

# ***Chinese Traditional Clothing Culture and the Improvement of Contemporary College Students' Aesthetic Taste and Cultural Confidence***

**Feifei Liu<sup>1,2,a</sup>, Hafriza Burhanudeen<sup>2,b,\*</sup>**

<sup>1</sup>*Faculty of Literature and Cultural Communication, Xi'an Innovation College of Yan'an University, Xi'an, Shaanxi, China*

<sup>2</sup>*Faculty of Education, Language, Psychology and Music, SEGi University, Kuala Lumpur, Malaysia*

<sup>a</sup>46308781@qq.com, <sup>b</sup>hafrizaburhanudeen@segi.edu.my

<sup>\*</sup>Corresponding author

**Keywords:** Chinese Traditional Clothing; Aesthetic Education; Cultural Confidence; Artificial Intelligence; Ideological and Political Education

**Abstract:** With the integration of multiple cultures under the background of globalization, the aesthetic standards of contemporary college students are becoming more diverse, but their understanding and appreciation of Chinese traditional clothing culture are generally insufficient, and the construction of cultural confidence also faces certain challenges. The existing traditional cultural communication methods are relatively single, lacking interactive and immersive experience, and it is difficult to stimulate students' interest and identity. To this end, this paper introduces the integration of artificial intelligence and the Internet of Things to innovate the traditional clothing culture communication model and enhance college students' aesthetic taste and cultural confidence. This study constructs an "intelligent clothing cognition and aesthetic improvement experimental platform", uses computer vision technology (such as image recognition and style transfer) to identify traditional clothing types and pattern features, and uses Internet of Things devices (intelligent mirrors, wearable terminals) to achieve virtual try-on and interactive experience. At the same time, the pre- and post-test analysis is designed, focusing on the three dimensions of clothing cognition, aesthetic evaluation, and cultural attitude, and an eight-week experimental teaching activity is carried out, and SPSS is used for data comparison and analysis. The experimental results show that the interest score of the AI intelligent clothing virtual try-on experience in the pre-test is 6.2, and the post-test increases to 8.5, an increase of 37.1%. This activity provides an innovative interactive experience by introducing modern technology, which greatly stimulates students' interest.

## **1. Introduction**

In recent years, the integration of artificial intelligence (AI) and Internet of Things (IoT) technologies has provided new possibilities for cultural communication and educational innovation.

With the help of the intelligent assistance of AI platforms, students can not only gain a deep understanding of traditional clothing culture but also enhance their cultural identity and self-confidence in a personalized and interactive learning process. This study aims to explore the combination of AI technology and the inheritance of traditional clothing culture, and through a variety of teaching activities and interactive experiences, enhance college students' cognition, aesthetics and cultural confidence in traditional clothing, thereby promoting the modernization and revival of traditional culture. The core goal of this study is to analyze the impact of different teaching methods (such as AI platforms and traditional teaching methods) on college students' traditional clothing culture cognition, aesthetic taste and cultural confidence through designing experiments, and to explore how AI technology can help students better understand and inherit traditional clothing culture. Through this research, it is expected to provide new ideas for future cultural education and promote the innovative spread and sustainable development of traditional culture.

The paper first explains the background of traditional clothing culture education and its importance in the aesthetic and cultural identity of contemporary college students. Then it introduces the experimental design and methods, and details the differences in teaching content, methods, and carriers between the experimental group and the control group. Subsequently, through experimental data analysis, the paper evaluates the impact of different teaching methods on students' traditional clothing culture cognition, aesthetic taste, and cultural confidence, and provides detailed quantitative data and comparative results. In the last part, the paper summarizes the research findings, discusses the limitations of the experiment and future development directions, and provides suggestions for further research and practice of traditional clothing culture education.

## 2. Related Work

In recent years, with the revival of traditional culture and the continuous advancement of modern science and technology, more and more scholars have paid attention to the inheritance and transformation of traditional clothing in modern society. Through different theories and methods, scholars have continued to deepen their research on traditional clothing culture and explore its expression and significance in contemporary society. By redesigning Dai costumes, Li and Yu enabled the Dai people to display their "Dainess" and female image while actively participating in the negotiation and reconstruction of the national discourse system, demonstrating their expression and strategies as active subjects[1]. Fan and IP P used the theory of "emotional economy" to analyze their emotional attachment to Hanfu and its expression in cultural activities. The study found that Hanfu carries multiple emotions such as homesickness, pride and loneliness [2]. Taking the historic city of Xi'an as an example, Zhong et al. used questionnaire surveys and factor analysis to explore the cultural tourism experience of tourists wearing Hanfu. The study found that the experience was influenced by five factors: entertainment, aesthetics, culture, escapism, and role-playing, and divided tourists into four categories: immersive culture, aesthetic experience, cultural literacy, and passing by [3]. Zhang and Gong analyzed the development status and digital marketing strategies of the Hanfu industry in the digital economy era. The study found that the Hanfu market has grown rapidly since 2019, with social media as the main communication channel [4]. Wu and Yezhova explored the artistic and aesthetic characteristics that influence the digital design of modern Chinese-style clothing, combined pattern evolution with digital software creation, and summarized the design characteristics and development trends of Chinese-style digital clothing and personal image[5]. Shen et al. used qualitative research methods to analyze art images in online museums and cultural websites, revealing the commonality between artistic symbols and religious spirit across cultures, and emphasizing how art conveys sacred information and cultural values[6]. FU

discussed the importance of aesthetic education in undergraduate education, aiming to cultivate students with aesthetic knowledge, the ability to create beauty and the quality of appreciating beauty, so as to serve the socialist construction[7]. Shevtsova et al. summarized scholars' understanding of the phenomenon of "music and aesthetic education", believing that it is an integral part of individual spiritual development and a means of cultivating artistic emotions and aesthetic attitudes. The study showed that adolescents are most sensitive to music, are keen on music appreciation and performance activities, and actively develop musical abilities[8]. Shevtsova et al. analyzed the tasks and content of aesthetic education, proposed methods for implementing aesthetic education, and revealed the significance of self-education. Through a variety of methodological perspectives, they expounded the historical development and innovation system of aesthetic education and studied the composition of aesthetic education consciousness, including aesthetic perception, judgment, emotion, ideal and taste [9]. Bing et al. conducted a survey of 347 students and 8 music education experts from four universities in Guangxi. The study found that students and educators have a strong interest in intangible cultural heritage music and proposed an effective plan to improve the aesthetic education capacity of music in universities [10]. Gao and Kuipers conducted a multiple correspondence analysis and 48 interviews with 422 college students and found three dimensions of television taste: alienated and appreciative viewers, television lovers and haters, and "Western" and "Eastern" television tastes. Dimensions 1 and 3 represent cultural capital, reflecting differences in cultural knowledge and economic capital[11]. Although a large number of studies have explored the inheritance and innovation of traditional clothing culture, there are still some bottlenecks, such as the weak research on the application of modern technology, especially artificial intelligence and digital platforms in the promotion of traditional culture, and the lack of systematic analysis of the improvement of college students' cognition, aesthetics and cultural confidence in this process.

### **3. Method**

#### **3.1 Practical Exploration of the Path of Inheritance of Traditional Clothing Culture**

##### **(1) Skill learning and skill inheritance**

College students participate in intangible cultural heritage projects, learn from traditional craft masters, and systematically learn traditional handicrafts such as embroidery and printing and dyeing. Starting from basic operations such as stretching cloth, threading needles, color matching, and threading, they gradually master the core skills of traditional clothing and inject new vitality into endangered techniques.

##### **(2) Cultural research and theoretical construction**

Students actively participate in field surveys, visit villages and workshops, collect folk stories and inheritance status behind traditional costumes, write research reports on issues such as cultural gaps and inheritance bottlenecks, and put forward constructive suggestions to promote the revival of traditional culture with academic strength.

##### **(3) Campus promotion and club building**

In colleges and universities, students set up traditional clothing clubs to restore classic styles and hold fashion shows to enhance the traditional cultural atmosphere on campus, attract more young people to pay attention to and participate in the inheritance of traditional culture, and promote the dissemination and development of traditional clothing among young groups.

#### **3.2 The role of Traditional Clothing Culture in Cultivating Aesthetic Literacy**

Expansion and sublimation of color aesthetics: The color matching in traditional clothing adheres to the Eastern philosophy of "primary colors and intermediate colors". By analyzing the cultural

implications of color use, students can get rid of the influence of Western monotonous color patterns and enhance their diverse aesthetic vision and innovative ability.

Artistic inspiration of modeling structure: By deconstructing the cutting logic of traditional clothing, such as the front lapels, stand-up collars, pleated structures, etc., students can master the design wisdom of the plane construction and three-dimensional shaping of oriental clothing, and enhance their own fashion sensitivity and design creativity.

Cultural expression of patterns and designs: Totems and designs in clothing contain auspicious meanings, such as cloud patterns symbolizing unpredictability and lotus representing purity and elegance. In the process of appreciation and redesign, students can integrate traditional aesthetics into modern living spaces and enhance their daily aesthetic level.

### **3.3 The Path of Integrating Traditional Clothing Culture into Ideological and Political Education**

The inherent cultural confidence inspires the craftsmanship, national identity and patriotism embodied in traditional costumes, which can play a unique role in the ideological and political education of colleges and universities. By analyzing the evolution of costumes and the cultural value behind them, we can guide students to deeply understand the spiritual core of the Chinese nation and enhance their sense of cultural identity and historical mission.

As a useful supplement to the ideological reform of undergraduate intercultural communication course to introduce the traditional dress culture content into undergraduate intercultural communication classroom, teachers can use contextual teaching, English speech and other forms of designing dress-themed communication tasks, integrating the national culture elements in language learning, and improving the students' intercultural communication skills and ideological participation.

Improving teaching effectiveness and student participation. The intuitiveness and fun of traditional costumes make them very attractive teaching materials. Through multimedia presentations, traditional costume try-on experience and other means, the classroom interactivity and immersion are enhanced, so that students can achieve dual resonance in cognition and emotion, and improve the educational effectiveness of ideological and political education in the course.

### **3.4 Integration and Innovation of Education and Teaching System**

Systematic construction of the curriculum system: Colleges and universities should offer courses such as "History of Chinese Costumes", "Research on National Costume Culture", and "Traditional Pattern Design" to help students systematically learn the historical evolution, technical characteristics, and cultural connotations of traditional costumes and expand their professional horizons.

Interdisciplinary teaching model: Promoting the integration of fashion design with history, aesthetics, materials science, folklore and other disciplines, introducing traditional textile techniques and clothing psychology into design teaching, and helping students understand the essence of traditional culture from multiple dimensions.

Progressive design in the educational stages: a coherent teaching process has been constructed from basic cognition in the freshman year, professional deepening in the sophomore and junior years to graduation creation in the senior year, encouraging students to integrate traditional clothing culture into design practice, and ultimately achieve an organic combination of tradition and modernity.

### 3.5 Arrangement and Teaching Application of Traditional Clothing Cultural Resources

Systematic construction of resource library: Teachers should sort out and classify traditional costume-related materials, such as pattern atlases, production process videos, historical documents, etc., build a structured teaching resource library, enrich teaching content, and improve classroom performance.

Pay equal attention to practicality and fun in content selection: Practicality and fun should be taken into account in the selection of teaching content, which is both close to students' future career development and culturally attractive. For example, representative national costumes, traditional craft processes, cultural backgrounds and other contents should be introduced to enhance students' learning enthusiasm and knowledge internalization ability.

Diversified expansion of teaching methods: In combination with the characteristics of traditional costume culture, teachers can use role-playing, English debates, physical displays and other forms to enable students to understand culture through participation, improve language skills through interaction, and promote the vivid and effective development of teaching content.

## 4. Results and Discussion

### 4.1 Experimental Subjects

Research subjects: Second-year college students majoring in non-arts at a certain university

Number of people: 80 in total, divided into an experimental group and a control group with 40 people each

Characteristics controlled: Gender ratio, cultural foundation, and interest in traditional culture are basically balanced between the two groups

### 4.2 Experimental Cycle

Implementation period: 8 weeks (one course or activity per week, 90 minutes each)

### 4.3 Experimental Methods

In this experimental design, there are obvious differences in teaching content, methods and carriers between the experimental group and the control group. The experimental group adds special education content on traditional clothing culture and adopts a variety of teaching methods such as theoretical lectures, physical demonstrations, manual practice, social research and participation in clothing shows. The control group uses regular English or aesthetic education courses as teaching content, mainly relying on traditional lectures, focusing on the imparting of theoretical knowledge, and a relatively simple teaching method. In terms of teaching carriers, the experimental group uses a variety of tools such as PPT courses, traditional costumes, experiential teaching, research records and student work displays to increase the interactivity and practicality of learning; while the control group mainly relies on PPT courses for teaching, lacking sufficient practice and interactive links. Through these differences, the experimental group is able to provide students with a richer and more diverse learning experience, thereby improving their understanding and interest in traditional costume culture.

### 4.4 Teaching Content Design (Experimental Group)

Week 1-2: Introduction to theory

Brief history of the development of traditional Chinese clothing  
 Appreciation of representative ethnic clothing such as Dai, Han, and Miao  
 Traditional color aesthetics and pattern meaning  
 Week 3-4: Handicraft experience  
 Experience of basic embroidery and tie-dyeing techniques (taught by intangible cultural heritage masters or folk artists)  
 Color matching practice, redesign of traditional patterns  
 Week 5-6: Field research  
 Students visit rural clothing workshops/museums in groups  
 Explore folk clothing stories, interview inheritors, and write research reports  
 Week 7: Clothing innovation design tasks  
 Teams design modern clothing works inspired by traditional elements  
 Week 8: Results display and clothing show activities  
 Work explanation + physical display  
 Evaluation and reflection session, collect student feedback

#### 4.5 Data Collection Methods

Survey (once before and after the experiment)  
 Contents include: aesthetic ability, attitude towards traditional culture, cultural identity, interest in independent learning, etc.  
 Using Likert five-point scale  
 Interview method (conducted after the experiment)  
 Select some members of the experimental group for semi-structured interviews to gain a deeper understanding of the students' inner changes and feelings  
 Analysis of student works  
 Professional evaluation of students' designed works to determine whether they reflect the understanding of traditional culture and aesthetic sublimation

#### 4.6 Evaluation Index Design

The evaluation indicators of this experiment include the recognition of traditional clothing, the diversity of aesthetic taste, cultural confidence, and the improvement of students' interest in different types of activities. These indicators are compared through pre-test and post-test data to evaluate the effectiveness of the AI platform in improving college students' cognition, aesthetics, cultural confidence, and interest in traditional clothing culture. Through the quantitative changes in indicators, the experiment shows the significant advantages of the AI platform in promoting students' comprehensive understanding and recognition of traditional culture.

When comparing the effects of improving the awareness of traditional clothing in the experimental group and the control group in Figure 1, the experimental group (using the AI platform) showed a significant improvement in awareness. Specifically, the awareness of traditional clothing in the experimental group increases from 55.2 in the pre-test to 86.5 in the post-test, an increase of 56.6%. This change shows that the introduction of the AI platform has significantly enhanced college students' awareness of traditional clothing culture. In contrast, the control group (without the platform) has a relatively small increase in awareness, from 54.8 in the pre-test to 59 in the post-test, with a cognitive improvement rate of only 7.6%. This difference shows that the traditional teaching method has not effectively promoted students' in-depth understanding of traditional clothing culture in the same period of time. By comparison, it can be seen that the AI platform has obvious advantages in improving the awareness of traditional clothing. Its innovation

and interactivity may provide students with a richer and more intuitive learning experience, thereby promoting students' deeper understanding of traditional clothing culture. Further analysis may also reveal that the AI platform not only enhances students' interest in learning but also deepens students' memory and cognition through multi-sensory interaction.

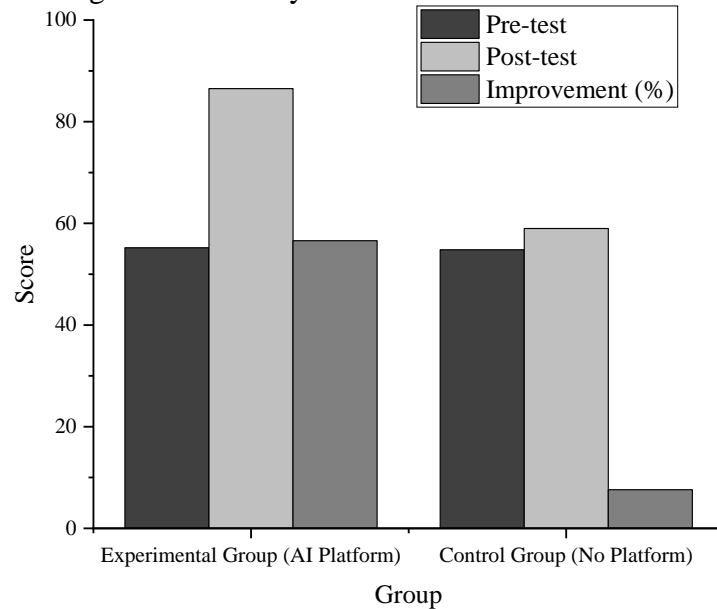


Figure 1. Comparison of changes in aesthetic cognition among college students

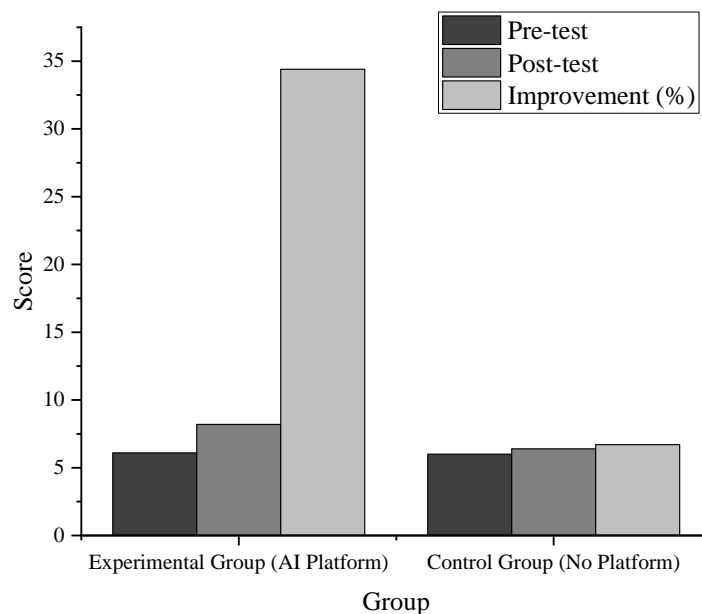


Figure 2. Changes in the diversity of aesthetic tastes of college students

In terms of the diversity of aesthetic taste, there is a significant difference between the experimental group (using the AI platform) and the control group (no platform). The aesthetic taste score of the experimental group increases from 6.1 in the pre-test to 8.2 in the post-test, and the taste diversity increases by 34.4%. This improvement shows that the introduction of the AI platform has had a significant positive impact on the diversity of college students' aesthetic taste, helping students broaden their aesthetic horizons and improve their acceptance and appreciation of different styles and elements. In comparison, the aesthetic taste score of the control group only slightly

increases from 6.0 in the pre-test to 6.4, and the taste diversity increases by 6.7%. This small change shows that traditional teaching methods have failed to significantly promote the development of diversity in students' aesthetic tastes. As can be seen from the data in Figure 2, the AI platform can not only effectively improve students' aesthetic taste in traditional clothing but also guide students to explore more diverse aesthetic styles, thereby stimulating their creative thinking and personalized expression. In contrast, students who do not use the AI platform are more limited in the expansion of their aesthetic tastes. Therefore, the application of the AI platform undoubtedly provides students with a richer and more interactive learning platform, thereby promoting the improvement and diversity of their aesthetic tastes.

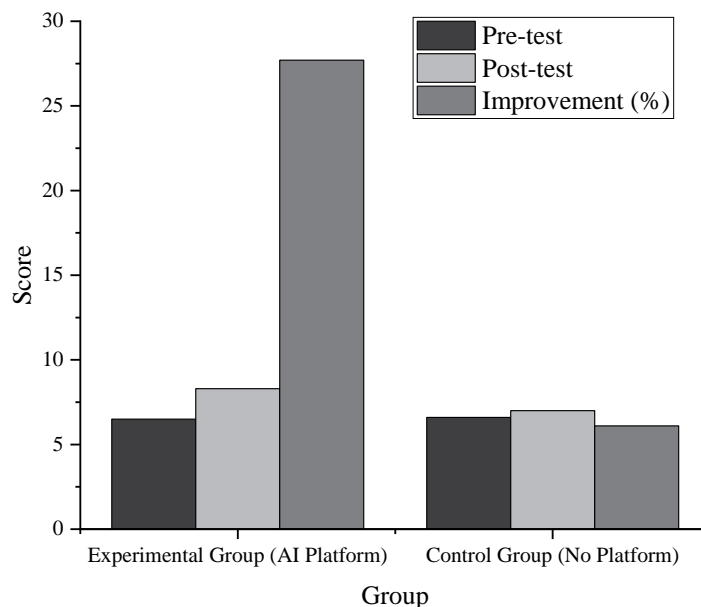


Figure 3. Changes in cultural confidence

In terms of the improvement of cultural confidence, there is a significant difference between the experimental group (using the AI platform) and the control group (no platform). The cultural confidence score of the experimental group increases from 6.5 in the pre-test to 8.3 in the post-test, with an increase of 27.7%. This change shows that the AI platform has played a significant role in enhancing students' cultural confidence. Through the presentation of rich interactive content and cultural background knowledge, it has stimulated students' sense of identity and pride in traditional culture. In contrast, the cultural confidence score of the control group only increases slightly from 6.6 in the pre-test to 7.0, with an increase of 6.1%. This small increase indicates that traditional teaching methods have failed to effectively promote a significant increase in students' cultural confidence. By comparing Figure 3, it can be seen that the AI platform has a strong effect in enhancing students' cultural confidence. This shows that the platform enables students to more deeply understand and identify with the value of traditional Chinese culture through multi-dimensional and interactive teaching methods, and then build confidence in their own culture in their hearts. Relatively speaking, the improvement of cultural confidence of students in the control group who do not use the AI platform is relatively limited, indicating the limitations of traditional teaching models in enhancing cultural identity and self-confidence.

From the interest increase of different activity types in Table 1, all activity types show significant interest increase after the experiment, and the increase is quite significant. Specifically:

**Traditional costume exhibition:** The interest score in the pre-test is 5.8, and the post-test increases to 8.0, an increase of 37.9%. This data shows that the traditional costume exhibition can effectively arouse students' interest and attention in displaying the visual charm and historical value

of traditional culture.

Table 1. Students' interest in participating in traditional clothing cultural activities

Activity Type	Pre-Test	Post-Test	Improvement (%)
Traditional Clothing Exhibition	5.8	8	37.9
Traditional Clothing Making (Workshop)	6	8.3	38.3
Traditional Clothing Culture Lecture	5.7	7.6	33.3
AI Smart Clothing Virtual Try-On Experience	6.2	8.5	37.1

Traditional clothing making (experience class): The interest score in the pre-test is 6.0, and the post-test increases to 8.3, an increase of 38.3%. Through the actual experience of participating in the making of traditional clothing, students' interest in traditional clothing has increased significantly, which may be because during the personal experience, students' understanding of clothing skills and their sense of cultural identity have been enhanced.

Traditional clothing culture lectures: The interest score in the pre-test is 5.7, and the post-test increases to 7.6, an increase of 33.3%. Although this activity is slightly inferior to other types in terms of interest improvement, it still shows a significant increase, indicating that theoretical cultural lectures also play a role in stimulating students' interest, especially in helping students understand the cultural connotations behind clothing.

AI smart clothing virtual try-on experience: The interest score in the pre-test is 6.2, and the post-test increases to 8.5, an increase of 37.1%. This activity provides an innovative interactive experience by introducing modern technology, which greatly stimulates students' interest. The virtual try-on experience not only allows students to perceive the aesthetics of traditional clothing but also enhances students' sense of participation and interaction through technological elements.

## 5. Conclusion

This paper studies the role of combining AI platform with traditional clothing culture education in improving college students' cognition of traditional clothing, aesthetic taste and cultural confidence. Through comparative analysis of the experimental group (learning supported by AI platform) and the control group (traditional teaching method), the results show that the AI platform has shown significant effects in improving students' cognition of traditional clothing, aesthetic diversity and cultural confidence. The experimental group shows a high increase in cognitive improvement, diversity of aesthetic taste and enhancement of cultural confidence, especially in the improvement of traditional clothing cognition and cultural confidence. The experimental group has a more significant gap compared with the control group. Through these experimental results, it can be seen that AI technology not only enhances students' interactive experience of traditional culture but also promotes their deep understanding and recognition of traditional clothing culture. The virtual try-on and customized learning content provided by the AI platform enable students to perceive and experience traditional clothing culture more intuitively, thereby deepening their interest and identification with the culture. The application of such technology provides a new way for the modern dissemination of traditional culture and provides theoretical support for the innovative practice of cultural education. However, the time span of the study is short and the sustainability of long-term learning effects is not fully explored. Therefore, future research should conduct longer follow-up experiments in larger groups to further verify the long-term impact of the AI platform on traditional clothing culture education. In general, with the continuous development of AI technology, its application prospects in cultural education are broad and worthy of in-depth exploration and practice.

## References

- [1] Li J, Yu W. *Ethnic clothing, the exercises of self-representation, and fashioning ethnicity in Xishuangbanna, Southwest China*[J]. *Fashion Theory*, 2023, 27(6): 797-832.
- [2] Fan C, Ip P T T. 'When showing Hanfu to foreigners, I feel very proud': *The imagined community and affective economies of Hanfu (Chinese traditional couture) among Chinese migrant youth in the United Kingdom*[J]. *European Journal of Cultural Studies*, 2023, 26(6): 781-802.
- [3] Zhong L, Yang L, Morrison A M, et al. *Who wears Hanfu clothing when they travel? Experience-based cultural tourism market segmentation—the case of Xi'an, China*[J]. *Current Issues in Tourism*, 2024, 27(5): 805-818.
- [4] Zhang C, Gong T. *Retracted Article: The brand strategy and cross-border promotion of Han Chinese clothing under the digital economy*[J]. *Electronic commerce research*, 2023, 23(1): 257-277.
- [5] Wu S, Yezhova O V. *Features of contemporary Chinese style in digital fashion design: cases of fashion industry products*[J]. *Art and Design*, 2023 (3): 68-78.
- [6] Shen Z, Zhou M, Zaib K. *Religious semiotics in performance and visual art: Symbolism in aboriginal dot painting, sichuan opera makeup, chinese traditional sculpture and shu embroidery*[J]. *European Journal for Philosophy of Religion*, 2024, 16(3): 266-292.
- [7] Fu D D. *Research on the Practice Path of Aesthetic Education for Normal University Students*[J]. *Adult and Higher Education*, 2023, 5(12): 66-70.
- [8] Shevtsova O, Tsarenko V, Kurkina S, et al. *The importance of musical and aesthetic education of young people in modern society*[J]. *Amazonia Investiga*, 2023, 12(61): 51-60.
- [9] Shevtsova O, Stratan-Artyshkova T, Tiutiunnyk M, et al. *Aesthetic education of personality development in the field of education*[J]. *Amazonia Investiga*, 2023, 12(64): 146-155.
- [10] Bing Z, Ismail M J, Sile H, et al. *Harmony Amidst Change: Revitalizing Guangxi's Intangible Cultural Heritage Music in Higher Education*[J]. *International Journal of Religion*, 2024, 5(4): 213-223.
- [11] Gao Y, Kuipers G. *Cultural capital in China? Television tastes and cultural and cosmopolitan distinctions among Beijing youth*[J]. *Sociological Research Online*, 2024, 29(1): 62-82.