to express traditional Chinese calligraphy and painting art and elements of national culture on the clay body, which has become a major feature. The bronze pottery brown refers to the firing of the Nixing pottery. After grinding, the bronze pottery is born like a swan, and its unique bronze color becomes the classic brown basic color of the Nixing

pottery. Pottery modeling refers to the clay of Nixing pottery with good plasticity, neither too hard, nor too soft, which is very suitable for various modeling creation.

Tea culture is an important part of traditional Chinese culture, and the beauty of tea culture cannot be separated from the foil of tea ware. The shape, material and decoration of tea ware all represent the form of tea ceremony culture. Tea ware also represents the rich connotation and essence of Chinese tea culture. In China, tea ware is not only a kind of practical utensils, but also has a high artistic value and collection value. The production of tea ware is as long as the history of tea, but the development and innovation of tea ware are still continuing, and the appearance and shape of tea ware are constantly improved and perfected to meet the needs and aesthetic requirements of the society for tea ware. Tea tasting in China has traditionally been seen as a way of life for the elderly, and nowadays more and more young people are joining the ranks of tea tasting. Several factors have contributed to the popularity of tea tasting among young people. First, tea is considered a healthy drink, which attracts many health-conscious young people; In fact, inviting good friends to sit around and talk about tea has become a popular way for young people to socialize. Tea tasting groups tend to be younger, and young people have become the mainstream consumer groups in Chinese society. The consumption concept and demand of young consumers for tea utensils are quite different from those of the older generation. How do the design and production of Qinzhou Nixing Pottery tea ware adapt to the changes of consumer groups and bring about changes in aesthetic demand for appearance design with The Times? Therefore, understanding consumer groups of Nixing Pottery tea ware and consumers' aesthetic demands for the appearance design of Nixing Pottery tea ware can provide reference for designers and craftsmen of Nixing Pottery tea ware.

Literature Review

1. Research on product appearance elements

The appearance design of a product refers to the new design of the shape, pattern, color or combination of the product that is aesthetically pleasing and suitable for industrial application. Among them, shape refers to the shape of a three-dimensional product, such as a mobile phone or a car. Patterns refer to the design of two-dimensional planes. Color

can be a part of a pattern or a part of a pattern (Mei Yun, 2015). Product modeling design is in the comprehensive consideration of design materials, color and form under the premise, combined with the use of modern aesthetics, ergonomics and other disciplines, adhering to the people-oriented design concept, aimed at providing customers with the best solution to the problem. The core of product shape design is the beauty of product shape design, which is carried out on the basis of the designer's systematic analysis of market research materials and the precise positioning of product shape design (Tong Weilin, 2011). Line, space, brightness, color, texture and material are the main elements of design (Qiu Jingyuan & Jiang Bin, 2012). In the product appearance design, the material, graphics, structure and function of the product reflect the conceptual connotation of the product. Consumers' first visual perception of products and product positioning is the shape of the product (Fang Lijuan, 2021). The visual language of product appearance can be divided into shape, color and texture. Excellent appearance cannot be separated from excellent shape, proper color, high-quality material and intriguing texture. They complement each other and cannot be absent without one (Yu Ziqian, 2009).

As for the components of product appearance, different scholars have different discussion and division methods, but the contents basically include the three elements of form, color and texture. The form refers to the spatial shape and situation of the product, which is the combination of shape and spiritual situation. The form can be further subdivided into points, lines, surfaces and bodies. Color refers to the color of the product, texture refers to the surface texture based on the material, such as rough or delicate, transparent or opaque. In order to facilitate further investigation and research, this paper divides the appearance elements of Nixing Pottery into form, color and texture, and investigates consumers' aesthetic demand for Nixing Pottery tea ware from these three aspects.

2. Research on consumers' aesthetic demand and appearance design

Consumer demand, mainly refers to a kind of psychological activity, this kind of psychological activity will strongly promote consumers to achieve their own purposes, to meet their needs. It is the most common internal reason to promote consumers to carry out various consumer behaviors, and it is a psychological tendency before the

start of consumer behaviors (Dai Jia, 2007). Consumer demand is one of the important contents of western economic theory, and the research on consumer demand is conducive to guiding the production and operation of enterprises (Niu Yipeng, 2020). Consumer demand for products can be divided into practical demand, aesthetic demand and emotional demand, each consumption stage, the importance of the demand for the three is different. In the product shortage stage is the most important, the practical demand is the most basic; In the stage of product abundance, aesthetic and emotional needs become more and more important. Under the current conditions in China, the production of tea utensils has also shifted from "deficiency type" to "excess type", that is, from insufficient supply to insufficient demand, stimulating demand and starting consumption is particularly important. Merchants should focus more on the study of consumers' ability to pay and potential for a variety of needs, consumption preferences and aesthetic needs (Liu Kaiyun, 2005). The aesthetic demand of consumers can promote the appearance design to meet the actual needs of consumers, and the aesthetic demand of consumers can promote the practicality and aesthetic unity of the appearance design (Zhang Jun, 2015).

To sum up: According to the research of domestic and foreign scholars, the appearance of a product mainly includes three elements: form, texture and color; Aesthetic demand plays an important role in promoting consumers' consumption behavior, and product appearance design is the main means to meet consumers' aesthetic demand.

Research Methods

Mainly through the method of questionnaire survey, collect relevant information to analyze and draw conclusions. The questionnaire is mainly based on the results of literature research to investigate the characteristics of consumer groups from the aspects of gender, age, income, education level, etc. The aesthetic preferences of consumers are understood from the three elements of product design form, texture and color. After the preliminary draft of the questionnaire is prepared, Three experts' suggestions were solicited in the form of project-goal consistency (IOC) index score table. The score of each question was 0.67, which could be implemented. The questionnaire was revised according to the experts' suggestions, and 6 samples were selected for questionnaire testing. The questionnaire was

formally finalized. The formal questionnaire is mainly divided into two parts. One is to investigate the basic information of consumers of Nixing Pottery tea ware, so as to understand the changes of consumer groups of Nixing Pottery tea ware; The second part is consumers' aesthetic demands and preferences in the appearance design of Nixing Pottery tea ware.

Table 1 Basic information of consumers of Nixing pottery tea ware

Serial Number	Question	Options
1	Your gender	☐ Male ☐ female
2	Your age	☐ Under 20 ☐ 21-30 ☐ 31-40 ☐ 41-50 ☐ 51-60 ☐ over 60
3	Your occupation	☐ Student ☐ Office worker ☐ Freelancer ☐ Other
4	Your level of education	☐ Junior College ☐ Undergraduate ☐ Graduate
5	Your average monthly income level	☐ Less than 5000 yuan ☐ 5000-10000 yuan ☐ 10,000-20000 yuan ☐ More than 20000

Table 2 Aesthetic demand preference of consumers for the appearance design of Nixing Pottery tea ware

Serial Number	Question	Options
1	What is your favorite design direction of Nixing pottery tea ware? (Multiple choices available)	☐ Modern simple ☐ Combined with regional culture decoration ☐ novel shape ☐ innovative function ☐ Technological innovation
2	What style of Nixing pottery tea maker do you like?	☐ Geometric straight line ☐ Round curve ☐ Bionic nature
3	What decorative style of Nixing pottery tea ware do you prefer?	☐ No decoration ☐ Simple decoration ☐ Complex decoration
4	What color of Nixing pottery tea do you prefer?	☐ Black, White, gray ☐ Brown ☐ Natural kiln color ☐ Color
5	Which texture of Nixing pottery tea ware do you prefer?	☐ Matte ☐ Gloss

6

What kind of Nixing pottery tea ware
do you prefer?

☐ Pure ceramic ☐ Mixed
materials (ceramic and metal, ceramic and
wood, etc.)

Guangxi is located in the subtropical zone. The Tropic of Cancer runs through the central part of Guangxi, bordering the Beibu Gulf in the south, Nanling Mountain in the north and Yunnan-Guizhou Plateau in the west. The terrain is high in the west and low in the east. It is mainly distributed in mountainous, hilly, low-lying and plain areas. The administrative area covers 237,600 square kilometers. By the end of 2021, the resident population of Guangxi Zhuang Autonomous Region will be 50.37 million. Guangxi is an autonomous region inhabited by many ethnic groups. The number of ethnic minorities in Guangxi ranks first among all provinces in China, accounting for 37.6 percent of the total resident population in the region. Twelve ethnic groups live in Guangxi, including Zhuang, Han, Yao, Miao and Dong. Guangxi is the only autonomous region of ethnic minorities bordering the sea in China. It is an important gateway and frontier for China to open up to the outside world, to ASEAN and to the world. Qinzhou Nixing Pottery is a local pottery with certain influence in China. Thanks to the development of Internet sales network, sales groups of Nixing Pottery tea ware products cover all provinces in China, but the main sales area is still Guangxi Zhuang Autonomous Region. Therefore, the samples were selected as consumers who had purchased Nixing pottery tea ware in Guangxi Zhuang Autonomous Region. According to the data of the census, with the reliability of 90%, 2‰ of the total population of Guangxi Zhuang Autonomous Region was selected for sampling, and more than 100 people were surveyed.

The questionnaire will be issued from June 10 to June 20, 2023. Through the designers, craftsmen and sellers of Nixing pottery known to the author, the online questionnaire will be accurately pushed to consumers who have purchased Nixing Pottery tea ware products and who are interested in and have certain understanding of Nixing Pottery tea ware products. All consumers who participated in the survey provided their consent and their privacy was guaranteed. A total of 108 questionnaires were collected. On June 22, 2023, the collected questionnaires were systematically analyzed and processed, and the analysis results were expressed in precise language.

Research results

1. Analysis of basic information of consumer groups

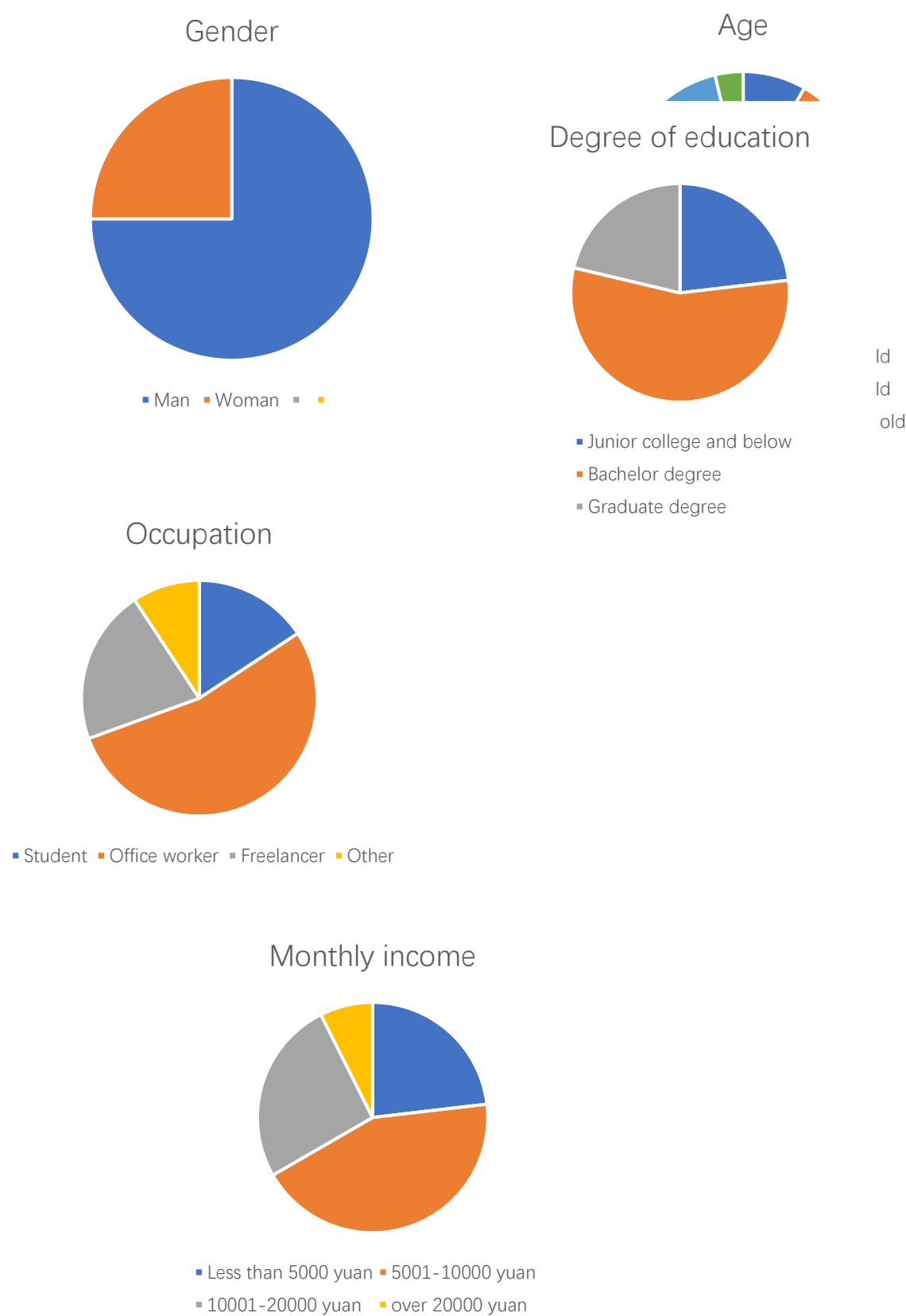


Figure 1 Consumer distribution ratio diagram

Among the 108 samples, 81 males accounted for 75% and 27 females accounted for 25%, which indicates that the consumers of Nixing Pottery tea ware products are still mainly males. Among the age segments of the samples, 21 people between 21 and 30 years old accounted for 19.44%, 41 people between 31 and 40 years old accounted for 37.96%, and 22 people between 41 and 50 years old accounted for 20.37%. The three consumers together accounted for 77.77%. This indicates that the main consumer group of Nixing Pottery tea ware has changed from middle-aged and elderly people over 50 years old in the traditional impression to young and middle-aged people between 20 and 50 years old. Among the occupations and incomes of the sample, office workers (58, 53.7%) were the largest group, while freelancers (23, 21.3%); In the educational structure of consumers, 25 samples with college degree or below accounted for 23.15%, 60 samples with undergraduate degree accounted for 55.55%, and 23 samples with postgraduate degree accounted for 21.30%. The data show that consumers of Nixing Pottery tea ware have a higher education level, which is related to drinking tea as a cultural consumption behavior. The number of consumers with monthly income in the range of 5001- 10000 yuan accounted for the largest proportion of 47, accounting for 43.52%, followed by the number of consumers in the range of 10001- 20000 yuan accounted for 25.93%, and those with monthly income in the range of 5000-20000 yuan belonged to the middle and high income level in Guangxi Zhuang Autonomous Region of China. These two data show that the consumers of Nixing Pottery tea ware are mainly white-collar workers, civil servants, teachers and other middle and high income groups in cities.

Drinking tea is a kind of culture in China, which goes beyond practical needs and is a way to make oneself calm. As a tool for making tea, it has also become a product integrating practical consumption and spiritual culture. Traditionally, the elderly over the age of 50 pay more attention to peace of mind, so they are the main groups of drinking tea and tea utensils. Due to the development of society, people are paying more and more attention to health, tea as a kind of healthy drink has received everyone's attention, at the same time, drinking tea as a way of relaxation is also getting more and more attention from young people, so the main groups of drinking tea and tea ware consumption are gradually getting younger. It can be

seen from the survey data that middle-aged and young people with relatively stable working and living conditions, certain economic foundation and higher education level are the main consumers of Nixing Pottery tea ware. Among the consumer groups, 25% of women should not be ignored, which indicates that female consumers of Nixing Pottery tea ware account for a considerable proportion. However, there are almost no products designed for the aesthetic needs of this group in the market, which is a consumer group worthy of our attention and efforts.

1. Consumers' aesthetic demands and preferences for the appearance design of Nixing Pottery tea ware

Among the aesthetic demand preferences of the design direction, modern simplicity and novel modeling accounted for the highest proportion, with 104 samples accounting for 96.3% and 102 samples accounting for 94.44% respectively. The traditional decoration combining Nixing pottery with regional culture was not favored by consumers, with 31 samples accounting for 28.7%. Among the aesthetic preferences of modeling styles, 68 samples chose geometric straight lines at most, accounting for 62.96%, far exceeding the number of people who chose rounded curves and bionic natural modeling styles. In the aesthetic demand preference of decorative style, 67 samples accounted for 62.04% and 36 samples accounted for 33.33% of the non-decorative and simple decorative styles, respectively, far exceeding the traditional complicated decorative styles. In the color aesthetic demand preferences, the samples that chose black and natural kilns ranked first and second, accounting for 46.3% of 50 samples and 31.48% of 34 samples respectively. Among taste preferences, 35 samples chose traditional polishing of Nixing pottery, accounting for 32.41%, while 73 samples chose matte finishing, accounting for 67.59%, indicating that consumers' preference for Nixing Pottery tea ware is the pursuit of novelty and change. Among the aesthetic demand preferences for material selection, 80 samples chose pure ceramic material, accounting for 74.07%, and 28 samples chose mixed material, accounting for 25.93%.

Table 3 Survey results of consumers' aesthetic demand preferences for Nixing Pottery tea ware

Variables	Items	Sample	Scale	General
Design direction	Modern simplicity	104	96.3%	108

Styling style	Decorations that integrate with regional culture	31	28.7%	108
	Novel shape	102	94.44%	
	Functional innovation	32	29.63%	
	Craft innovation	24	22.22%	
	Geometric straight lines	68	62.96%	
	Rounded curves	22	20.37%	
	Bionic Nature	18	16.67%	
	No decoration	67	62.04%	
	Simple Decorations	36	33.33%	108
	Intricate Decorations	5	4.63%	
Decorative style	Black, white, grey	50	46.3%	
	Tan	15	13.89%	
Color tendency	Natural kiln-changing colors			108
	Color	9	8.33%	108
	Matte finish	73	67.59%	
Surface treatment tendency	Gloss	35	32.41%	
	Pure ceramic material	80	74.07%	108
Material tendency	Mix Materials	28	25.93%	

It can be seen from the survey data that in terms of aesthetic preference for form, simplicity and simplicity, minimalist style and shape innovation focusing on geometric forms are more favored by young consumers, ahead of decoration and technology innovation combined with regional culture; The linear geometry of the aesthetic preference of the modeling style is also far more than the rounded curve and bionic natural modeling characteristics of the traditional Nixing pottery. In terms of aesthetic preference for decorative styles, the traditional characteristics of surface decoration in the form of calligraphy and painting have also been

abandoned by young consumers, who are more inclined to simple or non-decorative styles. In terms of color, the aesthetic preference tends to be neutral black, white and gray more than the traditional tan, and the color is too eye-catching, which is not in line with the low-key casual atmosphere of drinking tea, and has not been accepted by consumers for the time being. In terms of surface texture, consumers' aesthetic preference for matte texture exceeded the glossy texture, which is one of the traditional characteristics of Nixing pottery art, and their aesthetic preference for materials still tended to be pure ceramic material. In general, the changes in consumer groups' aesthetic demand for the appearance design of Nixing Pottery tea ware mainly reflect the young consumers' aesthetic demand for novelty and change in appearance design. From the aspects of design style, shape, decorative form, color and texture, traditional forms are no longer sought after by young consumers, and the minimalist style is more favored by young consumers. On the one hand, young Chinese consumers are deeply influenced by the minimalist style led by Apple Inc.; On the other hand, in the rapid development of Chinese society, young people are under great pressure to choose a simple and simple lifestyle, which is also the choice of young people, and this aesthetic demand is also the embodiment of their life attitude.

Discussion and Suggestions

Designers and producers should be keenly aware of the trend of gradually younger consumer groups of Nixing Pottery tea ware. Middle-aged and young men with stable jobs, higher education and good income are the main consumer groups. It's also important to focus on women who can't be ignored. The change of consumption aesthetic demand is brought about by the change of consumer groups. Traditional shapes and decorations can no longer meet the aesthetic needs of consumers, and consumers need the appearance design of Nixing Pottery tea ware that conforms to the modern aesthetic trend to meet the aesthetic needs of consumers with more concise forms, non-decorative styles and neutral colors, so as to stimulate the needs of consumers.

This research is aimed at consumers who have purchased Nixing Pottery tea ware. The main purpose of this research is to consider that such consumers have certain knowledge of Nixing Pottery tea ware, so that they can better understand issues and make correct choices, thus ensuring the validity of the questionnaire. However, in the

selection of samples, potential consumers were not considered and their aesthetic demands were not included. Due to the particularity of the research, the views of designers and manufacturers were not included. The research was only conducted for more than five months, and the insufficient number and extensive representativeness of samples limited the accuracy of the research. Despite the limitations of the study, the research results are of general guiding significance for the designers and makers of Nixing Pottery tea ware.

It is suggested that future researchers, when conducting more in-depth research, should include the views of various potential consumer groups and designers into the scope of the survey, increase the number of samples and sample representatives in all aspects, so as to make the survey results broadly representative, and increase the research time limit to more accurately divide the elements of appearance. The language of the questionnaire is more in line with the cognitive level of consumers, so as to more accurately find out the consumer groups of Nixing Pottery tea ware and consumers' aesthetic needs for the appearance design of Nixing Pottery tea ware.

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