

Research and Analysis on the Demand Trends of Innovative Products of Guangxi Ethnic Minority Brocades in China

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Abstract

Background and Aim: Guangxi's ethnic minority brocade culture has a long history, but it is difficult to inherit. This study aims to understand the demand trend of consumers for innovative woven products, to promote the development and cultural inheritance of the woven industry.

Materials and Methods: The study used literature research and questionnaire survey methods to collect data on consumers' viewing value, cultural characteristics, innovation, practicality, cost-effectiveness, and price acceptance of woven brocade products, ensuring the universality and representativeness of the results. The data from the questionnaire survey were quantitatively analyzed using SPSS 25.0 software.

Results: The research results show that consumers prefer products with aesthetic value, regional cultural characteristics, and creativity, while also focusing on practicality and cost-effectiveness. With high price sensitivity, most accept a price range of 0-200 yuan. Tend to purchase cultural and creative products related to clothing, home decor, and daily necessities, with casual wear and embroidery, weaving, printing, and dyeing techniques being popular.

Conclusion: The research provides clear guidance for the Ethnic minority brocade industry in Guangxi. The industry should focus on the cultural value and innovative design of products while considering consumers' practical needs and price sensitivity. By developing product types that meet market demand and adopting popular craftsmanship techniques, the development and inheritance of the weaving industry can be effectively promoted.

Keywords: Guangxi Ethnic Minority Brocade Weaving; Innovation; Demand Trends; Statistical Analysis

Introduction

12 ethnic groups have lived in Guangxi, China, for generations. The ethnic minorities in Guangxi have a long history, splendid artistic culture, and excellent traditional culture. Brocade, embroidery, and batik are the excellent traditional cultures of the people of all ethnic groups in Guangxi. Among them, the brocades of various ethnic groups in Guangxi have a long history and a wide variety of varieties. The early history can be traced back to the Spring and Autumn Period and the Warring States Period more than 2000 years ago (Wu, 2014). The brocade patterns of Guangxi's various ethnic groups have profound cultural and artistic roots, and together with other ethnic artworks such as batik and embroidery, they form the gene pool of Guangxi's ethnic minority art (Yang, 2019).

In today's era of globalization, the rapid penetration of digital media culture has caused the living space of traditional ethnic culture to be compressed, making it difficult to preserve and continue the ethnic culture. Many excellent traditional Chinese cultures and skills are disappearing due to a lack of inheritance. Due to the long time and low output of the weaving skills of Guangxi's ethnic brocades, the economic benefits are not obvious, which has led to fewer and fewer people engaging in the weaving skills, fewer and fewer people paying attention to traditional brocade products, and fewer and fewer people understanding the cultural connotation of brocade patterns. The inheritance and development of ethnic minority brocade culture are facing severe challenges.

With China's high attention to excellent traditional culture, the inheritance and innovation of traditional culture have become the focus of social attention. Many industries have set off a "culture +" boom around the excellent traditional culture to stimulate new experiences and value creation (Zhang, 2021). The concept of "culture+" emphasizes the diversity and inclusiveness of culture, advocating the active pursuit of the integration of cultural elements with different fields while respecting and protecting



cultural traditions. It not only focuses on the protection and inheritance of culture but also aims to activate the modern vitality of traditional culture through innovative means and promote its wide application in contemporary society. To ensure the continuation of the brocade culture of Guangxi's ethnic minorities, it is imperative to innovate the expression forms of brocade patterns in line with the characteristics of the times, so that innovative brocade products can adapt to the needs of modern society.

Objectives

To better protect and inherit the ethnic minority brocade culture, it is necessary to keep traditional culture up-to-date, combine the characteristics of the times, and innovate ethnic minority brocade products. The objective of this study is to understand the development prospects of innovative products for ethnic minority brocade in Guangxi, to understand consumers' attitudes and demand trends towards innovative products for ethnic minority brocade in Guangxi, and to provide a reference for the innovative development direction and application design of brocade patterns, to promote the better development of the ethnic minority brocade industry in Guangxi.

Literature Review

1. Inheritance and protection of Guangxi ethnic minorities' brocades

With the comprehensive implementation of the protection of China's intangible cultural heritage in 2003, the productive protection method has played a positive role in increasing the benefits of inheritors and local people, enhancing the enthusiasm of the public to carry forward excellent traditional culture and inherit intangible cultural heritage, promoting cultural consumption, expanding employment, improving people's livelihood, and achieving comprehensive, coordinated and sustainable development of regional economic, social and cultural aspects. Most scholars have devoted themselves to researching the inheritance and protection of ethnic brocade. Chen Wei and Yang Hui, based on an overview of the development history and cultural connotations of Guangxi Zhuang Brocade, proposed countermeasures, and suggestions for further promoting the protective tourism development of Zhuang Brocade in response to the existing problems and deficiencies in the current protection and tourism development of Zhuang brocade (Chen & Yang, 2018). He Jianwu and Gao Yanling, based on summarizing the development history and cultural connotation of Zhuang Brocade, proposed countermeasures and suggestions for implementing the development-oriented protection of Zhuang Brocade in response to the practical situation faced in its development and the problems and deficiencies in its protection and tourism development (He & Gao, 2010). Ding Zhicai mentioned that the "non-legacy" of handicrafts is more likely to be marketized and industrialized due to the development of productive protection. However, in practice, "protection" and "development" remain a difficult problem to coordinate. As a national intangible cultural heritage, the productive protection of Zhuang brocade reflects the industrial process of intangible cultural heritage resources for ethnic minorities. An examination of it can provide a glimpse into the opportunities, contradictions, and dilemmas of current intangible cultural heritage protection and the development of ethnic cultural industries for ethnic minorities, and it can also be used to explore the possibility of a positive interaction between the two (Ding, 2013). Xu Ganli believes that there are inevitably problems in the relationship between consumption, inheritors, and the product itself in the productive protection of Zhuang brocade. She proposes that to solve these problems, the government needs to intervene with macroeconomic regulation, and it is also necessary to leverage the aesthetic and artistic value of Zhuang brocade while maintaining a high-quality and high-price positioning for the product (Xu, 2014). Wang Fen studied the protection and inheritance of Guangxi Rongshui Miao brocade from the perspective of innovation and entrepreneurship and believed that it should promote the integration of traditional Miao brocade into contemporary life, innovate the application fields of Miao brocade, and collaborate with multiple social subjects to improve the added value of Miao brocade. Change the traditional apprenticeship system of Miao brocade craftsmanship, which is passed down orally from generation to generation, and use modern technology and educational methods to enable Miao brocade artists to receive new knowledge, enhance their confidence, broaden their horizons, and improve their competitiveness (Wang, 2017). Huang Feiyue





pointed out the initiative to inherit and develop the long-standing Zhuang brocade culture. On the one hand, it is necessary to explore the unique charm and value functions of Zhuang brocade culture, promote the excellent elements of Zhuang brocade culture, carry out learning about Zhuang brocade culture, and absorb and innovate it to realize the recreation of its value. On the other hand, we should increase support and assistance for the Zhuang brocade cultural industry in terms of policy, funding, technology, etc., to add new economic growth points to the development of Guangxi and comprehensively enhance the comprehensive competitiveness of Guangxi. At the same time, we should also pay attention to enhancing cultural protection awareness and improving the level of inheritance of national historical and cultural heritage (Huang, 2018). Wu Dequn believes that traditional Zhuang brocade faces challenges in production and application. Practitioners of Zhuang brocade should first protect traditional Zhuang brocade from three aspects: first, protect traditional brocade craftsmanship. Second, we should pay attention to the inheritance of traditional patterns and colors of Zhuang brocade. Third, carry out inheritance activities (Wu, 2021). Su Ye and Chen Wei also proposed combining Zhuang Brocade with digitalization and adopting interactive methods for the innovative development of Zhuang Brocade (Su & Chen, 2021).

Yang Xiongyan and Ye Dehui used the trichotomy of Morris's semiotics as a theoretical guide to interpret the cultural connotation and expand the application of Dong brocade from the semantic, syntactic, and pragmatic levels, construct a model for the interpretation and transformation of Dong brocade semiotics, and explore modern transformation strategies for Dong brocade intangible cultural heritage elements, providing new ideas for the inheritance and modern transformation of rural intangible cultural heritage elements (Yang & Ye, 2022). Chi Xiaoli, Wang Huilei, and Cui Hongli discussed the value of protecting and inheriting the excellent traditional cultural genes of the nation, and proposed corresponding protection and inheritance strategies for Dong brocade protection, starting from the aspects of inheritors, dissemination paths, productive protection, and national brand building (Chi, Wang & Cui, 2022).

2. Research on the innovative application of the Guangxi ethnic minority brocade

Nowadays, with the promotion of the cultural value of Guangxi ethnic minority brocade, the brocade patterns of various ethnic groups have also been applied in various packaging designs, cultural and creative product designs, clothing design, and other aspects, and there are also many related research results. Based on an analysis of the patterns, colors, artistic features, and connotations of Zhuang brocade elements, Wu Hongmei integrated Zhuang brocade patterns with packaging designs for local products in Guangxi, such as Wuzhou Liubao tea, to conduct a modern packaging design study with Zhuang cultural connotations (Wu, 2012). Chen Lifang mainly analyzes the innovation and application of Dong brocade art patterns in modern fashion design, and examines the current development status of Dong brocade art patterns in modern fashion design. She conducts research on fashion design from the aspects of Dong brocade art and basic patterns, to better promote the development and progress of Dong brocade art patterns in modern fashion design (Chen, 2018). Another example is Wu Ming's attention to the use of Zhuang brocade patterns in urban environmental design in the Beibu Gulf region of Guangxi. He analyzed the current application status of Zhuang brocade patterns in urban construction in the new era, combined with the conception and conception of Zhuang brocade patterns, and proposed improvement measures for the deficiencies of Zhuang brocade patterns in urban public environments. This provides new ideas for the application of similar intangible cultural heritage in urban public environment construction (Wu, 2019). Qin Manlin and others started from the field of modern clothing design, and based on in-depth research on the characteristics, culture, and artistic language of Zhuang brocade representative decorations, they integrated them with modern clothing design, effectively verifying the feasibility and artistic value of Zhuang brocade in modern clothing design (Qin, 2018). Chen Xiaoling, Peng Xiaoqin, and Xie Xiandong took Dong brocade as the research object, analyzed the artistic characteristics of Dong brocade patterns from the aspects of ornamental art, plastic art, composition art, and color matching art, and combined modern craftsmanship with 3D printing technology, modeling and composition with laser engraving technology, color art, and modern batik craftsmanship to explore the application forms and innovative design methods of Dong brocade patterns in clothing, injecting new thinking into the inheritance and application of Dong brocade art (Chen, Peng & Xie, 2021). Chen Li and Liu Hongxiao believe that modern clothing accessories





designers should have a deep understanding of the cultural connotations of Miao brocade elements if they want to combine them with accessories design. Then, they should combine current era factors and design techniques, based on market demand, and design products that meet the needs of different user groups, to achieve the purpose of protecting and inheriting Guangxi Miao brocade to a certain extent (Chen & Liu, 2021). Based on the analysis of the pattern characteristics and cultural connotations of Guangxi Miao brocade, Chen Li and others explored how to integrate the elements of Guangxi Miao brocade into soft pottery jewelry for the development of tourist souvenirs, and elaborated on the significance of developing tourist souvenirs with Guangxi Miao brocade elements in soft pottery jewelry (Chen, Lu & Zhu, 2022). Ye Rui analyzed the application of brocade patterns in modern shoes and clothing from the perspective of the inheritance and development of brocade patterns in Miao shoes and clothing. It is proposed that to protect traditional Miao culture, we must start from the perspective of innovation and entrepreneurship, seek truth from facts, and keep pace with the times (Ye, 2022).

Yao Shuqi, Zhang Xianfu, and Shen Jialing have explored the innovative ways and methods of using Dong brocade cultural elements in jewelry design through in-depth analysis of Dong brocade, and have conducted jewelry creation practices based on Dong brocade patterns to explore the integration and development of ethnic culture and modern jewelry (Yao, Zhang & Shen, 2022). Xia Lu and Li Benjian selected representative patterns of Dong brocade, analyzed the expression forms of Dong brocade patterns in northern Guangxi, extracted the outstanding characteristics of the patterns in terms of morphological features, color genes, and cultural symbols, and attempted to establish a design factor library for Dong brocade patterns. They conducted pattern selection and design deduction, used methods such as fragmentation, reconstruction, and evolution to innovate the design of Dong brocade elements, and applied them in the packaging design of edible mushrooms in northern Guangxi (Xia & Li, 2023). Li Xiaoning, Liu Longyan, Huang Yongzhi, and Liang Yanmin used semiotics to analyze Dong brocade from the dimensions of semantics, pragmatics, and syntax, summarizing the composition symbols, pattern symbols, and color symbols of Dong brocade, exploring the application of its symbols in new Chinese-style furniture design, and conducting research on individual furniture design and furniture space atmosphere creation. The aim is to provide new reference methods for furniture design and reflect on the innovation, inheritance, and protection of Dong brocade (Li, Liu, Huang & Liang, 2023) this study, comparative analysis was employed to conduct horizontal comparisons of the structural features of Buddhist botanical motifs, capturing their decorative aspects. Additionally, a longitudinal analysis of different ornamental themes was conducted to trace the development trajectory and historical origins of these motifs.

Conceptual Framework

The conceptual framework of this study is shown in Figure 1.



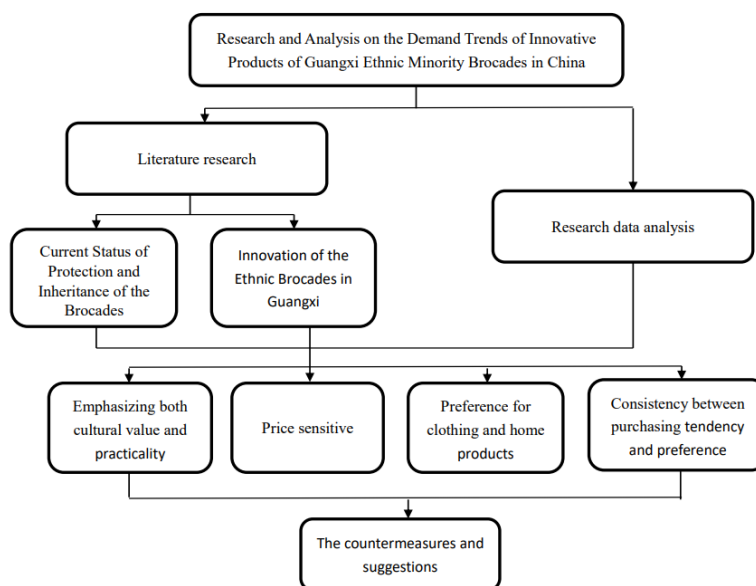


Figure 1 Conceptual Framework
Note: Constructed by the researcher

Methodology

Qualitative research: Collection and analysis of secondary data: To improve the breadth and depth of research and provide theoretical support for the study, various literature related to Guangxi Zhuang brocade, Dong brocade, and Miao brocade were collected, and then the most relevant data for the research topic were filtered out.

Quantitative research: Using quantitative research tools such as questionnaire surveys and data analysis, the target population of the research questionnaire survey is consumers of brocade products, including tourists from other places in Guangxi, ordinary residents in Guangxi, and young people from the three ethnic minorities of Zhuang, Miao, and Dong in Guangxi. The purpose is to understand their recognition and demand trends for innovative brocade products. A total of 406 consumers effectively completed the questionnaire survey. The researcher conducted a statistical analysis on the relevant data of the questionnaire using SPSS 25.0 software.

Results

To understand the demand trends of Guangxi consumers for innovative products of ethnic brocade, the researcher distributed questionnaires to 406 consumers in Guangxi through the Internet and then used SPSS 25.0 software to conduct statistical analysis on 406 valid samples. Through the validity analysis, the KMO of the questionnaire is 0.770, which is greater than 0.7, and the Bartlett test P value is 0.00, which is less than 0.05. Therefore, the validity structure of the questionnaire is good, the question design is reasonable, and it can truly reflect the relationship between research variables. The results of the specific questionnaire survey are analyzed as follows:

Cross-analyze the results of question 8 (viewpoint on innovatively designing traditional ethnic patterns and presenting them through cultural and creative products, modern clothing, and accessories, etc.) and question 9 (viewpoint on redesigning traditional ethnic patterns to make them innovative and fashionable) of the questionnaire, and display them visually in Figure 2. Where "8. XXX" represents the viewpoint on innovatively designing traditional ethnic patterns and presenting them through cultural and creative products, modern clothing and accessories, etc., and "9. XXX" represents the viewpoint on redesigning traditional ethnic patterns to make them innovative and fashionable. It is obvious from the figure that most people who hold the view of liking the innovative design of traditional ethnic patterns and

presenting them through cultural and creative products, modern clothing and accessories, etc. account for about 90%, of which 51.23% hold the view of "very like" and 38.42% hold the view of "prefer". The remaining are all holding the view of "general". Therefore, it can be inferred that people hold a favorable and supportive attitude towards the innovative design of traditional ethnic patterns and presenting them through cultural and creative products, modern clothing, and accessories etc. Similarly, it can also be seen that the proportions of respondents who "like very much", "like quite a lot" and "generally" the redesign of traditional ethnic patterns to make them innovative and fashionable are 55.67%, 35.22%, and 8.87% respectively, while the proportions of those who "don't like very much" or "don't like very much" are both about 0%. This can also be inferred that people like the redesign of traditional ethnic patterns to make them innovative and fashionable. In addition, it can be seen that there is a certain consistency between the views of the respondents who innovate traditional ethnic patterns and present them through cultural and creative products, modern clothing, and accessories, and the views of those who redesign traditional ethnic patterns to make them innovative and fashionable. Simply put, among the respondents who hold the view of "liking very much" for the former, the largest proportion of them also hold the view of "liking very much" for the latter. Other views also show this consistency, which will not be repeated here.

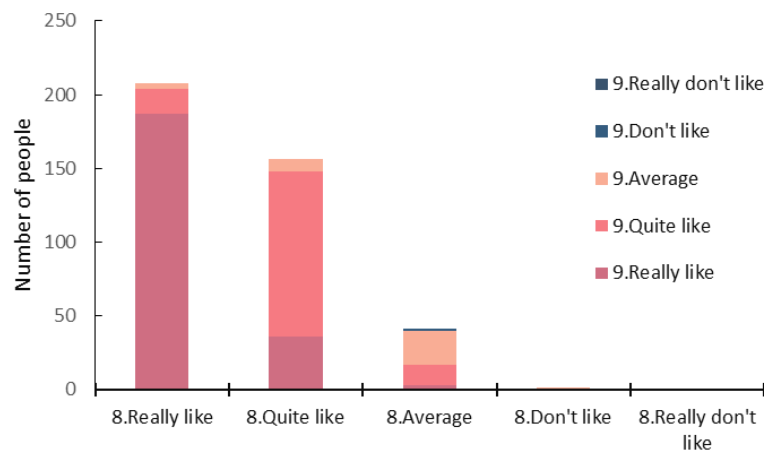


Figure 2 The view of the redesign of traditional ethnic patterns and the presentation of cultural and creative products, modern clothing
Note: Constructed by the researcher

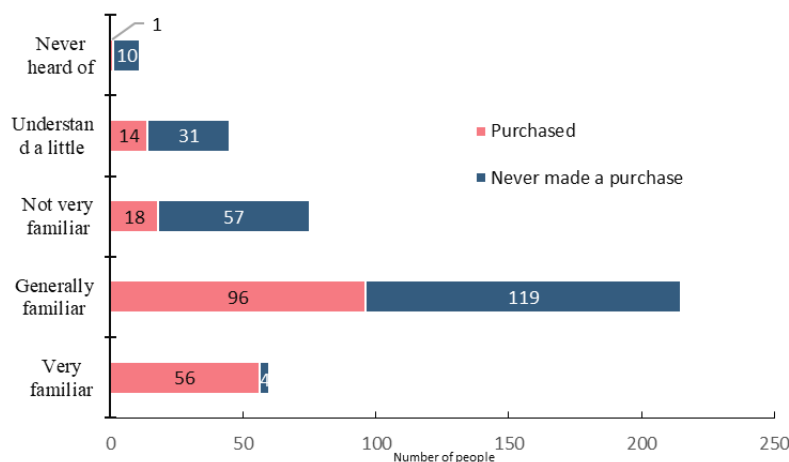


Figure 3 The respondents' understanding of the brocade of ethnic minorities in Guangxi and the visualization of the purchase of innovative products
Note: Constructed by the researcher



The analysis of multiple-choice questions requires defining each multiple-choice question as a set of multiple response variables in SPSS software, which involves packaging all the option variables collected for each multiple-choice question into a single variable and then analyzing these variable sets. The response case number refers to the number of times the option is selected, the response percentage refers to the proportion of the number of times the option is selected to the total number of times the multiple choice question is selected, and the response percentage should add up to 100%. The case percentage refers to the proportion of the number of people who choose the option to the total number of people.

Through frequency analysis, the researcher studied the demand trend of 185 respondents who had purchased innovative brocade products from ethnic minorities in Guangxi Province at the time of purchase and obtained Table 1. As shown in Table 1, among the 185 respondents who have purchased Guangxi ethnic brocade cultural and creative products, the probability of choosing other options as priority content is higher than 50%, except for "low price" and "communication value". Among them, "viewing value", "regional cultural characteristics", and "innovation degree" rank the top three, accounting for 73%, 63.2%, and 61.1% of the respondents who have purchased them, respectively. Their proportion in the total number of choices also ranks in the top three. Similarly, the same method can also be used to analyze the reasons why the respondents did not choose to purchase Guangxi ethnic brocade cultural and creative products. The results are shown in Table 2. From the analysis results in Table 2, it can be seen that "lack of practicality" is the most common reason for respondents not purchasing Guangxi ethnic brocades, with a response percentage and case percentage of 32.5% and 51%, respectively. Secondly, "low cost-effectiveness" and "lack of creativity" were the most common reasons, accounting for more than 30% of the respondents. Among those who chose other reasons, many mentioned "expensive products", "low cost-effectiveness", and "lack of understanding of the product". In summary, in the process of innovation and production of Guangxi ethnic brocade cultural and creative products, in addition to considering the ornamental value, regional characteristics, and positive innovation of the products themselves, we should also pay attention to the practicality, cost-effectiveness, and other issues of the products. In addition, we should also promote and carry forward the traditional ethnic culture, as the cultural and creative products continue.

Table 1 The frequency analysis table of the content that the respondents prioritized when purchasing Guangxi ethnic brocade cultural and creative products

Options	Number of response cases	Response percentage	Case percentage
Low price	70	9.8%	37.8%
Innovation level	113	15.9%	61.1%
Practical value	101	14.2%	54.6%
Viewing value	135	19.0%	73.0%
Communication value	72	10.1%	38.9%
Collection value	103	14.5%	55.7%
Regional characteristic culture	117	16.4%	63.2%
Other reasons	1	0.1%	0.5%

Table 2 The frequency analysis table of the reasons why the respondents did not choose to buy Guangxi ethnic brocade cultural and creative products

Options	Number of response cases	Response percentage	Case percentage
Low cost-effectiveness	148	23.2%	36.5%
Lack of creativity	132	20.7%	32.5%
Lack of cultural connotation	86	13.5%	21.2%
Lack of practicality	207	32.5%	51.0%
Other reasons	64	10.0%	15.8%



Will consumers' preference for ethnic brocade cultural and creative product types affect their purchase tendency for Guangxi ethnic brocade cultural and creative product types? Table 3 concludes this issue; this study conducted a cross-analysis of the results collected from questions 14 and 15 in the questionnaire and obtained the results shown in the table. The column labels in the table represent individuals' purchase tendencies towards Guangxi ethnic brocade cultural and creative product types, and the row labels represent individuals' preferences for ethnic brocade cultural and creative product types. The table includes the counts of each cross-term (unit: person), the proportion of the total row (unit: %), the proportion of the total column (unit: %), and the total row and column (unit: person). If the total results can be seen, the respondents are more inclined to purchase clothing and accessories, home decoration, and daily necessities when choosing Guangxi ethnic brocade cultural and creative products, with the proportions of the three categories being 33%, 30.1%, and 23.5% respectively; Among the respondents, the number of people who prefer ethnic brocade cultural and creative products such as handicrafts and hanging ornaments is the largest, accounting for 75.4% of the total. Next are clothing bags, lifestyle fashion, cultural and academic toys, clothing and accessories, and home furnishings, with the number of people who prefer these types of products exceeding 40%. If the results of cross-analysis show that no matter what type of ethnic brocade cultural and creative products people prefer, the number of people who tend to purchase Guangxi ethnic brocade clothing and accessories cultural and creative products is always the largest; If individuals prefer lifestyle products, handbook accessories, digital accessories, and other practical cultural and creative products, their second preference when purchasing Guangxi ethnic brocade cultural and creative products is for daily necessities; If individuals prefer ethnic brocade cultural and creative products with strong ornamental value such as handicrafts, ornaments, clothing bags, and home furnishings, their second preference for purchasing Guangxi ethnic brocade cultural and creative products will be home decoration products.

In summary, consumers tend to prefer to purchase clothing and accessories when choosing to purchase Guangxi ethnic brocade cultural and creative products. It can also be found that consumers' shopping preferences for these products are consistent with their preferences for ethnic, brocade, cultural and creative products.

Table 3 A cross-analysis of personal preferences for the types of ethnic brocade cultural and creative products and the purchasing tendency of ethnic brocade cultural and creative products in Guangxi

Category	Office Stationery	Daily Necessities	Home Decor	Apparel	Total
Crafts, pendants, ornaments	41 (13.4, 69.5)	72 (23.5, 74.2)	92 (30.1, 80.0)	101(33.0,74.8)	306
Clothing bag	26(11.5,44.1)	48(21.2,49.5)	60(26.5,52.2)	92(40.7,68.1)	226
Study and leisure activities	28(15.4,47.5)	44(24.2,45.4)	54(29.7,47.0)	56(30.8,41.5)	182
Lifestyle Trendy Products	23(12.1,39.0)	51(26.8,52.6)	43(22.6,37.4)	73(38.4,54.1)	190
Hand account peripherals	18(15.0,30.5)	30(25.0,30.9)	28(23.3,24.3)	44(36.7,32.6)	120
Digital peripherals	20(15.9,33.9)	36(28.6,37.1)	27(21.4,23.5)	43(34.1,31.9)	126
Home Furnishings	19(10.8,32.2)	46(26.1,47.4)	50(28.4,43.5)	61(34.7,45.2)	176
Apparel	9(5.1,15.3)	32(18.2,33.0)	39(22.2,33.9)	96(54.5,71.1)	176
Other	0(0.0,0.0)	1(50.0,1.0)	1(50.0,0.9)	0(0.0,0.0)	2
Total	59	97	115	135	

The purpose of the respondents' purchasing of Guangxi ethnic brocade cultural and creative products was analyzed using frequency analysis, and the resulting percentage results were visually displayed, as shown in Figure 4. It can be seen that about 60% of the respondents purchased Guangxi ethnic brocade cultural and creative products to be interested in the creativity of cultural and creative products, followed by more than 50% who purchased them for tourism souvenirs and gifts to friends and relatives, while only about 30% of the respondents purchased them for daily use or because of the cultural connotation of the products themselves.

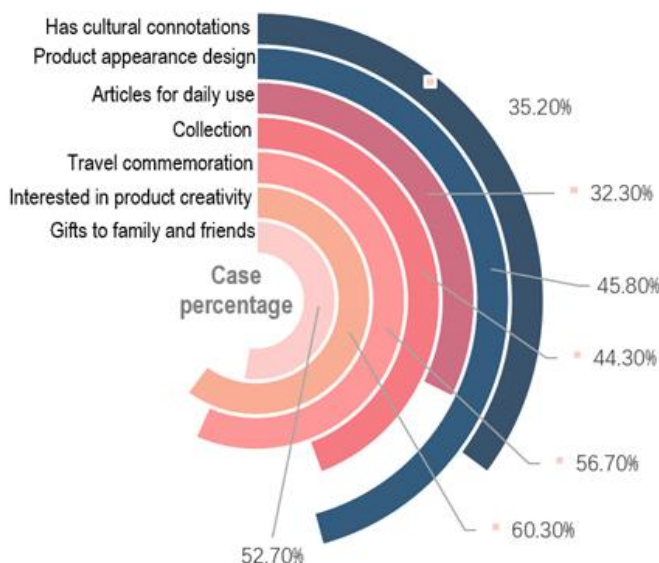


Figure 4 The percentage of cases in which the respondents purchased Guangxi ethnic brocade cultural and creative products can be seen

Note: Constructed by the researcher

According to the results of the questionnaire survey, the frequency of the respondents was used to analyze the problems existing in the cultural and creative products of Guangxi ethnic brocade, and the percentage results of the cases were visualized to obtain 5. The results were visualized by calculating the percentage of cases, revealing that more than 50% of respondents believed that the current problems with Guangxi ethnic brocade cultural and creative products were "high prices" and "single category", followed by "too commercialized" and "no sense of design". In combination with the previous analysis of the demand trend of the surveyed people when purchasing Guangxi ethnic brocade cultural and creative products, the consumption market of Guangxi ethnic brocade cultural and creative products should make changes and innovations, and design multi-category, distinctive, practical, and cost-effective brocade innovative products based on regional characteristics and culture.

The frequency statistics were used to analyze the respondents' expectations of Guangxi ethnic brocade cultural and creative products, and the number of cases and frequency statistics of each option were obtained, as shown in Figure 5. It can be seen that the respondents expect the innovative products of Brocade to be more practical and can be used in daily life, which has the highest response, both of which account for more than 60%; The second priority is to enhance its cultural depth and creativity, accounting for approximately 50%; The number of people who expect limited edition products is the least, accounting for about 15%; The proportion of respondents who chose the remaining options was within the range of 30% to 45%.

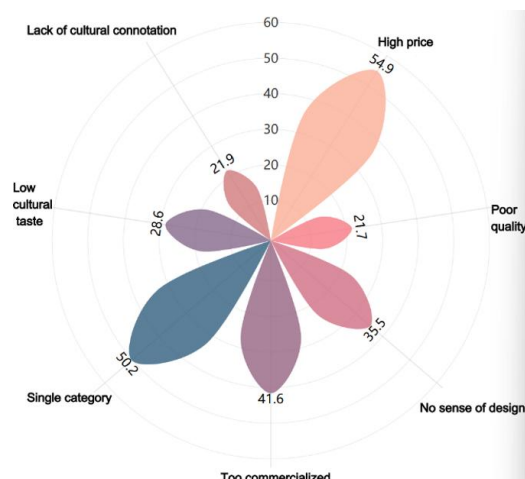


Figure 5 Visual table of the problems that the respondents think exist in Guangxi ethnic brocade cultural and creative products

Note: Constructed by the researcher

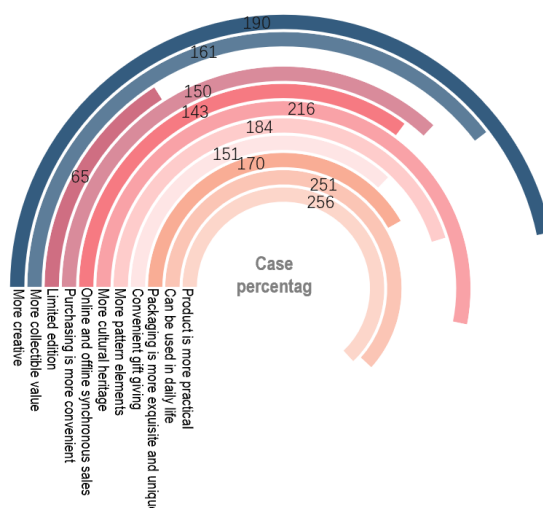


Figure 6 The visual analysis of the respondents' expectations for Guangxi's national brocade cultural and creative products

Note: Constructed by the researcher

The results of the survey of whether the respondents believe that there is a problem of high prices in the Guangxi national brocade cultural and creative products market are cross-analyzed with the highest price range of the acceptable brocade innovative products, and the visual Figure 7 is obtained. Overall, it can be seen that the highest price range of brocade cultural and creative products that most respondents can accept is between [0,200] RMB, accounting for about 80% of the total. The results of the cross-analysis indicate that, regardless of whether the respondents believe that the market has a problem with high prices, the price range of 50-200 RMB is the most popular choice among the respondents; If the respondents believe that the market has a problem of high prices, the proportion of people who can accept a price range of 0-50 RMB is higher than 20%, while the proportion of people who can accept a price of more than 200 RMB is only about 6%; If the respondents do not think that there is a problem of high prices in the market, the proportion of people who can accept a price range of 0-50 RMB is almost the same as that of people who can accept a price of more than 200 RMB. Therefore, it can be seen whether individuals believe that

the high price of Guangxi ethnic brocade cultural and creative products in the market may affect their acceptable price range for brocade products. A chi-square test of the two shows that $P\text{-value}=0.001$, which also proves whether individuals believe that the high price of Guangxi ethnic brocade products in the market has a significant difference in their acceptable price range for brocade products.



Figure 7 Cross-analysis of the respondents' perception of the high price problem in the Guangxi ethnic brocade market and their acceptable maximum price range

Note: Constructed by the researcher

Discussion

This study conducted in-depth research on the demand trend of consumers for innovative products of Guangxi ethnic brocade in China through literature review and survey questionnaires, and proposed some new insights, which are summarized as follows:

1. Emphasize both culture and practicality. Through investigation, it was found that consumers consider both aesthetic value, regional cultural characteristics, and product innovation level in their purchasing decisions. This provides important guidance for product designers to balance cultural elements and practical functions in design so that innovative products of Guangxi ethnic brocade can have a rich cultural heritage and creativity.

This conclusion emphasizes that the combination of cultural elements and practicality is a major trend in product design. This design approach helps to protect and inherit regional culture while innovating to make it more in line with the aesthetic and usage habits of modern consumers. However, it is important to pay attention to the precise integration of cultural elements, otherwise, it may lead to cultural misunderstandings or mismatched designs, affecting the market acceptance of the product.

2. Price sensitivity. Price is an important factor that affects consumers' purchasing decisions. This study conducted an in-depth analysis of consumers' price sensitivity and found that price is an important factor affecting consumers' purchasing decisions. The study found that consumers' acceptance range for prices is mainly concentrated between 0-200 RMB, which provides a basis for formulating reasonable pricing strategies. In addition, this study also found that consumers who believe prices are too high are more inclined to accept a price range of 0-50 RMB, indicating the need for more flexible pricing strategies to meet the needs of different consumers.

By understanding the price acceptance range of consumers, companies can better adjust their product structure and cost control to meet market demand. However, solely relying on price as a purchasing decision factor may lead to consumers pursuing low-priced products excessively, ignoring the actual value of the products, and affecting brand image and market positioning.

3. Product type preference. The study revealed consumers' preferences for different types of innovative Guangxi ethnic brocade products, especially for clothing accessories, home decoration, and daily necessities. This provides product developers with a clear market orientation that they should consider these types of products more when developing new products.



Clarifying consumer preference types can help businesses concentrate resources on developing the most popular products in the market and improve resource utilization efficiency. However, excessive concentration on certain types of products may lead to a single product line, ignoring the diversity of the market and potential emerging demands.

4. Consistency between purchase intention and design preference. This study also found that consumers' purchasing intentions are generally consistent with their preferences for product types, providing important market information for product designers. Especially, the purchasing tendency of casual wear far exceeds that of other types of clothing, indicating that when designing innovative clothing products, priority should be given to casual wear and embroidery, weaving, printing, and dyeing processes to enhance the market competitiveness of the products.

The consistency between purchase intention and design preference indicates that the product design is highly matched with market demand, which helps to improve the market acceptance and sales performance of the product. However, it may limit innovation, as designers may overly rely on existing market trends and overlook the possibility of creating new trends and guiding consumer demand.

Conclusion

Summarizing the research, the following conclusions are drawn:

1. Cultural value and practicality should be balanced. Designers should enhance the practicality of innovative ethnic brocade products while maintaining the cultural characteristics of ethnic brocade to meet the needs of consumers and improve the market competitiveness of the products. This will involve modernizing traditional craftsmanship and innovating product functionality.

2. Price strategies should be flexibly formulated. Considering the sensitivity of consumers to prices, the pricing strategy for innovative products of Guangxi ethnic brocade should be more flexible to adapt to the budgets of different consumer groups. Meanwhile, price rationality can be achieved through cost control and market positioning.

3. Product types should be diversified. Although consumers have clear preferences for certain types of products, designers should also consider product diversity when focusing on popular product types to meet the needs of different consumers and explore new market opportunities.

4. Satisfy consumer preferences. Designers should pay attention to consumers' purchasing preferences, such as clothing styles and specific craftsmanship choices, as well as the preferences of consumers from different social classes, to enhance the attractiveness and market acceptance of the product.



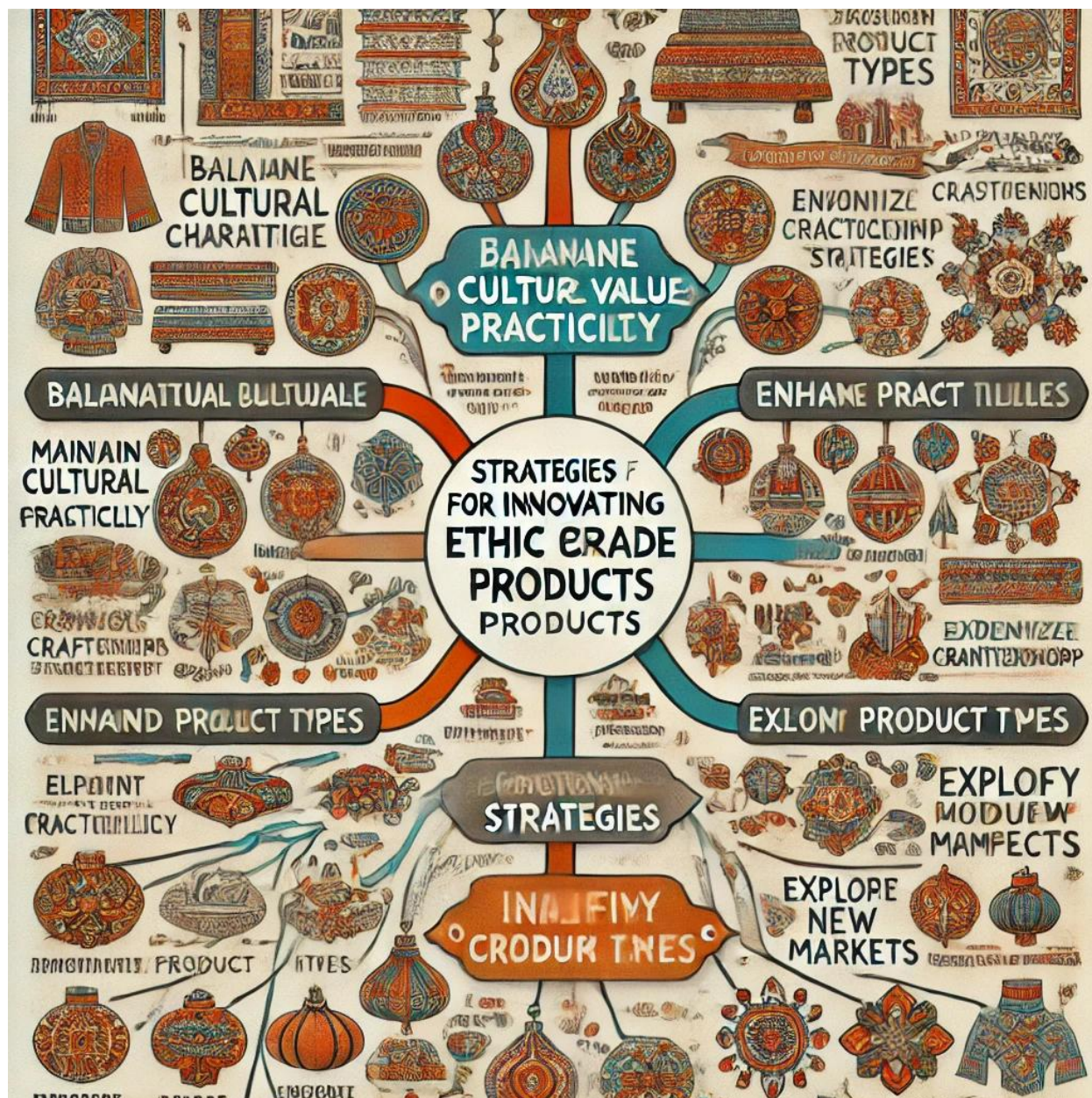


Figure 8 Trends of Innovative Products of Guangxi Ethnic Minority Brocades in China

Recommendation

1. Theoretical suggestion: Consumer demand trends are changing, so brocade product designers should regularly conduct market research, strengthen innovation in product design, combine modern design elements with traditional ethnic brocade craftsmanship, develop practical and culturally distinctive products, and cooperate with other brands to achieve resource sharing and market expansion; In addition, according to market research results, product designers can try to expand their product line and develop reasonable multi-channel marketing strategies while maintaining the core product line, to attract consumer groups of different levels.

2. Application suggestion: Innovative weaving product enterprises can integrate sustainable development principles into the design and production process of ethnic brocade products in the future, to attract more environmentally friendly consumers. Enterprises can also enhance the market awareness of innovative Guangxi ethnic brocade products through brand building and promote innovative products

through digital marketing and social media platforms. In summary, it is obvious that consumers love traditional ethnic culture, and the vast majority of the surveyed also support the innovative application design of traditional ethnic patterns. For innovative products, consumers' attitudes towards demand are a combination of culture and practicality, with an expectation that innovative products can be used in daily life, at reasonable prices, and with a preference for clothing and home decoration products. This provides a clear direction for subsequent research and design.

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