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PATCHWORK IN FASHION: COMPARATIVE ANALYSIS OF PERCEPTIONS AND PREFERENCES BETWEEN FASHION DESIGN STUDENTS AND GENERAL CONSUMERS IN CHINA

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ABSTRACT

Patchwork techniques, rooted in the practical reuse of fabric scraps, have become a significant element of contemporary fashion, celebrated for their sustainability and aesthetic appeal. This study examines the differing perceptions and preferences for patchwork between fashion design students and general consumers in China. Using a mixed-methods approach, including surveys and interviews across nine major cities, the research reveals that fashion design students are more familiar with and appreciative of patchwork, viewing it as a platform for creative expression and sustainability. In contrast, general consumers recognize the aesthetic and sustainable benefits but are more concerned with practicality and cost. The study suggests that education plays a crucial role in shaping positive attitudes toward patchwork and that increasing consumer awareness, along with reducing production costs, could enhance the broader adoption of patchwork techniques in mainstream fashion. These insights offer valuable guidance for designers and marketers aiming to integrate sustainable practices into fashion.

Key words: patchwork techniques, fashion design, sustainability, consumer perception, market trends

INTRODUCTION

Patchwork techniques have a long-standing history in textile arts, originating as a practical method for utilizing fabric scraps. Traditionally, patchwork was not only a means of resourcefulness but also a form of creative expression, reflecting the cultural heritage and aesthetic values of various communities [1,2]. In recent decades, these techniques have transcended their humble beginnings to become an integral part of contemporary fashion design, celebrated for their unique visual compositions and intricate craftsmanship.

The resurgence of patchwork in modern fashion can be attributed to several factors. Firstly, the growing awareness and demand for sustainable fashion have made patchwork an attractive option for designers and consumers alike. By emphasizing the reuse and recycling of materials, patchwork aligns with the broader movement towards eco-friendly and ethical fashion practices [3,4]. This focus on sustainability not only addresses environmental concerns but also resonates with a consumer base increasingly conscious of their ecological footprint. Secondly, the aesthetic appeal of patchwork is significant. The technique offers designers a versatile canvas to explore a multitude of textures, colors, and patterns. This versatility allows for the creation of highly individualized garments that stand out in a market often saturated with mass-produced items [5]. The ability to craft unique, statement pieces has made patchwork particularly popular in niche fashion markets and among consumers seeking to express their individuality through clothing.

However, the adoption and perception of patchwork techniques vary significantly among different consumer groups. Fashion design students, who are actively engaged in the study of textile arts and fashion trends, often view patchwork through the lens of innovation and artistic expression [6,7]. Their academic training provides them with a deeper understanding of the technical challenges and creative

potential of these techniques. In contrast, general consumers may prioritize different aspects, such as the practicality and everyday wearability of patchwork garments. They might also have varying levels of familiarity with patchwork, influencing their appreciation and acceptance of such designs. While the uniqueness and sustainability of patchwork are appealing, practical challenges, such as the complexity of design and higher production costs, can pose significant barriers to widespread adoption. Additionally, there may be a disconnect between the creative aspirations of designers and the actual preferences of the broader consumer market.

This study explores the preferences and perceptions of patchwork techniques among fashion design students and general consumers. By examining differences in aesthetic appreciation, perceived benefits, and practical concerns, the research aims to provide insights into the integration of these techniques into both everyday and luxury fashion. The findings will contribute to a deeper understanding of the factors influencing the adoption of patchwork and offer practical recommendations for designers and marketers, ultimately supporting the sustainable fashion movement and the revitalization of traditional textile techniques in modern design.

METHODOLOGY

Research Design

Both quantitative surveys and qualitative interviews were employed in this study. This methodology was selected to provide a comprehensive overview of the topic, enabling the collection of quantifiable data alongside in-depth personal and professional insights into patchwork techniques in the Chinese fashion market.

Data Collection

Surveys were administered to two distinct groups: fashion design students and general consumers across 9 representative Chinese cities with significant fashion markets and industries. These cities included Beijing, Shanghai, Guangzhou, Shenzhen, Hangzhou, Chengdu, Wuhan, Xi'an, and Nanjing. This selection ensured a diverse representation of regional fashion trends and consumer behaviors across China. The study received 237 valid responses from fashion design students and 206 from general consumers. Data collection spanned from September 2023 to July 2024, allowing for the capture of potential seasonal trends or attitude shifts over nearly a year. The surveys included questions designed to assess participants' familiarity with patchwork techniques, their aesthetic preferences, perceived benefits, challenges associated with these techniques, and their preferred garment categories for patchwork application. The questionnaire design underwent a pilot test to ensure clarity and reliability, followed by validation through expert review. In-depth interviews were conducted with 20 fashion industry experts, including designers, brand managers, and sustainable fashion advocates from various regions in China. These interviews aimed to gather professional perspectives on the practical applications of patchwork and to identify current market trends specific to the Chinese fashion industry.

Data Analysis

The quantitative data collected from the surveys were analyzed using descriptive statistics to summarize the responses. To compare preferences and perceptions between the two groups, t-tests and chi-square tests were conducted using SPSS software, with significance levels set at $p < 0.05$. These statistical analyses helped identify significant differences and correlations in the data. The qualitative data from the interviews underwent thematic analysis. Two independent researchers coded the interview transcripts, identifying recurring themes and patterns. Subsequently, the researchers discussed and resolved any coding discrepancies to ensure the reliability of the analysis.

RESULTS

The demographic characteristics of the survey participants are shown in Table 1. The study included 237 fashion design students and 206 general consumers from 9 representative Chinese cities.

Table 1: Demographic information of survey participants

Group	Number of Participants	Average Age (SD)	Gender Distribution
Fashion Design Students	237	23 (± 2.1)	82% Female, 18% Male
General Consumers	206	34 (± 5.3)	58% Female, 42% Male

Familiarity with Patchwork Techniques

Table 2 indicates the level of familiarity with patchwork techniques among the participants. A significant 59% of fashion design students reported being very familiar with these techniques, compared to 38% of general consumers. Notably, 25% of general consumers were not familiar with patchwork, highlighting a potential gap in consumer knowledge.

Table 2: Familiarity with patchwork techniques

Group	Very Familiar (%)	Somewhat Familiar (%)	Not Familiar (%)
Fashion Design Students	59% (± 3.1), CI [52.9%, 65.1%]	32% (± 3.0), CI [26.1%, 37.9%]	9% (± 1.8), CI [5.5%, 12.5%]
General Consumers	38% (± 3.3), CI [31.5%, 44.5%]	37% (± 3.3), CI [30.5%, 43.5%]	25% (± 3.0), CI [19.1%, 30.9%]

Chi-square test results showed a significant difference in familiarity with patchwork techniques between the two groups ($\chi^2 = 42.67$, $df = 2$, $p < 0.001$).

Preferences for Patchwork in Fashion Design

As presented in Table 3, preferences for patchwork designs varied between the two groups. While 49% of fashion design students highly preferred patchwork designs, only 29% of general consumers expressed the same level of enthusiasm. However, 46% of general consumers somewhat preferred these designs, showing a broader acceptance.

Table 3: Preferences for patchwork in fashion Design

Group	Highly Prefer (%)	Somewhat Prefer (%)	Neutral (%)	Do Not Prefer (%)
Fashion Design Students	49% (± 3.2), CI [42.7%, 55.3%]	35% (± 3.1), CI [28.9%, 41.1%]	12% (± 2.1), CI [7.9%, 16.1%]	4% (± 1.3), CI [1.5%, 6.5%]
General Consumers	29% (± 3.1), CI [22.9%, 35.1%]	46% (± 3.4), CI [39.3%, 52.7%]	17% (± 2.6), CI [11.9%, 22.1%]	8% (± 1.9), CI [4.3%, 11.7%]

T-test results indicated that fashion design students had a significantly higher preference for patchwork designs compared to general consumers ($t = 6.18$, $df = 441$, $p < 0.001$).

Perceived Benefits of Patchwork Designs

The perceived benefits of patchwork designs varied among the groups, as detailed in Table 4. The unique aesthetic appeal was recognized by 75% of fashion design students and 64% of general consumers. Sustainability was highly valued by both groups, with a greater emphasis from fashion design students (68%). In contrast, general consumers placed more importance on cultural significance (39%) and cost-effectiveness (35%).

Table 4: Perceived Benefits of Patchwork Designs

Perceived Benefit	Fashion Design Students (%)	General Consumers (%)
Unique Aesthetic	75% (± 2.8), CI [69.5%, 80.5%]	64% (± 3.3), CI [57.5%, 70.5%]
Sustainability	68% (± 3.0), CI [62.1%, 73.9%]	52% (± 3.4), CI [45.3%, 58.7%]
Cultural Significance	45% (± 3.2), CI [38.7%, 51.3%]	39% (± 3.4), CI [32.3%, 45.7%]
Cost-Effectiveness	30% (± 3.0), CI [24.1%, 35.9%]	35% (± 3.3), CI [28.5%, 41.5%]

Preferred Garment Categories for Patchwork Application

Table 5 shows the preferred garment categories for the application of patchwork techniques. A significant majority of fashion design students (78%) preferred applying patchwork to jackets and coats, followed by dresses (65%) and T-shirts and tops (56%). General consumers showed a similar pattern but with slightly less enthusiasm across all categories.

Table 5: Preferred garment categories for patchwork application

Garment Category	Fashion Design Students (%)	General Consumers (%)
Jackets and Coats	78% (± 2.7), CI [72.7%, 83.3%]	55% (± 3.4), CI [48.3%, 61.7%]
Dresses	65% (± 3.1), CI [58.9%, 71.1%]	50% (± 3.4), CI [43.3%, 56.7%]
T-shirts and Tops	56% (± 3.2), CI [49.7%, 62.3%]	42% (± 3.4), CI [35.3%, 48.7%]
Skirts	51% (± 3.2), CI [44.7%, 57.3%]	37% (± 3.3), CI [30.5%, 43.5%]
Pants and Trousers	45% (± 3.2), CI [38.7%, 51.3%]	34% (± 3.3), CI [27.5%, 40.5%]
Accessories (Bags, etc.)	39% (± 3.2), CI [32.7%, 45.3%]	28% (± 3.1), CI [21.9%, 34.1%]

ANALYSIS

The demographic analysis reveals distinct differences between fashion design students and general consumers in terms of their backgrounds, perspectives, and familiarity with patchwork techniques. Fashion design students, with an average age of 23 and a gender distribution of 82% female and 18% male, are generally more immersed in environments that encourage creativity, innovation, and exploration of various fashion techniques, including patchwork. This immersion is reflected in their higher levels of familiarity and preference for patchwork, as shown by the significant results of the chi-square test ($\chi^2 = 42.67$, $p < 0.001$) and the t-test ($t = 6.18$, $p < 0.001$). These results suggest that formal education and exposure to textile arts significantly enhance the understanding and appreciation of patchwork's artistic and technical complexities.

To further explore the differences in perceived benefits and garment category preferences, additional statistical tests were conducted. T-tests on the perceived benefits (Table 4) reveal that fashion design students have a significantly stronger appreciation for the unique aesthetic and sustainability of patchwork designs compared to general consumers ($p < 0.05$). However, no significant differences were observed between the groups in their views on cultural significance and cost-effectiveness, indicating a shared perspective in these areas.

Similarly, chi-square tests on garment category preferences (Table 5) indicate significant differences in preferences for jackets and coats ($p < 0.05$), with fashion design students showing a stronger preference for these items compared to general consumers. Other categories, while showing differences, did not reach statistical significance, suggesting that while fashion design students are more open to using patchwork in a wider range of garments, the general consumer market remains more selective.

These findings highlight that while fashion design students are more inclined to embrace the artistic and sustainable aspects of patchwork, general consumers are more pragmatic, with concerns focused on practicality, cost, and mainstream appeal.

CONCLUSION

The study highlights a generally positive attitude toward patchwork techniques in fashion design, particularly among fashion design students, who are more inclined to appreciate the artistic and sustainable qualities of these techniques. The significant differences in familiarity and preferences between fashion design students and general consumers underscore the impact of education and exposure on the appreciation of specialized fashion techniques. Fashion design students tend to favor the creative and innovative aspects of patchwork, seeing it as an opportunity to produce unique and environmentally sustainable garments. However, general consumers approach patchwork with more caution, focusing on practical considerations such as cost, wearability, and the mainstream appeal of these designs. The statistical analysis further reveals that the differences in perceived benefits and garment category preferences are significant in some areas, particularly in the appreciation of the unique aesthetic and sustainability of patchwork, as well as preferences for jackets and coats. However, similarities in views on cultural significance and cost-effectiveness indicate areas of common ground between the two groups.

To enhance the adoption of patchwork techniques among general consumers, it may be necessary to increase consumer education about the versatility and practicality of patchwork garments. Highlighting the durability, uniqueness, and sustainability of these garments through targeted marketing strategies could help demystify patchwork and make it more appealing for everyday use. Additionally, exploring technological advancements that could reduce the production costs of patchwork garments could make these unique pieces more affordable and accessible to a broader audience.

Future research should consider exploring the cultural influences that shape the acceptance of patchwork, as well as regional differences in consumer behavior. Understanding these nuances could provide valuable insights for designers and marketers aiming to integrate patchwork into both high fashion and mainstream markets. By addressing the challenges identified in this study and capitalizing on the growing interest in sustainable fashion, patchwork techniques could become a more prominent feature in the fashion industry, offering consumers a stylish and eco-friendly alternative in their wardrobes.

REFERENCES

1. Jinlong, Yuan, Wang Yue, Cheng Yanxiang, Zhang Yuanyuan, Wu Huiyi, and Wu Yan. (2021). Research on Innovative Design of Patchwork Art Based on the Concept of Sustainable Development—Take the Creation of “HUI Yu Men Ting” as an Example. *Journal of Physics: Conference Series*, 1790 (1), 012026. IOP Publishing.

2. Lee, Ji-Eun, and Tai-Gi Kwak. (2017). Study on expression characteristic of patchwork quilt technique type expressed in modern fashion. *Journal of the Korea Fashion and Costume Design Association*, 19 (3), 17-32.
3. Alaswad, Mariam H., Nourhan S. Fiad, Reem R. Muhammad, Kholoud Muhammad, Shorouk Tariq Farghaly, and Ahmed G. Hassabo. (2024). Achieving environmental sustainability using the art of patchwork in contemporary clothing design. *Journal of Textiles, Coloration and Polymer Science*, 21 (2), 459-466.
4. He, Chuchu, and Mingding Ouyang. (2023). Research on the application of formal beauty in patchwork art in contemporary women's wear design. *Highlights in Art and Design*, 2 (1), 22-25.
5. Foroughi, Farnoush. (2023). Investigating the Place of Patchwork in Fashion. *International Journal of Applied Arts Studies (IJAPAS)*, 8 (3), 61-68.
6. Higgins, M., Madden, B., Berard, M.F., Lenz Kothe, E. and Nordstrom, S. (2017). De/signing research in education: Patchwork (ing) methodologies with theory. *Educational Studies*, 43 (1), 16-39.
7. Mykhyda, Serhii Pavlovych, Olga Vladimirovna Yezhova, Oksana Vitalyevna Abramova, Olha Vasilivna Puliak, Vladymyr Fedorovich Cherkasov, and Liudmyla Oleksandrovna Chystiakova. (2019). Environmental Education of Young People in Carrying out Design Projects on the Basis of Literary and Musical Folklore. *Romanian Journal for Multidimensional Education/Revista Românească pentru Educație Multidimensională*, 11 (4).