ISSN 3006-4007 (Print)
ISSN 3006-4015 (Online)

JAARS

Journal of Advanced Academic Research and Studies

Vol. 3, No.6, 2026

Published by

NLBA Eurasian Institute

Supported by

Netherlands Business Academy University of Applied Sciences

한국유라시아연구원 Eurasian INSTITUTE EAI 欧亚研究院

ACADEMY OF PROFESSIONAL MANAGEMENT,UK

Journal of Advanced Academic Research and Studies (JAARS)

ISSN 3006-4007 (Print)
ISSN 3006-4015 (Online)

Aims

The Journal of Advanced Academic Research and Studies aims to Continuously promote meaningful and valuable outstanding academic achievements to serve the society, increase advanced academic knowledge for the world civilisation, and serve the progress of science and technology combined with human society.

Journal Title

The official title of the journal is "Journal of Advanced Academic Research and Studies (JAARS)" and the abbreviated title is "J. adv. acad. res. stud."

Year of Launching

Journal of Advanced Academic Research and Studies was launched in 2023.

Availability of the Full-Text in the Web

Full text is freely available from: www.nlbaeai.org

Fund Support

This journal was supported by the NLBA Eurasian Institute Limited.

Index in Database

The articles published in this journal are may index and/or abstracted in EBSCO.
ProQuest, Ex Libris, and Google Scholar.

Subscription Information

All correspondences regarding membership, subscriptions and changes of address should be sent to the society addressed as below: NLBA Eurasian Institute Limited (E-Mail: edubscon@outlook.com , Homepage: www.nlbaeai.org). The annual subscription fees are free of charge.

Submission

The NLBA Eurasian Institute Limited operates an on-line submission system. Details of how to submit online and full author instructions can be found at:www.nlbaeai.org. Manuscripts should be submitted to the on-line submission system at:www.nlbaeai.org following all prompts on the screen. Other correspondences can be sent by e-mail to the editor at edubscon@outlook.com Peer review under responsibility of the NLBA Eurasian Institute Limited.

Journal of Advanced Academic Research and Studies Volume 3, Number 6

Published 2026

Publisher (Editorial Office)

E-Mail: edubscon@outlook.com, Homepage: www.nlbaeai.org
Hooijdonkseweg 3, 4823 ZD Breda, Nederland

Copyright

© 2023 The NLBA Eurasian Institute Limited, All rights reserved.

Editorial Staff
The Journal of Advanced Academic Research and Studies (JAARS) editorial team is committed to providing subscribers with the best quality articles in a timely manner, ensuring a journal that subscribers will find stimulating and useful in their teaching and professional activities.

Editor
Prof. Sandra Doeze Jager PhD Erasmus University Rotterdam

Co-Editor
Xulong Dai PhD SKEMA Business School, France

Consulting Editor
Prof. Baoke Wu Peking University, China
Prof. Jan Pronk Former Minister of Trade, the Netherlands
Hon. Andres P. Arango Former President of Republic of Colombia
Georgios Katrougalos PhD Former Greek Minister of Foreign Affairs

Editorial Review Board
Qian Liu PhD NLBA University of Applied Sciences, the Netherlands
Jia Lyu PhD Jilin Normal University, China
Stuart Kewley PhD University of Cambridge, UK
Ian Mackechnie Mc PhD University of Southern Queensland, Australia
John Walsh PhD Oxford University, UK
Jianguo Huo PhD Nankai University, China
Isaac Newton PhD Colombia University, USA
Prof. Jan van Zwieten NLBA University of Applied Sciences, the Netherlands
Lan Li PhD Baliuag University, Philippine
Yong-gil Kim PhD Shinhan University, South Korea

Manuscript Editor
Qian Liu PhD NLBA University of Applied Sciences, the Netherlands
Jia Lyu PhD Jilin Normal University, China
Lan Li PhD Baliuag University, Philippine

Journal of Advanced Academic Research and Studies

Vol.3, No.6, 2026

1 Research Hotspots and Trend Analysis of Digitalization in Physical Education
Xiaoshi Bo Hui-Suan Wei

25 Study on Value Construction and Design Innovation of Xiqin Embroidery Cultural and Creative Based on Cultural Identity
Wenqi Shi Fangqin Zheng and Fan Cheng

36 From "Overall Pass" to "Targeted Strategies": A Data- Driven Reconstruction of College Physical Education through "Precision Intervention"— A Case Study of the 2024 Student Physical Fitness Test Results of a University
Chuan Zhang

56 Research on Translation of Traditional Chinese Medicine Classics Oriented to International Communication:A Thick Translation Perspective
Bairu Zhao

68 On the Literary Healing Nature of Shi Tiesheng's The Temple of Earth and Me
Yuting Li

75 Inheritance and Development of Xianyang Traditional Dance from the Perspective of Intangible Cultural Heritage Protection
Fengchao Yin

89 From Cultural Expression to Brand Narrative: A Study on the Symbolic Value Generation of Ethnic Tourism Products
Haiyan Zhai Qian Liu and Min Zhu

102 Research on Fire Safety Governance of High-rise Buildings: A Case Study of Panzhihua City
Yi wang Yali Zhai and Yina Li

Published by
NLBA Eurasian Institute

Journal of Advanced Academic Research and Studies 高等学术研究期刊
Vol. 3, No.6, 2026 (pp. 1-24)
http://www.nlbaeai.org/

ISSN 3006-4007 (Print)
ISSN 3006-4015 (Online)

Research Hotspots and Trend Analysis of Digitalization in Physical Education

Xiaoshi Bo[a] Hui-Suan Wei[b]

[ab] Kuala Lumpur University of Science and Technology ,Malaysia

[a] Shaanxi University of International Trade & Commerce,China

Received 28 March 2026, Revised 20 April 2026, Accepted 10 June 2026

Abstract

Purpose – This paper will systematically review the research landscape, hotspots and evolutionary trends of digitalisation in physical education (PE) to meet the growing demand for evidence-based knowledge on how digital technologies are changing PE at the university level.

Design/Methodology/Approach – This study retrieves 480 English papers (2010–2025) from Web of Science Core Collection and Scopus via bibliometrics. Visual analyses including publication trends, international-institutional partnerships, author networks, keyword clusters and burst words are performed with CiteSpace 6.2.R4.

Findings – Main findings: (1) PE digitalisation research has expanded rapidly since 2020; (2) Global research cooperation is scattered without a stable core team; (3) Digital technology integration must centre on pedagogy; (4) Hot topics cover technical application, teaching practice, teacher training and comprehensive learning effects; (5) Research has shifted from basic ICT to AI-enabled precise teaching, focusing presently on teachers' digital literacy, student engagement and ethical risks.

Research Implications – This bibliometric study has constructed the knowledge system of PE digitalisation and offered theoretical and practical references for scholars, educators and policymakers interested in promoting digital innovation in physical education.

Keywords: Physical Education; Digitalization; Knowledge Mapping; CiteSpace; Research Trends

JEL Classifications: I20,O33,Z20

Financial source: This paper is supported by the following project of Shaanxi Provincial Sports Bureau Regular Research Project in 2025: "A Study on the Digital Transformation of Public Sports Projects and the Construction of Smart Sports Platforms in Shaanxi Province — From the Perspective of Public Sports Digital Scenarios and Technology Empowerment" (20250859).

[a] First Author, E-mail:42941158@qq.com

[b] Corresponding Author, E-mail:huisuan@klust.edu.my

© 2023 The NLBA Eurasian Institute Limited. All rights reserved.

I. Data Sources and Research Methods

1. Data Sources

To address both the impact of sample bias and comparability issues with foreign studies, this paper uses the Web of Science (WoS) Core Collection and Scopus as data sources and selects a time range of 2010-2025. Given the research topic "Application of Digital Technology in Physical Education in Higher Education", a preliminary literature review was carried out to identify common terminology and ensure both precision and completeness. "PE" and related terms were selected as the main search keywords, combined with "digital*" and its synonyms, and limited by terms such as "colleges" and "students". At the same time, to reduce the interference of a large number of unrelated medical papers, terms such as "patient*", "clinical", and "injury*" were excluded. The last search query is as follows:

TI=("physical education" OR "PE" OR "physical training" OR "sport education" OR "sport*" OR "movement skill*" OR "sport* skill*" OR "motor performance" OR "motor learning" OR "skill learning" OR "skill acquisition") AND TS=("college" OR "university" OR "higher education" OR "student*" OR "teacher*") AND TS=("digital*" OR "artificial intelligence" OR "AI" OR "technolog*" OR "media" OR "web-based" OR "online learning" OR "virtual reality" OR "augmented reality" OR "data-driven") NOT TS=("patient*" OR "clinical" OR "rehabilitation" OR "therapy" OR "disorder*" OR "disease*" OR "injur*" OR "hospital")

The first search found 1,582 papers in all the databases. Only the original Articles and Review papers were kept, excluding peripheral disciplines and non-English publications; thus, 932 relevant records remained. According to the PRISMA flow diagram for further de-duplication and screening, a final high-quality dataset of 480 publications suitable for CiteSpace analysis was obtained.

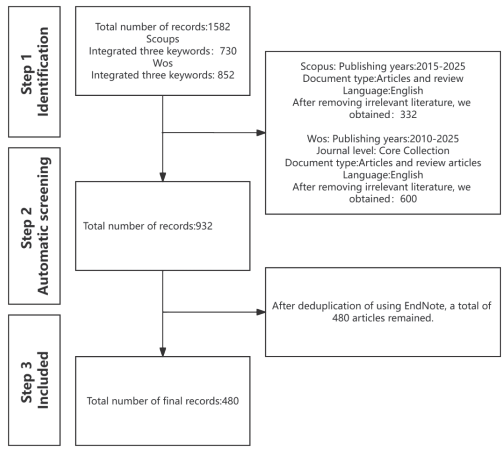

Figure 1. Flowchart of literature screening

Source: Compiled by the author

2. Research Methods

CiteSpace 6.2.R4 software is employed in this study to create knowledge maps and present the structure of knowledge and its development path in the field, thus addressing the shortcomings of "subjective induction" (Chen, C., 2017) of traditional reviews. The intellectual system, research hotspots and evolutionary trends of this field are shown systematically in dimensions such as the number of annual publications, co-citation networks, country-institution-author cooperation networks, keyword co-occurrence with LLR clustering, burst terms and time-zone views. Standardise the parameter settings to a time slice of 1 year and a g-index (k=25) threshold. LLR clustering algorithm was used, and a Modularity (Q) > 0.3 and Weighted Mean Silhouette (S) > 0.5 were considered to indicate a valid structure. This way can show the whole situation and future directions of research in "digitalisation" and "physical education".

II. Analysis of Current Research Status

To find out how far a field has progressed over time and where it is deficient, one can start a new study (Webster & Watson, 2002). Four attributes of the present digital applications in PE are presented here: publication trends, country and institutional networks, author collaboration, and the body of highly cited works that form the knowledge system of the field.

1. Trends in Annual Publication Volume

The number of publications each year can show whether a field has grown due to new technology or changes in society. Research on digital applications in Physical Education has passed through three recognizable stages (see Figure 2).

2010-2015 (Initial Exploration Period): Only 27 papers were published in this time, and the field was relatively new. Mobile Internet, smart terminals and 4G networks have created the technical conditions for digital teaching, but in practice, it has not been widely implemented. Most of the previous studies have only covered the theory and small-scale application tests; no systematic practical research has been carried out.

2016–2019 (Stable Growth Period): With the wider availability of digital tools, the number of publications reached 67. Smart wearables, high-performance mobile devices and cloud platforms have provided researchers with a more stable foundation for studying technology-PE integration. Instead of asking whether digital tools could be used in physical education classes, scholars began to explore how to apply video-based feedback, motion-sensor performance observation and app-assisted independent practice. Thus, the scale of production gradually increased.

2020-Present (Rapid Expansion Period): A total of 386 papers were published in this time, and the latter part was accelerated by the COVID-19 pandemic. School closures and social distancing requirements have led

many education systems around the world to switch to online and blended learning rapidly; this has created an urgent demand and new practical scenarios for digital PE (Wollscheid et al., 2023). At the same time, Artificial Intelligence (AI), Computer Vision and Virtual Reality (VR) have also shown some new research paths. The result was not only an increase in the number of publications but also a significant rise in citations; thus, PE digitalisation had become a serious problem for education and technology.

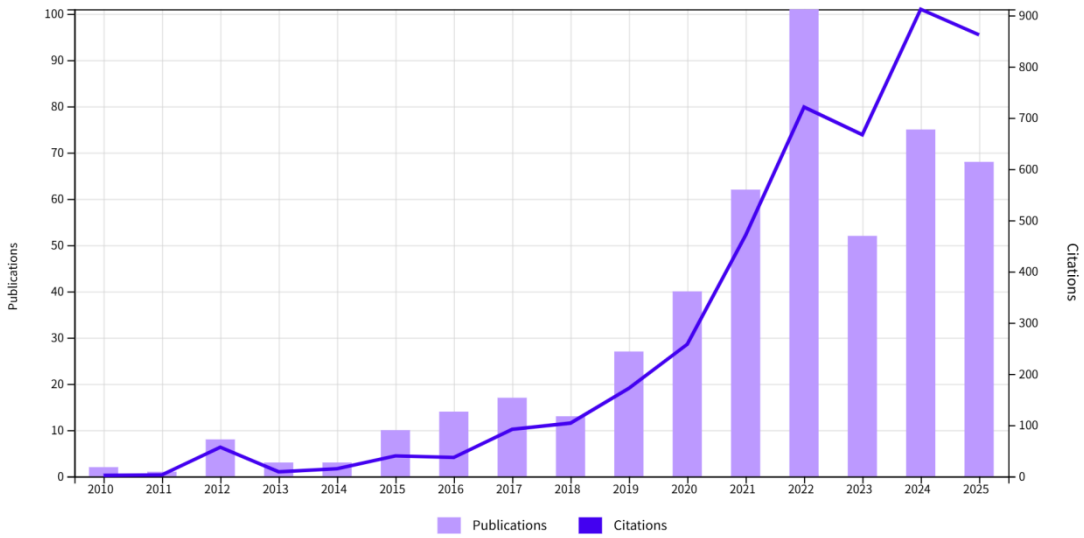

Figure 2. Annual Publications and Citation Rates in the Field (2010–2025)

Source: Authors' own visualization generated using CiteSpace (Version 6.2.R4) based on bibliographic data retrieved from the Web of Science Core Collection.

2. Analysis of Country Cooperation Networks

There are 88 countries (nodes) in the country co-occurrence map and 110 links connecting them; the network density is 0.0287. It can be seen that, although some foundations for cooperation among these countries have been laid in this field, the actual cooperation is not close. As shown in the table, there are 16 countries with more than 10 published papers. China is in the lead with 164 publications, followed by the USA (82), Spain (33), the UK (21) and South Korea (21), showing that these countries have been paying attention to the problem for some time.

Table 1. Publication Status of Major Countries in This Research Field from 2010-2025

Count	Centrality	Year	Countries
164	0.12	2012	PEOPLES R CHINA
82	0.13	2012	USA
33	0.27	2015	SPAIN
21	0.1	2016	ENGLAND
21	0.03	2016	SOUTH KOREA
20	0	2011	TURKEY
19	0.09	2012	AUSTRALIA
16	0.14	2020	INDONESIA
14	0	2015	GERMANY
14	0	2015	UKRAINE
14	0	2016	RUSSIA
11	0.2	2012	IRELAND
11	0.05	2022	MALAYSIA
11	0	2019	BRAZIL
9	0.04	2022	PHILIPPINES
9	0	2021	KAZAKHSTAN
8	0.01	2016	IRAN
8	0.06	2010	CANADA
6	0.02	2019	ITALY
6	0	2020	NORWAY
5	0	2012	NEW ZEALAND

Source: Generated by CiteSpace based on bibliographic data from Web of Science and Scopus (N = 480)

Centrality scores have another story. Spain leads at 0.27, followed by Ireland (0.20) and Indonesia (0.14); these countries are relatively better connectors in the network than would be expected based on their raw number of publications. When grouped by development level, the seven developed countries - the USA, Spain, the UK, Australia, Germany, Ireland and Canada - have a combined centrality of 0.79, and the nine developing countries have only reached 0.31. China is a typical case: although it leads in the number of publications, its centrality of 0.12 suggests that its connector role in the global network is still relatively small. There is a gap between output and influence; although developing countries are producing more research on the digitalisation of PE, developed countries still lead in terms of shaping global knowledge diffusion.

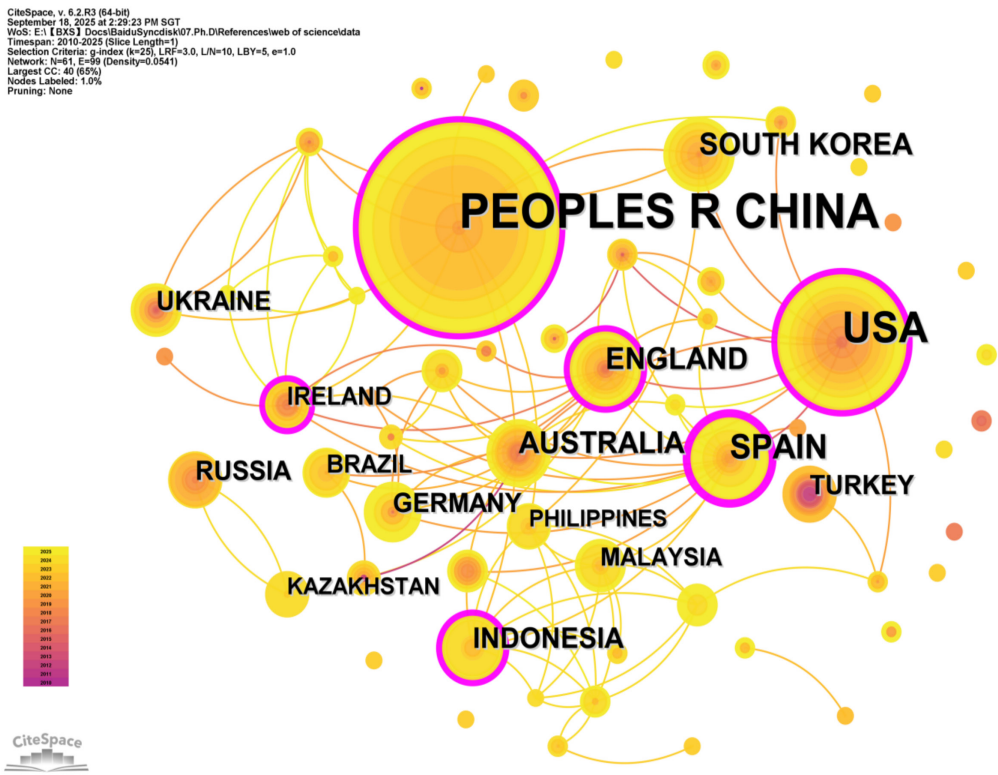

Figure 3. Major Country Collaboration Network

Source: Authors' own visualization generated using CiteSpace (Version 6.2.R4) based on bibliographic data retrieved from the Web of Science Core Collection.

3. Analysis of Institutional Cooperation Networks

A total of 275 research institutions are shown in the institution co-occurrence map, and among them, 217 are linked to form a network with a density of 0.0058. It can be seen that the foundation for institutional

cooperation in this area is relatively weak, and the network of cooperation is loosely connected. As shown in the table, there are 27 institutions that have published more than 3 papers. The Ministry of Education and Science of Ukraine is the highest at 14 publications, followed by Beijing Sport University, Charles Sturt University, Loughborough University, the University System of Georgia, the University of Limerick, and the University of Northern Colorado, all with 5 publications. These institutions have been paying attention to the integration of digitalisation and physical education for some time.

Table 2. Publication Status of Major Institute in This Research Field from 2010-2025

Count	Centrality	Year	Institutions
14	0.01	2015	Ministry of Education & Science of Ukraine
5	0	2018	Beijing Sport University
5	0	2017	Charles Sturt University
5	0	2017	Loughborough University
5	0	2016	University System of Georgia
5	0	2013	University of Limerick
5	0	2017	University of Northern Colorado
4	0	2022	Arizona State University
4	0	2020	California State University System
4	0	2020	City University of New York (CUNY) System
4	0	2023	Deakin University
4	0	2014	Indiana University System

Source: Generated by CiteSpace based on bibliographic data from Web of Science and Scopus (N = 480)

All the main institutions have centrality scores of 0 or very close to 0 (the Ministry of Education and Science of Ukraine is at 0.01). No clear institutional hub has been formed, and the cooperative networks are largely independent of each other. US universities lead in terms of output and have six such institutions, along with European institutions such as the University of Limerick and Loughborough University, and Australia's Deakin University. The fact that the top producers of this research area include a government educational department and a special sports university shows that various parties are involved. In short, the low centrality scores

indicate that inter-institutional cooperation has been initiated at a relatively early stage and still has a long way to go.

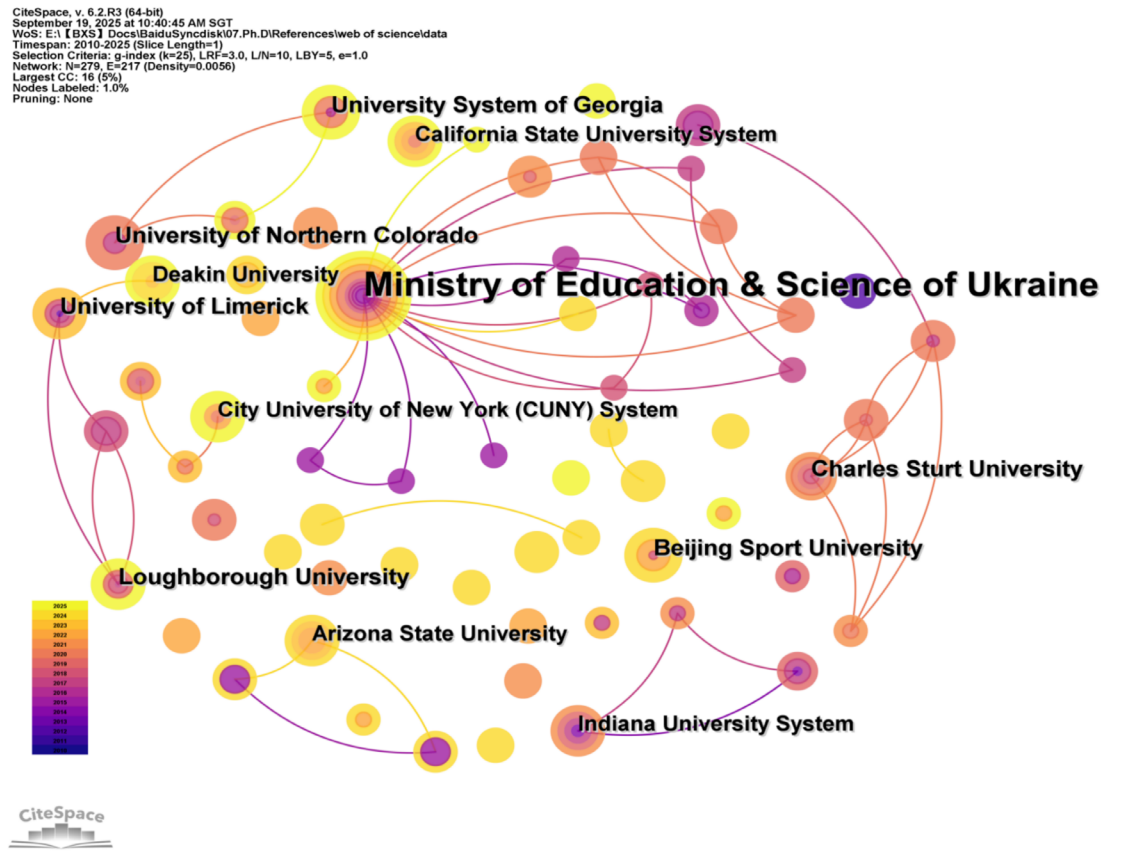

Figure 4. Major Research Institution Collaboration Network in This Research Field from 2010-2025

Source: Authors' own visualization generated using CiteSpace (Version 6.2.R4) based on bibliographic data retrieved from the Web of Science Core Collection.

4. Analysis of Author Cooperation Networks

The author's cooperation network has 340 researchers and 278 collaborative links, resulting in a network density of 0.0048. The low density indicates that there is currently a lack of cooperation among scholars in this field and a large amount of space for development. Based on the data, there are 8 main authors who have published three or more papers. Among them, Casey and Ashley are tied for first with an output of 5 papers each; Wagner, Ingo, Krause, Jennifer M., and Botagariyev, Tulegen have each published 4 papers, and the remaining 4 scholars have each contributed 3 research outcomes.

Table 3. Publication Status of Major Author in This Research Field from 2010-2025

Count	Centrality	Year	Authors
5	0	2017	Casey, Ashley
4	0	2024	Wagner, Ingo
4	0	2017	Krause, Jennifer M
4	0	2024	Botagariyev, Tulegen
3	0	2017	Goodyear, Victoria A
3	0	2020	Calderon, Antonio
3	0	2013	Lei, Ming
3	0	2024	Mambetov, Nurolla

Source: Generated by CiteSpace based on bibliographic data from Web of Science and Scopus (N = 480)

Notably, the centrality metrics of all the main authors in the network are 0. Therefore, there are no prominent academic leaders or collaborative platforms at present for this line of research. Based on the observation of the visualization map, researchers have formed several relatively independent, small-scale collaborative groups, such as the purple collaboration cluster around Mambetov and Nurolla, and the yellow research team led by Botagariyev and Tulegen.

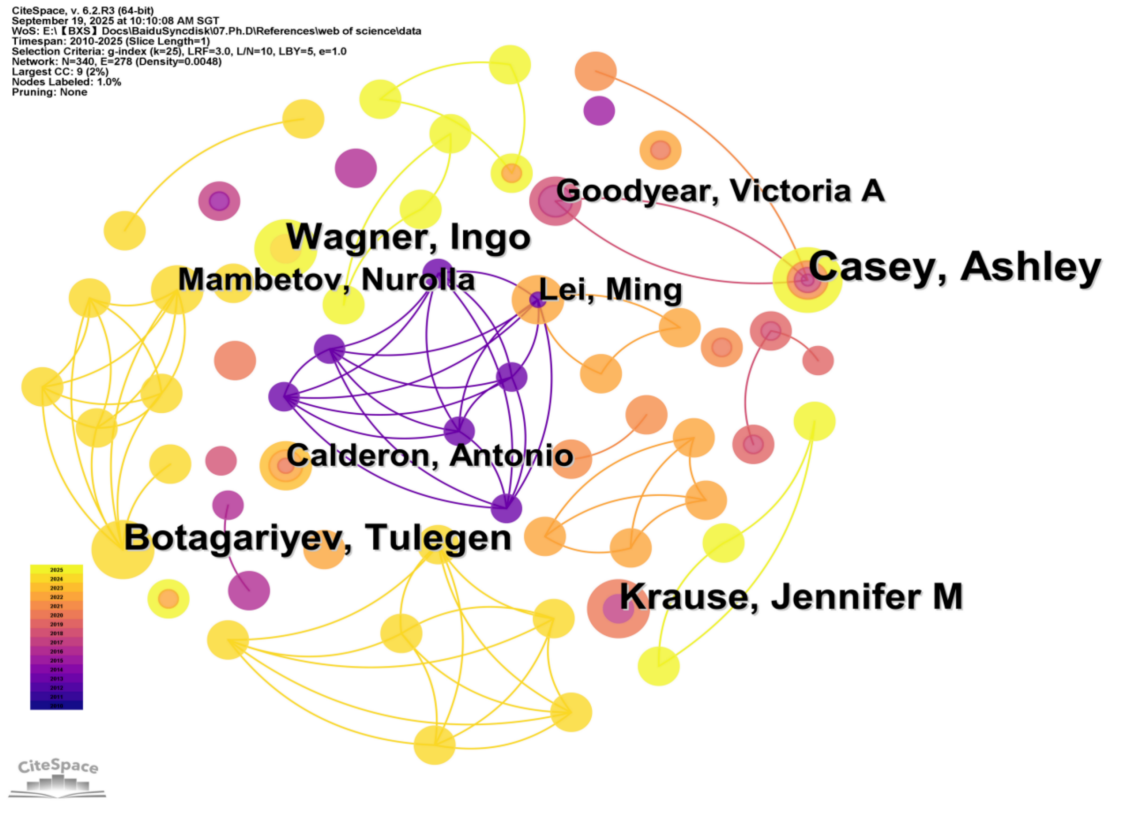

Figure 5. Publication Status of Major AuThor in This Research Field from 2010-2025

Source: Authors' own visualization generated using CiteSpace (Version 6.2.R4) based on bibliographic data retrieved from the Web of Science Core Collection.

The fragmented structure of the author cooperation network reflects the present stage of development for interdisciplinary digital integration in physical education. On the one hand, it shows that the area is relatively new and still developing; on the other hand, more cooperation among all parties and institutions needs to be strengthened to facilitate knowledge integration and theoretical progress. As the research topics are explored in more detail, more scholars will be eager to join, and eventually an organised and strong academic community will be formed.

5. Knowledge Base

In bibliometrics, the knowledge base refers to the body of essential papers that are frequently cited by many other papers in a specific field—these works provide the theoretical and methodological basis for the entire field (Small, 1973; Chen, 2006; Cobo et al., 2011; Aria & Cuccurullo, 2017). Co-citation analysis in this paper has

found some areas where scholars have reached a general consensus.

Most scholars have indicated that digital technology is not inherently good for education, and therefore, whether it can actually help depends on how it is employed. A tool-oriented approach will likely only achieve a superficial result and be confined to data observation out of a desire for observation. If the focus is on instructional objectives and the requirements of learners, then technology can be applied to support personalised learning and precision teaching (Casey et al., 2017; Williamson, 2015). According to the case study, students in the "pedagogy-led" model have performed better than those in the "technology-driven" model (Williamson, 2015).

Based on the research of students, digital tools can motivate them to learn more eagerly in class. Interactive exergames and wearable devices attract less-active students by increasing their enjoyment and providing immediate feedback (Bodsworth & Goodyear, 2017; Jastrow et al., 2022; Lindberg et al., 2016). AI educational robots and blended learning models have also increased students' enthusiasm, and the experimental group consistently outperformed the traditional control group (D.). Yang et al., 2020; J. Yang and others (2025).

Digital technology has helped to change the learning outcome model of Physical Education into a closed-loop system that covers pre-class resource distribution, in-class real-time communication and post-class data feedback (Müller & Wagner, 2025; D.). Yang and others (2020); Zhong and others (2025). The three types of power are: physical capability, knowledge and values, and emotional expression. Based on the above studies, several data sources have been employed to improve the accuracy of the evaluation by about 30% (Jastrow et al., 2022; Müller & Wagner, 2025). Video feedback is employed to teach skills in sports such as gymnastics and basketball, and interactive exercise games can be used to improve cardiorespiratory endurance and balance (Jastrow et al., 2022; Lindberg et al., 2016; Wallace et al., 2023). Together, VR and IoT can provide immersive simulations and real-time data analysis to expand the scope of personalised teaching and movement correction (Ding et al., 2020; Zhong et al., 2025).

There are still some deficiencies. Lack of Teacher Digital Literacy is the most frequently mentioned bottleneck. Most teachers are still at the level of fragmented tool use and do not integrate technology with teaching in an effective way (Østerlie et al., 2025; Wallace et al., 2023). This suggests that the teachers have not received regular training, and they are reluctant to change due to cognitive habits; research has shown that PE teachers generally make teaching decisions based on intuition rather than careful thought, resulting in a status quo bias and low self-efficacy in using technology (Müller & Wagner, 2025; Wyant & Baek, 2019).

AI and intelligent platforms can improve the efficiency of assessment and feedback in the area of teacher-student relationships, but they cannot replace teachers in other areas such as emotional interaction, value guidance, and the cultivation of sportsmanship (Lee & Lee, 2021; Wallace et al., 2023; D. Yang and others (2020). A "human-machine complementarity" model, which supports teachers in using technology, is likely to be more feasible.

In terms of resource equity, more than 20% of student groups still lack access to good digital support, and cross-regional differences in resource distribution are still noticeable (Fröberg & Lundvall, 2021; J.). Yang and others (2025). Ethical concerns are also increasing: data privacy breaches, algorithmic bias and risks to body

image have been occurring regularly in practice, and there are calls for institutional-level ethical norms and safeguard mechanisms (Østerlie & Killian, 2025; Jastrow et al., 2022; Fröberg & Lundvall, 2021).

Finally, the scope of the existing research is relatively narrow. Around 79% of the literature is in Chinese, and about 80% of it focuses on higher education; K-12 and special education are less frequently covered. Most studies are short-term intervention designs, and their long-term effects of digital PE have not been studied (Zhong et al., 2025). Cross-national comparisons also show a divergence: Western countries generally focus on AI and blended learning, while in China, the implementation is still mainly at the tool level; Japan has been integrating digital technology with traditional physical education in a culturally appropriate manner (Saiz-González et al., 2025; Williamson, 2015). Therefore, the various patterns suggest that the digitalisation of PE is multifaceted and context-specific, not uniform.

6. Summary

Different Teaching Methods have different actual results when applying digital technology. Some studies have shown that it can motivate students to study more and better. However, a deficiency in teachers' digital literacy is also a problem to be addressed. Technology can increase efficiency and provide personalised learning, but it is not suitable to replace teachers entirely at this time. In addition, problems of unequal distribution of educational resources and the digital divide are still serious; at the same time, most previous studies have been limited in scope, region and time. At the same time, there are problems of ethics and fairness. Cross-national practices have shown various levels of development and differentiation. The above consensus has provided a strong foundation for research on digital applications in physical education and has also pointed out directions for future deepening of theoretical construction and continuous practical innovation.

III. Visual Analysis of Research Hotspots in Digital Physical Education

1. Keyword Co-occurrence Analysis

A total of 378 nodes and 1,547 links were obtained from the keyword co-occurrence network in CiteSpace, and the entire network density was 0.0217. The top word in the network is "physical education", which appears 124 times and has a centrality of 0.39. Thus, PE serves as the basic topic of this area of study. The two closest subject keywords are "students" (frequency: 47, centrality: 0.14) and "teachers" (frequency: 25, centrality: 0.08); therefore, the research subjects are mainly students and teachers. In addition, "children" (frequency: 22; centrality: 0.11) is also relatively frequent, and research has been carried out at all levels of education.

Table 4. Keywords with Frequency >10 in This Research Field from 2010-2025

Count	Centrality	Year	Keywords
124	0.26	2010	physical education
47	0.06	2016	students
37	0.06	2020	artificial intelligence
36	0.09	2013	digital technology
31	0.03	2016	technology
30	0.15	2013	social media
30	0.07	2012	performance
29	0.09	2016	health
25	0.13	2012	teachers
22	0.14	2016	children
22	0.05	2019	physical activity
19	0.04	2020	virtual reality
18	0.29	2016	motivation
17	0.33	2016	challenges
14	0.08	2016	impact
13	0.07	2020	Augmented reality
12	0.06	2015	ICT
11	0.1	2015	professional development
11	0.03	2022	perceptions

Source: Generated by CiteSpace based on bibliographic data from Web of Science and Scopus (N = 480)

Several high-frequency terms, such as "physical education", "students", "digital technology" and "artificial intelligence", were included in the original search query, so their prominence is expected. The significance of these words lies in their connections to other words in the network. "Physical education" frequently appears

with "performance", "health" and "motivation", indicating that research has broadened to address motivation, health promotion and educational values in addition to instruction. "Digital technology" serves as a bridge word that connects the macro-level concept of "ICT" with new tools such as "social media" (30 times, 0.17), "virtual reality" (19 times, 0.09), and "augmented reality" (13 times, 0.04), thereby demonstrating the trend of informatisation towards intelligent and immersive teaching models.

Given that the frequent words in the text include "performance", "health", "motivation" and "impact", it can be inferred that this study investigates the effect of digital tools on athletes' results, health and learning attitudes. At the same time, terms such as "challenges", "perceptions" and "professional development" indicate that there are ongoing problems with implementation, subjective experiences of teachers and students, and the required professional ability for technology to function in practice.

2. Keyword Clustering Analysis

CiteSpace generated 18 clusters from the keyword data, with cluster sizes between 5 and 33, and most had Silhouette values greater than 0.879 (the highest being 0.998). These are relatively high, so the clusters have strong internal consistency and are well-separated. Together, the clusters show that the research has moved from asking "whether to use technology" to more specific questions about how technology works, in which environments it is effective, and what it means for different groups of learners.

The main thread in the clusters is the integration of technology and physical education. The first clusters that were formed around "digital technology" and "social media" have now been replaced by new ones focusing on "artificial intelligence", "virtual reality" and "generative AI", and it can be seen that changes in technology have led to new research directions at a faster rate. Clusters around "technology integration" and "educational innovation" indicate that the problem of how to integrate technology in physical education, rather than whether it can be applied, is a focus of research.

The second is the line of instruction and teacher education. Clusters with "pedagogy" and "teacher education" focus on the professional roles required to use digital tools effectively in teaching; those centered on "physical activity", "adolescents" and "youth" connect technology application with the physical and developmental needs of specific student groups.

The third is a thread for multi-scenario and cross-domain extensions. Clusters related to "online learning" and "blended learning" are manifestations of digital technology's application in distributed education, and clusters in "public health" and "sports journalism" show how PE digitalisation has spread to other areas.

In short, the cluster structure indicates that the three main directions for research in digital PE are: educational benefits focused on performance, health and motivation; technical applications involving digital technology, AI and immersive tools; and contextual challenges such as teacher development, student perception and integration barriers. "Digital technology" is a key word that connects educational needs with the entire range of available technological means as a link node.

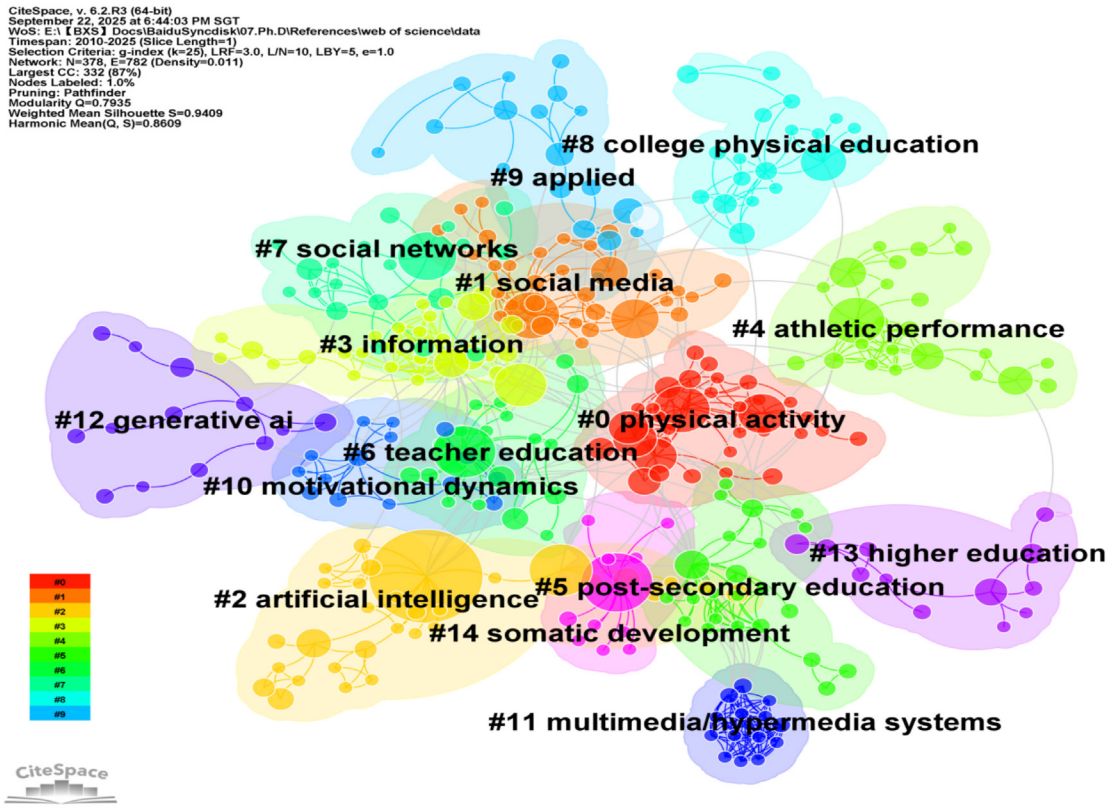

Figure 6. Keyword Clustering Map in This Research Field from 2010-2025

Source: Authors' own visualization generated using CiteSpace (Version 6.2.R4) based on bibliographic data retrieved from the Web of Science Core Collection.

3. Summary

Based on the visualisation analysis of the keyword co-occurrence network and clustering structure presented by CiteSpace, this paper will systematically present the main thematic structure and hotspot distribution characteristics of research in digital physical education. In short, a multi-dimensional knowledge network has been constructed around "physical education", and key terms such as "students", "teachers", "digital technology", and "artificial intelligence" serve as core supports. The research subjects mainly include two core parties: students and teachers, and the research environment is mainly concentrated in higher education; therefore, it is relatively far from other educational levels and application scenarios.

Based on the results of keyword co-occurrence analysis, the hotspots in digital PE research are not only technologies but also fundamental educational values that digital technology can provide to athletic performance, physical health, learning motivation and teaching efficiency. It can be seen that the research focus

has gradually shifted from the early stage of "technological introduction" to the exploration of "technological application effects and educational significance". At the same time, the appearance of keywords such as "challenges", "perceptions", and "professional development" indicates that the academic community has begun to systematically address the practical obstacles in digital implementation, the subjective experiences of teachers and students, and the supporting conditions for the professional development of teachers. Therefore, it can be inferred that research topics are moving away from the earlier period of technological optimism and becoming more rational and deliberate.

Keyword clustering analysis can also be performed on the research hotspots in this area to understand their internal structure and themes. In general, the hotspots in research on digital Physical Education (PE) are concentrated in three interconnected directions: first, the application of frontier digital technologies such as AI, VR and AR; this reflects the continuous driving force of technological iteration in research topics; second, research on instructional practice and teacher development focused on pedagogy, teacher education and technology integration; this focuses on the feasibility and effectiveness of embedding technology in instructional contexts; and third, holistic education goals and cross-domain extensions focusing on physical activity, health promotion and various learning scenarios; this reflects the spillover effects of digital PE in public health, online and blended learning. The high Silhouette values of all the clusters indicate that the current research topics have good focus and a strong foundation in academia.

In short, the research hotspots in digital PE exhibit a structural feature of "continuous technological upgrading – deepening of instructional practice – expansion of educational value". This pattern can both respond to the development of new technologies such as AI and be grounded in the instructional goals and educational functions of physical education. The hotspot landscape shown above is the general knowledge structure of this area, and it can provide strong support for studying the development path and leading-edge changes of this area over time, thus offering a foundation for trend analysis in Chapter 4.

IV. Visual Analysis of Research Trends in Digital Physical Education

1. Analysis of Keyword Time-Zone Knowledge Map

CiteSpace shows the development of knowledge over time in the form of a time-zone view. Each keyword is linked to a time zone according to the year of its first appearance, and the links among nodes and their thickness show how often and in what context keywords co-occur over time. This function can show the changes in research topics and the development logic of the knowledge system. Based on the time-zone map of the research field for digital physical education (Figure X) and keyword data, the evolution of research can be divided into three periods: the first exploration period (2010-2015), the period of rapid development (2016-2020), and the current period of diversified innovation (2021-2025).

1.1 Initial Exploration Phase (2010–2015)

At this time, digital PE had entered the academic discussion, and research began to focus on the early integration of traditional physical education and basic digital tools. "Physical Education" was the main reference point, and early digital keywords such as "Internet", "social networks", "digital technology" and "social media" started to appear, showing that scholars were beginning to explore how PE connected with new technologies. "Beliefs", "attitudes" and "acceptance" referred to people's awareness of how teachers and students were responding to digitalisation, while "teachers" and "competence" raised issues concerning the teachers' professional readiness. By around 2015, keywords such as "ICT" and "pedagogical content knowledge (PCK)" indicated a change in focus: instead of asking whether digital technology should be introduced to physical education, people began to inquire about how to effectively combine the two, and thus more applied studies started.

1.2 Rapid Development Phase (2016–2020)

At this time, the integration deepened and the scope of research expanded. Frequently appearing words are "students", "technology", "motivation", "impact" and "physical activity"; thus, the subject of discussion has moved from technology to its effect on learners and exercise. The appearance of terms such as "digital divide" and "challenges" indicates that attention has been drawn to the implementation gap; at the same time, a large number of keywords related to new technologies, including "artificial intelligence", "virtual reality" and "augmented reality", suggest that the frontier tools have begun to be applied in PE research. "Academic performance" and "distance education" also show that the field has expanded to cover blended and remote learning, a trend that accelerated significantly around 2020 due to the pandemic. The first two goals of this stage were to verify feasibility and to examine the actual operating conditions.

1.3 Diversified Innovation Phase (2021–2025)

Recently, there have been many themes and new ways of study. The keywords "perceptions", "online learning", "pedagogy" and "knowledge" suggest that researchers have been exploring how the digital environment has changed the logic of teaching and subject experience. "Generative AI", "wearable technology" and "real-time feedback" are examples of specific applications, such as using wearables to collect real-time motion data or applying generative AI to design instruction. Systematic reviews and meta-analyses have been proposed to demand a relatively high level of methodology for comparable and aggregated data. "Student engagement", "risk" and "digital competence" are all new dimensions that have emerged in research on the experience of learners and digital safety. By 2025, keywords such as "experiential learning" and "AI disclosure" indicate that the scope of the field has expanded to include ethical issues and transparency; thus, research has moved beyond the stage of tool adoption and entered a period of more reflective, systemic inquiry.

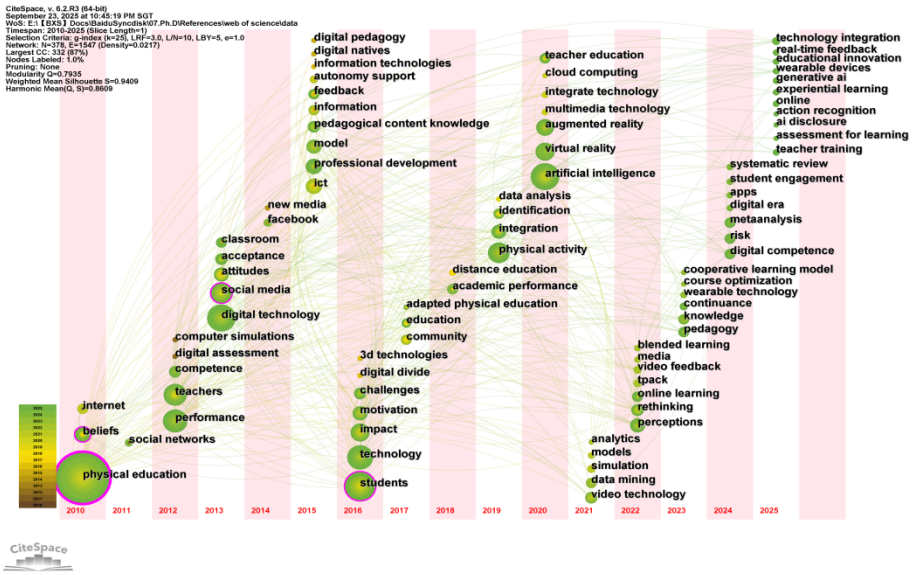

Figure 7. Timeline Distribution Map of Keywords in This Research Field from 2010-2025

Source: Authors' own visualization generated using CiteSpace (Version 6.2.R4) based on bibliographic data retrieved from the Web of Science Core Collection.

2. Analysis of Keyword Burst Knowledge Mapping

Keyword burstness refers to a relatively high-frequency period of a word that indicates a change in research focus and the beginning of a new research trend. CiteSpace burst detection of the digital PE literature shows three distinct stages of development.

Phase 1: Exploration of Basic Information Tools (2010-2015). Burst terms at this time are "internet", "multimedia", "video" and "information technology"; they indicate that research has shifted to exploring new means for delivering PE teaching. The first two applications of "game" (gamification) were relatively prominent, so it can be assumed that researchers had already begun to explore how to motivate students in physical education through active video games. The first type was technology-assisted instruction; digital tools are employed to expand teaching resources and overcome the drawbacks of traditional physical education teaching, such as the transience of demonstrations.

Phase 2: Growth of Instructional Model Transformation and Blended Learning (2016-2020). Burst terms in this stage are "blended learning", "adoption", "active video game" and "COVID-19", and they indicate a move from the use of isolated tools to deeper integration of teaching and learning. The emergence of "blended learning" indicates that the new mode will combine online teaching and offline practice of skills. The recent focus on TAM-based studies of technology acceptance has also been reflected in the trend of "adoption". The high-intensity burst of "COVID-19" in 2020 was the most disruptive event in recent times for the field, and

global PE instruction was forced to use digital means as its main way, not just as an addition. This large-scale emergency exercise provided a basis for the normalisation of digital PE that followed.

Phase 3: Deepening Intelligent and Precise Teaching (2021-2025). Since 2023, the burst terms have been increasingly technological in nature; at present, the research frontlines include "artificial intelligence", "machine learning", "deep learning" and "computational thinking". At present, the main direction is no longer the digitisation of resources but rather intelligent processing of data; for example, computer vision is used for motion capture and correction, machine-learning algorithms recommend personalised exercise plans, and data-driven methods evaluate the effectiveness of learning. The rise of "mental health" is also noteworthy; thus, digital Physical Education is now extending its scope to cover psychological well-being and is demonstrating an increased interest in integrating the mind and body in education.

Over the entire period from 2010 to 2025, international research on the digitalisation of physical education has shown a trend of development: first appearing as "Internet + Sports Resources", followed by reconstructions of instructional models in blended learning, and now reaching the forefront with AI-driven personalised teaching.

Top 19 Keywords with the Strongest Citation Bursts

Keywords	Year	Strength	Begin	End	2010 - 2025
virtual reality	2024	**4.52**	2024	2025	
time	2017	**4.1**	2021	2022	
sedentary behavior	2017	**3.99**	2017	2020	
people	2018	**3.99**	2018	2020	
physical education teacher education	2014	**3.8**	2014	2018	
artificial intelligence	2021	**3.7**	2021	2021	
self determination	2024	**3.63**	2024	2025	
adolescents	2013	**3.62**	2013	2017	
university	2022	**3.52**	2022	2025	
validity	2017	**3.41**	2017	2020	
system	2021	**3.31**	2021	2022	
inclusion	2023	**3.22**	2023	2025	
patterns	2019	**3.19**	2019	2019	
body	2010	**3.12**	2010	2019	
reflections	2017	**3.11**	2017	2018	
disability	2023	**2.99**	2023	2025	
sport education	2018	**2.99**	2018	2019	
teacher education	2018	**2.88**	2018	2021	
obesity	2013	**2.86**	2019	2021	

Figure 8. Keyword Burst Detection Map in This Research Field from 2000-2025

Source: Authors' own visualization generated using CiteSpace (Version 6.2.R4) based on bibliographic data retrieved from the Web of Science Core Collection.

3. Summary

Quantitative analysis of the keyword co-occurrence network shows that international research on the digitalisation of physical education has formed a dense academic network with "Physical Education" at the centre, and it is mainly supported by "Digital Technology", "Higher Education" and "Students". The distribution of high-frequency keywords and high-centrality nodes indicates that the research focus in this field has shifted from individual technological applications to a multi-dimensional integration ecosystem of "Technology-Pedagogy-Human". However, keyword co-occurrence primarily shows the static structure and association strength of research hotspots and is unable to fully reflect the evolution trajectory or the rise and fall of various research themes over time. To expand the research scope of digital PE over time and to identify new trends that may develop in the future, burstiness analysis can be used to add a time dimension. Thus, the following will be the subject of our discussion: the development stages and front-line trends of this region.

V. Conclusion and Discussion

1. Summary

Using CiteSpace for knowledge mapping of the 480 publications in the Web of Science Core Collection and Scopus (2010-2025), this paper has systematically studied the development of digital physical education abroad in four aspects: research situation, knowledge base, hotspot structure, and evolutionary trend.

Digitally augmented PE research started slowly but has increased at an accelerated pace recently. The 2010-2015 period focused on tool introduction and feasibility studies; 2016-2019 showed a growing interest in specific application models and instructional effectiveness; and since 2020, due to the pandemic and progress in AI, both the number of publications and the scope of topics have expanded significantly. Collaboration networks at the country, institutional and author levels all show the same pattern: active publication output but fragmented ties, and no stable international core has been formed yet.

Co-citation analysis in the knowledge base shows that most scholars agree on some points. The purpose of education for new technologies is not the technology itself. Empirical evidence consistently shows that digital tools can motivate and engage students in learning, and they have also been applied to create a data-driven pre-class, in-class and post-class loop for physical education. At the same time, teacher digital literacy gaps, weak technology-pedagogy integration, uneven resource distribution, and ethical problems are also main constraints on further development.

The three research hotspots are: application of digital technology (AI, VR, AR, wearables); instructional practice and teacher development (pedagogical innovation, teacher education, technology integration); and educational benefits and holistic goals (athletic performance, physical health, motivation, diverse learning scenarios). These directions are related, and the whole field is shifting from a single technological focus to a

"Technology-Pedagogy-Human" approach.

Over time, the three periods of the field have been basic information tools supporting teaching; blended learning and instructional model changes; and finally, AI-driven precision and intelligent teaching. Sustained increases in the frequency of "generative AI", "learning analytics", "real-time feedback" and "digital literacy" suggest that research is now focused on extending technological application to instructional decision support, learning experience design, and competency cultivation.

2. Discussion

According to the systematic review of the current research status, hotspot structure and evolutionary trends in digital physical education have been identified; thus, more work needs to be done at both the theoretical and practical levels based on these results. The theoretical basis and practical value of digital PE research will be introduced here, along with limitations and future directions of the research, as well as a summary of existing consensus.

2.1 Theoretical Insights of Digital PE Research

First, the study supports the idea that technology is not the cause of better educational results. Both keyword analysis and the knowledge base consistently show that AI, VR and wearable devices have gained attention in research not due to their technical difficulty but because of how well they can be integrated into teaching and learning, as well as student development. Therefore, the direction of research has changed from focusing on tools (instrumental rationality) to focusing on goals in education (educational rationality); it now asks what good teaching requires.

Second, according to the above results, the teacher serves as the mediator. Whether visible in clusters around teacher education and professional development, or in repeated references to digital literacy gaps in the knowledge base literature, teachers have emerged not as passive recipients of digital reform but as the key subjects for translating technological ability into teaching effectiveness. Provide a direct theoretical foundation for models that consider teacher digital competence as a mediator or moderator.

Third, in recent years, the focus of the field has shifted from technology application to learning experience and instructional decision support. The high frequency of terms such as "student engagement", "digital literacy" and "learning analytics" indicates that at present, researchers are investigating why, for whom, and under what circumstances technology can be effectively applied. Therefore, the direction of research will include mechanism analysis, moderator studies and context-specific research designs.

2.2 Implications for Practice and Policy

The direction of technology adoption in Physical Education should be the teaching goal, not the purchase

of equipment or construction of platforms. Only when these digital tools are used to achieve specific teaching objectives, such as providing motion feedback, motivating students, or offering individualised instruction, will they have teaching value; otherwise, they will be little more than a new-technology exhibition.

Enhance the Policy Goals to Strengthen Teacher Professional Development. All previous research has shown that a lack of digital literacy, fear of technology and low self-efficacy are all associated with poor application outcomes. Good support should be continuously provided and tailored to the specific circumstances of the teaching staff to help them apply new-media literacy in their teaching.

Equity and Ethics should be accompanied by efficiency. At present, the problems of the digital divide, data-privacy risks and algorithmic bias are serious and limit the scope of digital public services. Administrators and policymakers need to create protective norms and institutions at the institutional level to prevent further harm or deterioration of the existing inequalities in the digital reform.

2.3 Research Limitations and Future Directions

This paper will outline the research system and trend of research, but not how technology is applied in particular teaching environments. The literature reviewed mainly consists of English-language journals, and thus may lack practice and experiments conducted in non-English-speaking environments.

Future work will address the above deficiencies by conducting teacher-centered empirical studies on the interplay of digital competence, technostress and instructional beliefs; extending longitudinal research designs to track the long-term effects of digital interventions; carrying out cross-cultural comparative studies to explore how educational systems and cultural contexts influence different trajectories of digital PE; and paying close attention to ethics, safety and psychological impact, ensuring that efficiency gains in digital PE are accompanied by a commitment to humanistic values and sustainable development.

Digital PE is not an easy-to-achieve technology improvement. It is all-encompassing; thus, it will change the idea of education, teacher quality, students' lives and school management. Technology should only be used to support high-quality physical education, and its foundation should be pedagogy, teachers' judgment and students' growth.

References

Bodsworth, H., & Goodyear, V. A. (2017). Barriers and facilitators to using digital technologies in the Cooperative Learning model in physical education. Physical Education and Sport Pedagogy, 22(6), 563–579. https://doi.org/10.1080/17408989.2017.1294672

Casey, A., Goodyear, V. A., & Armour, K. M. (2017). Rethinking the relationship between pedagogy,

technology and learning in health and physical education. Sport, Education and Society, 22(2), 288–304. https://doi.org/10.1080/13573322.2016.1226792

Ding, Y., Li, Y., & Cheng, L. (2020). Application of Internet of Things and Virtual Reality Technology in College Physical Education. IEEE Access, 8, 96065–96074. https://doi.org/10.1109/ACCESS.2020.2992283

Fröberg, A., & Lundvall, S. (2021). The Distinct Role of Physical Education in the Context of Agenda 2030 and Sustainable Development Goals: An Explorative Review and Suggestions for Future Work. Sustainability, 13(21), 11900. https://doi.org/10.3390/su132111900

Jastrow, F., Greve, S., Thumel, M., Diekhoff, H., & Süßenbach, J. (2022). Digital technology in physical education: A systematic review of research from 2009 to 2020. German Journal of Exercise and Sport Research, 52(4), 504–528. https://doi.org/10.1007/s12662-022-00848-5

Lee, H. S., & Lee, J. (2021). Applying Artificial Intelligence in Physical Education and Future Perspectives. Sustainability, 13(1), 351. https://doi.org/10.3390/su13010351

Lindberg, R., Seo, J., & Laine, T. H. (2016). Enhancing Physical Education with Exergames and Wearable Technology. IEEE Transactions on Learning Technologies, 9(4), 328–341. https://doi.org/10.1109/TLT.2016.2556671

Müller, J., & Wagner, I. (2025). Formative assessment of motor learning through digital tools in physical education: A systematic literature review. European Physical Education Review, 1356336X251357207. https://doi.org/10.1177/1356336X251357207

Østerlie, O., & Killian, C. M. (2025). Flipped learning in physical education: Evolutions over a decade and future horizons. Physical Education and Sport Pedagogy, 1–16. https://doi.org/10.1080/17408989.2025.2497326

Østerlie, O., Kristensen, G. O., Holland, S. K., Camacho Miñano, M. J., & Whatman, S. (2025). Digital technology use in physical education teacher education: A scoping review. Sport, Education and Society, 1–15. https://doi.org/10.1080/13573322.2025.2474631

Saiz-González, P., Sierra-Díaz, J., Iglesias, D., & Fernandez-Rio, J. (2025). Exploring physical education teachers' willingness and barriers to integrating digital technology in their lessons. Education and Information Technologies, 30(5), 5965–5987. https://doi.org/10.1007/s10639-024-13060-9

Wallace, J., Scanlon, D., & Calderón, A. (2023). Digital technology and teacher digital competency in physical education: A holistic view of teacher and student perspectives. Curriculum Studies in Health and Physical Education, 14(3), 271–287. https://doi.org/10.1080/25742981.2022.2106881

Williamson, B. (2015). Algorithmic skin: Health-tracking technologies, personal analytics and the biopedagogies of digitized health and physical education. Sport, Education and Society, 20(1), 133–151. https://doi.org/10.1080/13573322.2014.962494

Wyant, J., & Baek, J.-H. (2019). Re-thinking technology adoption in physical education. Curriculum Studies in Health and Physical Education, 10(1), 3–17. https://doi.org/10.1080/25742981.2018.1514983

Yang, D., Oh, E.-S., & Wang, Y. (2020). Hybrid Physical Education Teaching and Curriculum Design Based on

a Voice Interactive Artificial Intelligence Educational Robot. Sustainability, 12(19), 8000. https://doi.org/10.3390/su12198000

Yang, J., Casey, A., & Cale, L. (2025). The influence of physical education on the use of healthy lifestyle technologies: Insights from young adults' digital PE experiences and future recommendations. Physical Education and Sport Pedagogy, 1–19. https://doi.org/10.1080/17408989.2025.2535387

Zhong, Q., Jiang, J., Bai, W., Yin, Z., Liao, Z., & Zhong, X. (2025). Application of digital-intelligent technologies in physical education: A systematic review. Frontiers in Public Health, 13, 1626603. https://doi.org/10.3389/fpubh.2025.1626603

Journal of Advanced Academic Research and Studies 高等学术研究期刊
Vol. 3, No.6, 2026 (pp. 25-35)
http://www.nlbaeai.org/

ISSN 3006-4007 (Print)
ISSN 3006-4015 (Online)

Study on Value Construction and Design Innovation of Xiqin Embroidery Cultural and Creative Based on Cultural Identity

Wenqi Shi[abc] Fangqin Zheng[ac] and Fan Cheng[ac]

[a] School of Fashion, Shaanxi University of International Trade & Commerce, China

[b] Health Culture Research Center, the Key Research Base of Philosophy and Social Sciences in Shaanxi (Universities),China

[c] Research Center of Shaanxi Intangible Cultural Heritage Digital Inheritance and Cultural Creative Design, China

Received 28 March 2026, Revised 20 April 2026, Accepted 10 June 2026

Abstract

Purpose – This paper aims to explore the construction logic and design innovation path of Xiqin Embroidery cultural and creative products in the dimensions of cultural value, homogeneous design form and weak market competitiveness in current Xiqin Embroidery cultural and creative development.

Design/Methodology/Approach – The research adopts literature research, field investigation and design practice methods. By systematically sorting out the cultural connotation and artistic characteristics of Xiqin Embroidery, a four-dimensional value system is constructed, and three design innovation paths are proposed. Three physical design cases are developed to verify the feasibility of the paths.

Findings – The construction of the four-dimensional value system and the implementation of the three design paths can effectively enrich the cultural connotation of Xiqin Embroidery cultural and creative products and enhance the public's sense of identity and emotional belonging to Qin culture.

Research Implications – The research results provide theoretical and practical references for the design innovation and industrialization development of Xiqin Embroidery cultural and creative products, and also offer a referable paradigm for the living inheritance of other regional intangible cultural heritage cultural and creative products.

Keywords: Cultural Identity; Xiqin Embroidery; Cultural and Creative Products; Value Construction; Design Innovation; Intangible Cultural Heritage

JEL Classifications: Z11,Z10

Financial source: This work was supported by the 2025 Shaanxi University Youth Innovation Team Project “Digital and Intelligent Design and Communication of Health and Wellness Apparel under the Belt and Road Initiative” and the 2026 Special Project of Philosophy and Social Science Research of Shaanxi Province (No. 2026YB0027): “Research on the Construction of Cultural Gene Pedigree and Digital and Intelligent Translation of Xiqin Embroidery”.

[a] First Author, E-mail: shiwenqi@csiic.edu.cn

Ⓒ 2023 The NLBA Eurasian Institute Limited. All rights reserved.

I. Introduction

Cultural identity is the source of Chinese national cohesion and the deepest level of identity, which governs and inspires the thoughts and actions of all ethnic groups. Under the background of creative transformation and innovative development of excellent traditional Chinese culture, intangible cultural heritage, as an important carrier of national culture, has become an important way to enhance cultural confidence and construct cultural identity. Xiqin Embroidery, mainly spread in Baoji and surrounding areas of Shaanxi Province, is a typical representative of Qin culture and was included in the second batch of national intangible cultural heritage representative project list in 2008. Rooted in the fertile soil of Zhou and Qin civilizations, it has formed a unique artistic style of bold and unrestrained, bright colors and auspicious meanings after more than 3,000 years of evolution, carrying the wisdom crystallization and spiritual pursuit of the working people in Guanzhong area.

In recent years, with the deepening of intangible cultural heritage protection, certain achievements have been made in the inheritance and development of Xiqin Embroidery. However, there are still many problems in the development of cultural and creative products: first, the excavation of cultural connotation is shallow, most products only stay in the simple replication of patterns and fail to deeply explain the historical culture and spiritual value behind them; second, the design form is homogeneous, the product category is single, and there is a lack of innovative consciousness and modern aesthetic expression; third, the industrialization degree is low, the brand awareness is weak, and the market competitiveness is insufficient. These problems make it difficult for Xiqin Embroidery cultural and creative products to establish emotional connection with contemporary consumers and effectively play their functions of cultural communication and identity construction.

From the perspective of cultural identity, this study systematically sorts out the cultural connotation and artistic characteristics of Xiqin Embroidery, constructs a four-dimensional value system for its cultural and creative products, and proposes targeted design innovation paths, supplemented by three practical design cases to verify the feasibility of the scheme. The purpose is to transform the cultural genes of Xiqin Embroidery into cultural and creative products that meet modern lifestyle and aesthetic needs through scientific design methods, so that intangible cultural heritage can enter public life and enhance the public's regional cultural identity and national pride imperceptibly.

II. Concept and Value of Cultural Identity

1. Concept of Cultural Identity

Cultural Identity is a complex and multi-dimensional concept covering emotion, cognition and behavior, involving the relationship between individual and society, history and reality. It refers to “the basis on which people use common cultural symbols, follow consistent thinking and habits, adhere to common cultural values and pursue unified cultural ideals as the basis for identification”(Liang Zhao-Zhen, 2023). From an ethnological

perspective, cultural identity is the process in which ethnic members recognize, acknowledge and agree with their own national culture, thereby generating a sense of belonging and further obtaining cultural consciousness .

In a broad sense, cultural identity is an individual's sense of identity and consciousness towards the cultural group to which he belongs, and it is a dynamic internalization process from cognition to emotion and then to behavior. Individuals construct their own cognition, concepts and emotions in the social and cultural environment, and integrate the internalized ideas with daily production and life through the recognition, acceptance and practice of culture, forming a benign relationship of mutual promotion between individuals and culture. For intangible cultural heritage cultural and creative products, cultural identity is the core driving force for consumers to accept and love products, and also an important foundation for the living inheritance of intangible cultural heritage culture.

2 .Value Orientation of Cultural Identity

Cultural identity is the result of the joint action of individual cognition, emotion, intention and behavior, and its value is mainly reflected in the following three aspects:

First, promote cultural inheritance and innovation. Cultural identity is an emotional bond that can strengthen individuals' cognition and respect for local culture and stimulate the consciousness and responsibility of cultural inheritance. When individuals identify with a certain culture, they will take the initiative to understand, learn and spread the culture, and innovate on the basis of inheritance, endowing traditional culture with new forms and vitality.

Second, enhance individual cultural identity. Under the background of globalization, cultural identity can help individuals clarify their own cultural identity and social positioning and form stable self-cognition. By contacting and using cultural and creative products with local cultural characteristics, individuals can obtain a sense of cultural belonging, resist the impact of foreign culture and enhance cultural confidence.

Third, improve social cohesion. Cultural identity can cohesion group consensus, enhance national centripetal force and reduce cultural estrangement and value differences. Common cultural memories and value pursuits can closely connect different individuals and provide strong spiritual support for social stability and development.

It can be seen that cultural identity, as a research perspective, can construct a clear logical framework for intangible cultural heritage cultural and creative design, make the design more targeted and value-oriented, and finally achieve the goal of “carrying culture with objects and educating people with culture”(Wang Yuan,2021).

III. Value Construction of Xiqin Embroidery Cultural and Creative Products

As a bridge connecting tradition and modernity, intangible cultural heritage and the public, Xiqin

Embroidery cultural and creative products have multi-dimensional and multi-level values. Based on cultural identity theory and combined with the cultural connotation and artistic characteristics of Xiqin Embroidery, this study constructs its value system from four dimensions: cultural value, aesthetic value, educational value and entertainment value.

1. Cultural Value: Contemporary Inheritance of Historical Context

Cultural value is the core value of Xiqin Embroidery cultural and creative products, playing the role of a bridge connecting history and contemporary times, tradition and modernity (As shown in Fig.1) . Xiqin Embroidery originated from sacrificial costumes and court decorations in the Shang and Zhou dynasties, developed in the Qin and Han dynasties, flourished in the Tang and Song dynasties, and matured in the Ming and Qing dynasties. Its development process is closely linked with the evolution of Qin culture. It is not only a folk craft, but also a “living fossil”of the history and culture of Guanzhong area, carrying rich historical information and cultural memories(Liu zong-ming and WengHai-Feng,2025).

Fig1. Xiqin Embroidery

The cultural value of Xiqin Embroidery is mainly reflected in three aspects: first, the inheritance of historical context. Through the innovative application of traditional patterns, colors and needlework, the 3,000-year history of Qin culture is integrated into modern products, allowing consumers to feel the weight of history in the process of use; second, the spread of cultural symbols. Patterns such as tigers, peonies, cloud patterns and meander patterns in Xiqin Embroidery all have specific cultural meanings. For example, tigers symbolize exorcising evil and suppressing evil, peonies symbolize wealth and auspiciousness, and pomegranates symbolize many children and many blessings. These cultural symbols are widely spread through cultural and creative products; third, the continuation of cultural spirit. The spiritual qualities of the people in Guanzhong area, such as bold and simple, hardworking and brave, optimistic and upward, embodied in Xiqin Embroidery, can be passed on to contemporary consumers through products, realizing the intergenerational inheritance of

cultural spirit(Yang Fei -Yu,2024).

2. Aesthetic Value: Modern Expression of Regional Art

Aesthetic value refers to the basic aesthetic attribute that things can satisfy people's needs. “The generation of aesthetic value is conditioned on the shaping of external things on the one hand, and on the shaping of human senses and psychology on the other hand. Only in the correspondence and isomorphism of the two can people perceive the beauty of things”(Xu Heng-Chun, 2006). Xiqin Embroidery has unique regional aesthetic characteristics. Its bold and unrestrained shapes, bright and strong colors and rich and varied needlework form an artistic style completely different from that of Jiangnan embroidery.

The aesthetic value of Xiqin Embroidery cultural and creative products is reflected in three levels: vision, touch and overall artistic conception. At the visual level, through the abstract simplification of traditional patterns and the modern reconstruction of colors, a visual effect with both traditional charm and modern sense is created to meet the aesthetic needs of contemporary consumers; at the tactile level, through the technological transformation of traditional needlework, such as transforming seed stitch into three-dimensional printing and gold-wrapping embroidery into bronzing technology, the texture of embroidery is retained, bringing rich tactile experience to consumers; at the overall artistic conception level, Xiqin Embroidery cultural and creative products create a strong Qin style and charm through the organic combination of shape, color and technology, allowing consumers to feel the unique charm of Qin culture in the aesthetic experience(Qian Hai-Qing,2020).

3. Educational Value: Concrete Communication of Cultural Knowledge

Xiqin Embroidery contains rich historical and cultural knowledge and traditional craft skills, and has high cultural and educational functions. Different from the abstractness of book knowledge, cultural and creative products present cultural content in a concrete and visual way, allowing the public to learn cultural knowledge and improve cultural literacy imperceptibly in the process of use and appreciation.

For teenagers, the educational value of Xiqin Embroidery cultural and creative products is particularly prominent. Teenagers are in a critical period of value formation(Dong Wen-qian and Ge Lou,2025). By contacting Xiqin Embroidery cultural and creative products with novel designs and strong interest, their curiosity and desire to explore traditional culture can be stimulated. For example, stationery and toys with Xiqin Embroidery patterns can allow teenagers to understand the historical origin, pattern meaning and production technology of Xiqin Embroidery in daily study and play; while embroidery DIY material packages can allow teenagers to experience embroidery technology in person and cultivate their hands-on ability and innovative thinking. For adult consumers, Xiqin Embroidery cultural and creative products can enrich their cultural life, improve their aesthetic taste and enhance their cognition and identity with traditional culture.

4. Entertainment Value: Diversified Satisfaction of Emotional Experience

Entertainment value not only refers to the way of obtaining value in the process of leisure and relaxation, but also reflects its positive significance of stimulating creativity and imagination(Zhang Jia-Min,2026). In the fast-paced modern life, consumers pay more and more attention to the emotional experience and interactivity of products. The entertainment value of Xiqin Embroidery cultural and creative products is realized through the interesting, interactive and participatory design.

At the visual level, through cartoon and cute design techniques, traditional Xiqin Embroidery patterns are transformed into lovely IP images, such as “Qin Xiaohu” and “Qin Mudan”, bringing consumers a relaxed and pleasant visual experience; at the interactive level, develop spliceable and combinable embroidery decorative paintings, educational toys with embroidery elements and other products, allowing consumers to have fun in hands-on operation; at the experience level, through carrying out embroidery experience courses, intangible cultural heritage inheritor meetings and other activities, allowing consumers to participate in the creation process of Xiqin Embroidery in person and obtain a sense of achievement and satisfaction from creation. This multi-dimensional entertainment experience can shorten the distance between consumers and Xiqin Embroidery culture and deepen their cognition and identity with the culture in a relaxed and pleasant atmosphere(Wang Xin-xin,2024).

IV. Design Innovation Paths and Practical Cases of Xiqin Embroidery Cultural and Creative Products

Based on the above four-dimensional value system and combined with the cultural connotation and artistic characteristics of Xiqin Embroidery, this study proposes three design innovation paths of Xiqin Embroidery cultural and creative products from the aspects of symbolic image design, branded series design and experiential interactive design, and implements three physical designs: Qin Xiaohu Portable Bookmark, Qin Style Pattern Silk Scarf and Intangible Cultural Heritage DIY Embroidery Material Package (Fig.2,Fig.3,Fig4) .The design is generated based on LoRA model training, and the same applies hereinafter (Shi Wen-qi,2025) .

1. Symbolic Image Design: Extraction and Translation of Cultural Genes

Symbols are visual and cultural carriers that carry meanings and can refer to and convey cultural connotations. “Cultural identity is premised on the identification of cultural symbols and based on the identification of cultural identity, and its core is the cultural subject's choice and recognition of cultural values”. The core of Xiqin Embroidery symbolic image design is to extract representative cultural genes and transform them into visual symbols that meet modern aesthetic needs through scientific translation methods.

First, construct a Xiqin Embroidery cultural symbol library. Through field investigation and literature

research, systematically sort out the patterns, colors and needlework of Xiqin Embroidery, and screen out symbolic elements with regional identification and cultural representation. Pattern symbols mainly include auspicious animals (tiger, lion, kylin), flowers (peony, lotus, pomegranate), geometry (cloud pattern, meander pattern, water pattern); color symbols mainly include traditional five colors such as cinnabar red, bright yellow, navy blue, grass green and ink black; needlework symbols mainly include seed stitch, gold-wrapping embroidery, appliqué embroidery, plain stitch, etc. Second, translate and reconstruct the extracted symbols. Adopt the methods of abstract simplification, deconstruction and recombination and semantic translation to retain the core cultural connotation of the symbols while removing cumbersome details to adapt to the needs of modern design. Finally, apply the translated symbols to product design. Select appropriate symbolic elements and application methods according to the function and positioning of different products(Shi Wen-Qi,2023)

Case 1: Qin Xiaohu Metal Bookmark (Fig.2) Based on the classic town house tiger pattern of Xiqin Embroidery for symbol extraction, the prototype is taken from the tiger head shape of the old embroidery piece in Longxian County, Baoji. The iconic features of big round eyes, wide mouth and short forehead lines are retained, redundant hair details are eliminated, and flat abstract reconstruction is carried out to shape the "Qin Xiaohu" IP image. The main body adopts brass etching process, and the local edge is embossed with concave and convex to imitate the texture of gold-wrapping embroidery. The color matching uses Xiqin cinnabar red paint to embellish the eyes. The product is oriented to student groups, realizes daily touch through stationery carriers, completes the cognitive accumulation of Xiqin auspicious animal culture in use, and implements cultural and educational value.

Fig 2. Qin Xiaohu Metal Bookmark Rendering

Note: The design retains the core characteristics of Xiqin Embroidery tiger pattern and adopts modern metal craft. Source: Author's design.

2. Branded Series Design: Systematic Transmission of Cultural Value

Branding is an important means to improve the market competitiveness and cultural influence of cultural and creative products. The branded series design of Xiqin Embroidery cultural and creative products aims to systematically transmit the cultural value of Xiqin Embroidery and enhance consumers' brand identity and loyalty by creating a unified brand image and product matrix. Establish the main brand line of “Qin Style Elegance · Craftsmanship Inheritance”, divide into three product series: Auspicious Animals, Blooming Flowers and Craftsmanship, and unify the color system and visual specifications(Chen Si-xing,2025).

Case 2: Qin Style Peony Cloud Pattern Silk Scarf (Fig.3) Belonging to the "Blooming Flowers and Prosperity" series, select Xiqin Embroidery peony and rolling cloud patterns as the core visual elements, break up the original full-spread traditional composition, split the flower units for dislocation recombination, improve the original high-saturation color matching, reduce the purity of red and green, and adapt to modern dressing aesthetics. The fabric is made of 16 momme mulberry silk, the edge is digitally printed to simulate the outline of appliqué embroidery, and the local precision machine embroidery reproduces the particle texture of seed stitch. The product is oriented to urban youth and cultural tourists, and can be used as a scarf, hair band and decorative accessory. It unifies the brand visual language, forms brand recognition through serialized products, and constructs emotional identity from the level of wearing aesthetics.

Fig 3. Qin Style Peony Cloud Pattern Silk Scarf Rendering

Note: The design combines digital printing and machine embroidery to restore the texture of Xiqin Embroidery.Source: Author's design.

3. Experiential Interactive Design: Deep Construction of Cultural Identity

Experiential interactive design is a design method that focuses on audience participation and interactive experience. It constructs a multi-sensory and immersive interactive relationship between people, objects and space, allowing people to change from passive viewing to active perception, thereby forming profound cultural memory and emotional identity. Implement the design from three layers: physical DIY, offline experience and digital interaction(Wang Juan.2026).

Case 3:Mini Xiqin Embroidery DIY Experience Material Package (Fig. 4). Classified into the "Craftsmanship Embroidery Art" experience product line, it contains cut linen base, color-divided embroidery threads, simple embroidery hoop and needlework instructions. The patterns select two classic simplified patterns: Qin Xiaohu and Small Pomegranate, and the supporting tutorials mark two core needlework of Xiqin: plain stitch and seed stitch. The size is controlled at 10cm×10cm, and the finished product can be made into a refrigerator magnet or key pendant. The product focuses on hands-on participation attributes and is suitable for primary and secondary school club activities and intangible cultural heritage research classes. The process of users embroidering by themselves realizes the transformation from passive viewing to active practice, and completes the three-layer cultural identity closed loop of cognition-emotion-behavior.

Fig 4. DIY Embroidery Material Package Rendering

Note: The design simplifies the embroidery process and is suitable for beginners to experience.

Source: Author's design.

V. Conclusion and Prospect

From the perspective of cultural identity, this study deeply excavates the cultural connotation and artistic characteristics of Xiqin Embroidery, constructs a four-dimensional value system of culture, aesthetics, education and entertainment for Xiqin Embroidery cultural and creative products, and proposes three design innovation paths: symbolic image design, branded series design and experiential interactive design. The practicability of the design paths is verified through three practical cultural and creative cases. The research shows that Xiqin Embroidery, as an important carrier of Qin culture, contains rich cultural and artistic values. Through scientific and systematic design innovation, it can be transformed into cultural and creative products that meet modern lifestyle and aesthetic needs. These products can not only meet consumers' material and spiritual needs, but also enhance the public's regional cultural identity and national pride imperceptibly, and promote the living inheritance of excellent traditional Chinese culture.

Although certain achievements have been made in this study, there are still some deficiencies: first, there is a lack of large-scale empirical research on the market demand and consumer preference of Xiqin Embroidery cultural and creative products; second, the research on the digital transformation and innovative application of Xiqin Embroidery needlework technology is not deep enough; third, the industrialization transformation path of design results needs to be further explored.

Future research can be carried out from the following aspects: first, carry out extensive market research, subdivide the needs of different circles such as teenagers, cultural tourism consumption and household products, and optimize the product design direction; second, combine new technologies such as 3D printing and intelligent digital weaving to expand the cross-border application of embroidery elements in daily use and clothing cultural and creative products; third, build a collaborative research and development platform of "local intangible cultural heritage workshop+university design + local cultural and creative enterprises" to accelerate the landing and mass production of design results.

References

Chen, S. X. (2025), “Brand Building and Practice of Xiqin Embroidery”, Master's Thesis, Xi'an Shiyou University. https://doi.org/10.27400/d.cnki.gxasc.2025.000597

Dong, W. Q. and L. Ge (2025), “Research on Teenagers' Educational Museum Cultural and Creative Product Design Based on Cognitive Psychology”, Design, 38(15), pp.85-89. https://doi.org/10.20055/j.cnki.1003-0069.002861

Liang, Z. Z. (2023), “On the Theoretical Connotation, Value Implication and Practical Direction of Cultural Identity”, Research on Cultural Soft Power, 8(3), 89-100.https://link.cnki.net/doi/10.19468/

j.cnki.2096-1987.2023.03.006

Liu, Z. M. and H. F. Weng (2025), "Research on Xiqin Embroidery Cultural and Creative Product Design Based on Kansei Engineering and TOPSIS Method", Furniture & Interior Design, 32(11), pp.38-44. https://doi.org/10.16771/j.cn43-1247/ts.2025.11.007

Qian, H. Q. (2020), "Research on the Development of Xiqin Embroidery Fabric Art Based on Design Innovation", Progress in Textile Science and Technology, (6), pp.59-61.

Shi, W. Q., L. Han, F. Cheng et al. (2025), "Research on the Design of Elderly Jogging Sneakers Based on Stable Diffusion Model", Leather and Chemicals, 42(6), pp.172-174. https://doi.org/10.19398/j.cnki.1673-0356.2025.06.035

Shi, W. Q., M. Qu, F. Cheng et al. (2023), "Sensibility Design of Banpo Painted Pottery Patterns on Young Women's Leather Bags", Leather and Chemicals,40(6),pp.8-12. https://doi.org/10.19398/j.cnki.1673-0356.2023.06.003

Wang, J., G. Li, Y. X. Yang et al. (2026), "From Functional Satisfaction to Value Resonance: Research on Agricultural Product Packaging Design Oriented to Consumer Experience under the Background of Rural Revitalization", Zhuangshi, (1), pp.40-47. https://doi.org/10.16272/j.cnki.cn11-1392/j.2026.01.016

Wang, X. X. (2024), "Application of Xiqin Embroidery Patterns in Pet Apparel", Dyeing and Finishing Technology, 46(9), pp.88-90. https://doi.org/10.19398/j.cnki.1671-4466.2024.09.028

Wang, Y. (2021), "The Formation Mechanism of Cultural Identity in Intangible Cultural Heritage Inheritance". In Y. Wang (Ed.), Research on Cultural Identity of Intangible Cultural Heritage: Based on China's Practical Experience. Shanghai: Shanghai Jiao Tong University Press, pp. 45-72.

Yang, F. Y. (2024), "Research on the Application of Xiqin Embroidery in Jewelry Design", Master's Thesis, Beijing Institute of Fashion Technology. https://doi.org/10.26932/d.cnki.gbjfc.2024.000028

Zhang, J. M. (2026), "Research on Value Construction and Design Innovation of Jingdezhen Ceramic Cultural and Creative Products from the Perspective of Cultural Identity", Ceramics, (5), pp.89-91. https://doi.org/10.19397/j.cnki.ceramics.2026.05.058

Journal of Advanced Academic Research and Studies 高等学术研究期刊
Vol. 3, No.6, 2026 (pp. 36-55)
http://www.nlbaeai.org/
ISSN 3006-4007 (Print)
ISSN 3006-4015 (Online)

From "Overall Pass" to "Targeted Strategies": A Data-Driven Reconstruction of College Physical Education through "Precision Intervention"— A Case Study of the 2024 Student Physical Fitness Test Results of a University

Chuan Zhang[a]
[a] Department of Physical Education, Shaanxi University of International Trade and Commerce

Received 6 March 2026, Revised 2 May 2026, Accepted 27 June 2026

Abstract

Purpose – This paper presents a data-driven curriculum reform to better promote the all-round physical health of college students and shifts from a "pass-oriented" model to a "targeted strategy" model.
Design/Methodology/Approach – Using a university's 2024 fitness test data, this study will analyze nine core items (such as BMI, vital capacity, 50m sprint), examining pass rates, project weaknesses, grade differences, and gender distribution to identify main deficiencies and propose a precision-intervention curriculum plan.
Findings – The data show that the university is "qualified overall but with low excellence/good rates, prominent project weaknesses, and uneven grade development". Key problems include a body composition imbalance (19% overweight/obese, 9% underweight), severe upper-body weakness (52% of male participants failed the pull-up test), cardiorespiratory deficiency (27% of male participants failed the 1000m run, 22% of female participants failed the 800m run), and weak explosive power (16% of standing long jump failures, 3% excellence rate). Grade distribution is uneven, and juniors perform the worst (0.3% excellent, 6.8% failed, average score 70.79).
Research Implications – Five strategies have been put forward in this paper: stratified body composition intervention, project-specific strength training, spatial/temporal safeguards for grade balance, interest-driven exercise, and enhanced monitoring. Based on the above research, adjust the teaching plan and solve problems in student health; at the same time, develop a rational, individualized physical education system.

Keywords: Data-driven; College Physical Education; Precision Intervention; Curriculum Reconstruction
JEL Classifications: I23,I12,C81

[a] First Author, E-mail:405931846@qq.com
Ⓒ 2023 The NLBA Eurasian Institute Limited. All rights reserved.

I. Introduction

In line with the spirit of the Opinions of the Ministry of Education and the Four Other Departments on Implementing the Plan to Strengthen Students' Physique and the Basic Standards for Physical Education in Higher Education Institutions, the Education Department of Shaanxi Province has issued the Three-Year Action Plan for Improving Students' Physical Health in Shaanxi Province. Therefore, the plan will stipulate that universities need to develop a "one school, one policy" special action plan for improving student health. Given the above, the university has published the "Implementation Plan for the 'One School, One Policy' Student Physical Fitness Testing Work" in 2026 and put forward plans to build a scientific and standardized physical fitness testing work system. Currently, most of the physical education curricula in schools use the "single standard, single teaching" approach. Although this can guarantee a high pass rate, it fails to address the deficiencies in individual weaknesses and has thus led to the current situation of "overall qualification but poor excellence and good rates, with prominent shortcomings in project-specific skills" (Li, M., & Zhang, H., 2025). Therefore, this paper takes the 2024 student physical fitness test data from a university as its research subject. Based on the above analysis, a "targeted strategy" curriculum reconstruction plan will be implemented with data. The goal is to change the teaching model from a "pass-oriented" way of teaching to "precision intervention" (Sun, Q., & Zhou, L., 2025), and to provide a practical reference for the reform of college physical education.

II. The Data Foundation for Curriculum Reconstruction

The data of the physical fitness test in this paper meet the requirements listed in the National Student Physical Health Standard (2014 Edition) (hereinafter referred to as the "Standard"). The top of the standard will be used to assess the actual health levels and physical fitness of the students. The subjects of this test were the students at a particular university in 2024, and the three dimensions of the test items were body morphology, function and quality.

1. Test Items and Weights

According to the requirements of the Standard, the test items and their corresponding weights for all university grades are as follows: Body Mass Index (BMI) accounts for 15%, Vital Capacity for 15%, the 50-meter Sprint for 20%, the Standing Long Jump for 10%, Sit and Reach for 10%, Pull-ups (male) / 1-minute Sit-ups (female) for 10%, and the 1000-meter Run (male) / 800-meter Run (female) for 20%.

Based on the analysis of the weight structure, endurance and speed items (the middle-long distance run and 50-metre sprint) together account for 40% of the total, and are therefore the main indicators of overall fitness. At the same time, strength-based items (pull-ups/sit-ups and the standing long jump) together make up 20%

and are basic requirements for upper and lower limb strength and explosive power. The weights assigned will indicate which part of the curriculum needs to be strengthened in light of the collected data, thus adjusting teaching content accordingly.

2. The Correlation between Scoring Standards and Curriculum Reconstruction

All individual event scores are based on the grade-specific scoring tables in the Standard. For example, male university students need to complete ≥ 17 repetitions (for freshmen and sophomores) or ≥ 18 repetitions (for juniors and seniors) of pull-ups to be considered "excellent", and the passing line is 10 repetitions. The passing time for the 800m run of female students in the freshmen and sophomore classes was no more than 4'34", and for juniors and seniors, it was no more than 4'32". The four levels of the overall score rating are: Excellent (≥ 90.0 points), Good ($80.0-89.9$ points), Pass ($60.0-79.9$ points), and Fail (≤ 59.9 points).

The above scoring norms and weightings serve as the basis for determining the students' physical weaknesses and revising the curriculum. These seemingly concrete indicators and passing grades are, in fact, a reflection of the current "results-oriented, process-neglecting" mode of the curriculum: students only need to achieve the standard without specific attention to their weak links (Chen, X. F. and Zhao J., 2024. This is precisely the logical beginning of the transition in this paper from "general qualifications" to "specific strategies"; only by accurately identifying the shortcomings in the project through data can we provide a practical foundation and direction for the following "precision intervention" curriculum reconstruction.

3. Shortcomings of the Existing Curriculum System

The present curriculum mainly follows the model of "unified standards and unified teaching". Although it has achieved a high all-round passing rate, it is not very precise in addressing and improving students' weak spots. For instance, pull-ups are only assessed by the "number of repetitions", and there is no specific curriculum for "progressive strength training". Similarly, middle- and long-distance running exercises are often done without purpose, and no personalised training plans are based on heart rate monitoring or pace control. The "results-oriented, process-neglecting" structure of this curriculum cannot address the deficiencies in learning identified by the data, such as the lack of upper-body strength in male students and poor endurance among female students. Thus, it can be seen that there is a pressing need to move towards a "targeted strategies" curriculum reform based on "data-driven" approaches.

II. Research Methods

Based on the 2024 student physical fitness test data at a university, this paper will study the current situation of students' physical health systematically. Based on the above data, while the overall pass rate for students is

90 per cent, many are not performing to a high standard and failing to achieve excellent results. A 52% failure rate for male pull-ups is a typical case; there are also obvious deficiencies in the standing long jump and middle/long-distance running events, and uneven grades of development. Therefore, this paper proposes building a "data-driven and precise" curriculum reconstruction plan to change from a "pass-oriented" approach to one of "precision intervention", thus providing a practical path for the reform of college physical education.

III. Analysis of Physical Fitness Test Data and Results

1. Overall Pass Rate of the University's Physical Fitness Test

A comprehensive scan of the physical fitness test data for students at a university in 2024 was carried out to identify the "pathologies" in students' physical health under the current physical education curriculum system more accurately, thereby providing data support and a logical starting point for subsequent curriculum reconstruction. As Based on the above data, the general pass rate of the students' physical fitness tests at the university is over 90% and relatively high. However, the excellent rate is only 0.4% (62 students), and the good rate is only 9.6% (1,648 students); more than 85% of the students' scores are in the passing range. It shows that the current state is "qualified overall but lacking in excellence and good performance"; this "flattened" performance structure reflects a deficiency in an effective mechanism for "precision intervention" in the current physical education curriculum to help students advance to a higher level of physical fitness. The design of the curriculum and training models have failed to motivate students to learn more effectively, as shown in the Figure 1 below.

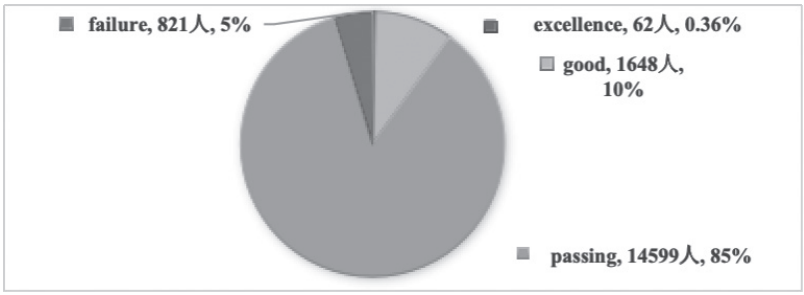

Figure 1. Distribution Chart of Overall Physical Fitness Test Data for the School
Source: Compiled by the author based on university physical fitness test data

2. Proportion of Failing Students by Gender, as Detailed in the Table Below

A total of 821 students were found to have failed or been unable to pass the comprehensive grades at

the university. Among this group, there were 408 men and 413 women; thus, both sexes accounted for an equal proportion of the total failures, at 50% each. Given that the two genders have different strengths and weaknesses, suitable countermeasures can be devised for each gender based on this analysis, rather than employing a single policy for all students.

Table 1. Proportion of Male and Female Students Failing the Test

Gender	Excellence Rate	Good Rate	Pass Rate	Failure Rate
Male	0%	3%	25%	2%
Female	0%	6%	61%	2%

Source: Compiled by the author based on university physical fitness test data

Since the total number of male and female students in the university was not the same, the proportion of female students who passed the test was relatively higher than that for male students.

Table 2. Comparison of unqualified rates across individual test items

Grade	BMI	Vital Capacity	50m Sprint	Standing Long Jump	Sit and Reach	800m	Vital Capacity	50m Sprint	Standing Long Jump
First Year	182	209	225	628	210	487	222	58	332
Second Year	224	218	229	668	155	640	301	26	376
Third Year	339	437	351	879	225	855	461	51	1814
Fourth Year	239	317	246	489	91	613	330	37	2696
Total Failures	984	1181	1051	2664	681	2595	1314	172	5218
Failure Rate	6%	7%	6%	16%	4%	15%	8%	1%	30%

Source: Compiled by the author based on university physical fitness test data

Based on the analysis of the failure rates for the individual test items, three serious deficiencies have been found and must be corrected urgently. Statistics of failing items show that the Standing Long Jump, the 800-metre run for female students, and the Pull-ups for male students have a high number of failures and account for a relatively large proportion.

The data in Table 2 show that:

Significant Deficiencies in Upper Body and Core Strength: The failure rate for male pull-ups is as high as 52%, and this is directly due to the inadequacy of the strength training module in the current physical education curriculum.

Obvious Deficiencies in Explosive Power and Body Coordination: The failure rate of the standing long jump is 16%, and the excellence rate is only 3%. This shows that there are deficiencies in the content or teaching methods of the course for jumping, speed and coordination training.

Urgent Need to Improve Cardiorespiratory Endurance and Willpower: The failure rates for middle- and long-distance running by both male and female students remain high. Therefore, it can be concluded that the density, strength or appeal of endurance exercises in the curriculum needs to be enhanced because they have not effectively improved students' cardiorespiratory function and exercise persistence.

3. Failure Rates by Test Item, as Shown in the Table Below

According to the statistics of failing items, the four physical fitness test items that have a high number of failures and account for a considerable proportion are BMI, Standing Long Jump, the 800-meter run (female), and Pull-ups (male). as shown in the Figure 1 below:

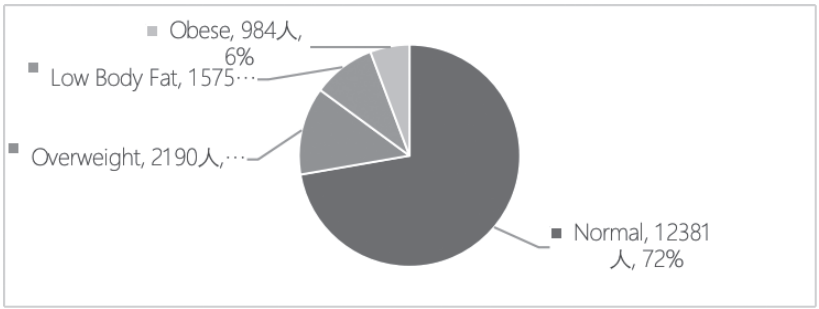

Figure 2. Test Data for Body Fat (BMI)

Source: Compiled by the author based on university physical fitness test data

Based on the data in the pie chart, there is a problem of unbalanced body composition among students: 72% of the students are of normal weight, but a combined 19% of the students are overweight (13%) and obese (6%), and underweight students account for 9%. Nearly one-third of the students have an abnormal body composition and thus require strengthening of dietary and exercise management through curriculum intervention.as shown in the Figure 2 above:

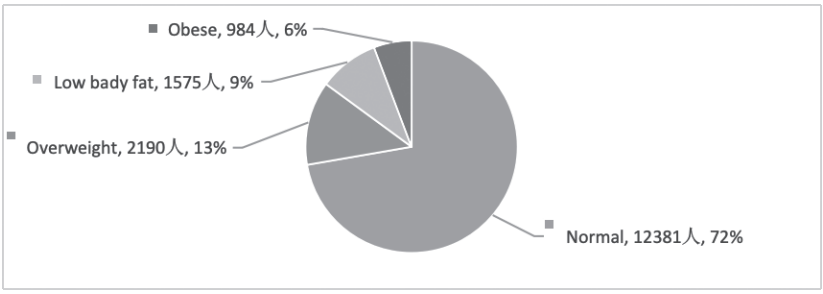

Figure 3. Test Data for Vital Capacity
Source: Compiled by the author based on university physical fitness test data

Based on the pie chart data, there is a problem of uneven body composition among students: 72 per cent of the students have a normal weight, but overweight (13 per cent) and obese (6 per cent) students combined account for 19 per cent, and underweight students account for 9 per cent. Almost a third of the students have abnormal body composition and require strengthening of dietary and exercise management in the curriculum.as shown in the Figure 3 above:

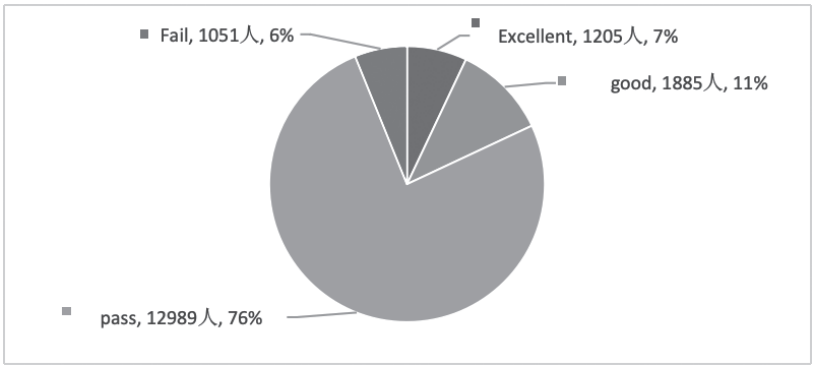

Figure 4. Test Data for the 50-meter Sprint
Source: Compiled by the author based on university physical fitness test data

As shown in the pie chart data, the general results of the 50-meter sprint were relatively good; a large number of students passed (12,989 students, making up 76%), and those who received a "good" grade (1,885 students, 11%) and an "excellent" grade (1,205 students, 7%) together accounted for 18%, while only 1,051 students (6%) failed. It can be seen that the foundation of speed-training education is relatively weak.as shown in the Figure 4 above:

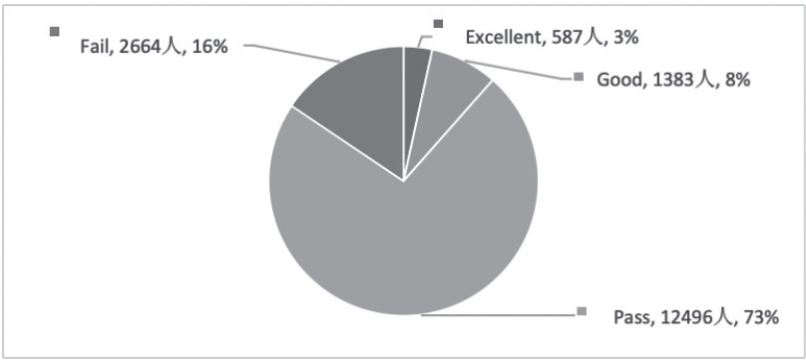

Figure 5. Test Data for the Standing Long Jump
Source: Compiled by the author based on university physical fitness test data

Based on the data in the pie chart, the distribution of results for the standing long jump shows a "concentrated in the passing range, with prominent weaknesses": 12,496 students passed (accounting for 73%), but the number of students who failed reached 2,664 (accounting for 16%), and the excellence rate was only 3% (587 students). Given that more than 70 per cent of the students' scores were in the passing range, it can be assumed that their training in explosive power and coordination was inadequate.as shown in the Figure 5 above:

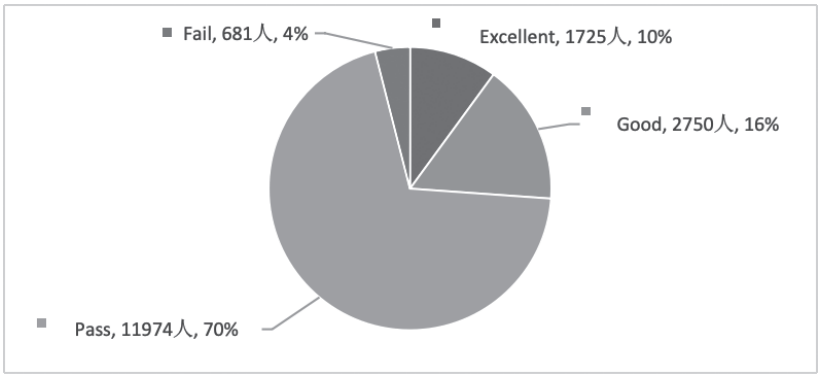

Figure 6. Test Data for the Sit and Reach
Source: Compiled by the author based on university physical fitness test data

Based on the pie chart data, the general performance in the sit-and-reach test was relatively good: 11,974 students passed (accounting for 70%), and among those who achieved a "good" rating (2,750 students, 16%) and an "excellent" rating (1,725 students, 10%), together they accounted for 26%, only 681 students (4%) failed. This shows that the students are relatively flexible, and thus the curriculum has achieved a certain extent of flexibility.as shown in the Figure 6 above:

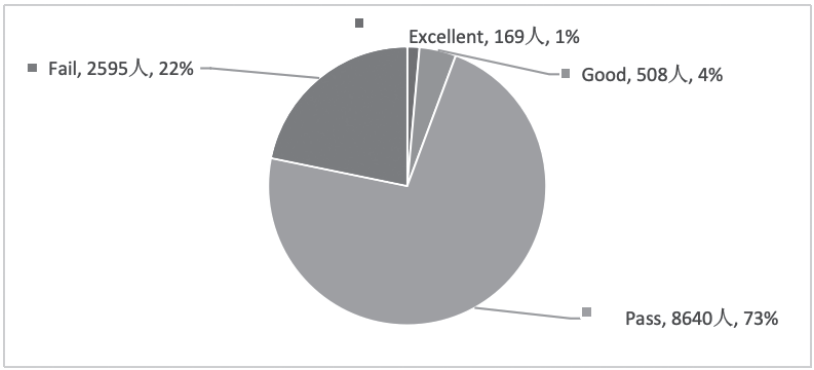

Figure 7. Test Data for the 800-meter Run

Source: Compiled by the author based on university physical fitness test data

Based on the data in the pie chart, the distribution of results for the female students' 800-meter run shows a "predominantly passing, with a scarcity of high scores" pattern: 8,640 students passed (73%), and the number of failures was 2,595 (22%). On the other hand, only 508 students were rated "good" (4%) and 169 were rated "excellent" (1%), for a total of just 5%. The above data show that the students' cardiorespiratory endurance and willpower are quite low. It is one of the "three major weaknesses" that need to be addressed urgently in the curriculum reform, and precise interventions will be made through ways such as increasing the intensity of endurance training and diversifying exercise forms.as shown in the Figure 7 above:

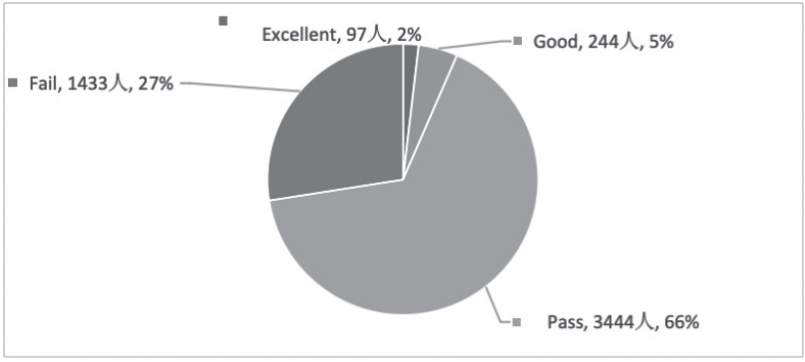

Figure 8. Test Data for the 1000-meter Run

Source: Compiled by the author based on university physical fitness test data

According to the chart, the results of the 1000m run for male students were significantly lower. Specifically, 3,444 participants were able to pass this test and accounted for 66% of the group; 1,433 individuals, or 27%, did not reach the minimum standard. Only 244 examinees were rated as "good" (5%), and only 97 received

an "excellent" score (2%); thus, fewer than 7% of all test-takers achieved the higher performance levels. With nearly one-third of the students falling into the failing category, it can be seen that there is a serious problem of low cardiorespiratory fitness among the male students. The above shortcomings are serious deficiencies that must be addressed urgently in the reform of the curriculum, and measures such as enhancing the depth and student participation in endurance training need to be taken.as shown in the Figure 8 above:

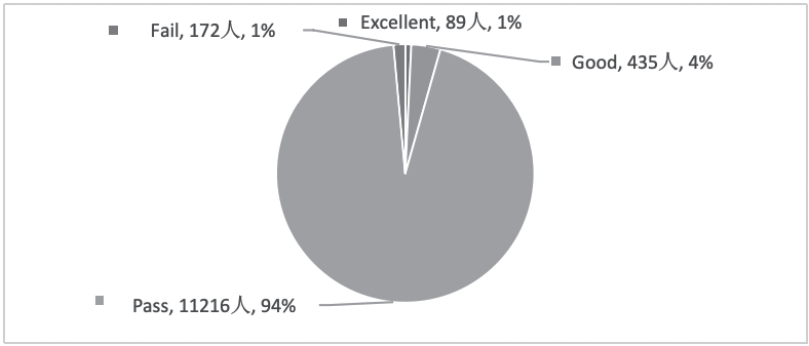

Figure 9. Test Data for the 1-minute Sit-ups

Source: Compiled by the author based on university physical fitness test data

According to the data in the statistical charts, the results of the sit-up tests for female students are distributed in a relatively narrow range, and most of the students have passed; a total of 11,042 have passed. Among the 11,953 female participants, the entire passing rate was 94%. However, the number of students who received a "Good" grade was only 435, making up about 4%, and the number of those with an "Excellent" grade was even lower at just 108, or about 1%. Although the overall passing rate of this item is relatively high, 172 students still failed and accounted for 1% of the total. The proportion of students with "Good" and "Excellent" ratings combined is less than 5%. It can be seen that the main strength level of most female students is still close to the passing mark and has not been significantly improved. The present training system does not have a progressive guidance path for strengthening the core muscles, so most students are unable to reach a higher level in terms of physical fitness. Therefore, there is a significant shortcoming in the curriculum's construction: it does not help students move from "meeting the basic requirements" to "achieving higher-order thinking abilities".as shown in the Figure 9 above:

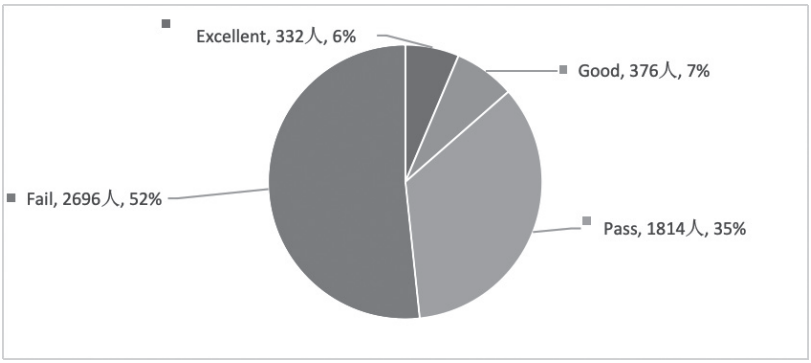

Figure 10. Test Data for Pull-ups

Source: Compiled by the author based on university physical fitness test data

According to the data in the pie chart, the distribution of results for the male students' pull-ups is very serious; there is "polarisation and a large number of failures", with the number of students who failed reaching 2,696 and accounting for a considerable 52%, indicating that more than half of the students did not meet the required standard. Only 1,814 students passed (35%), and the number of students who achieved a "good" rating (376) and an "excellent" rating (332) combined was only 13% (about 414 students). This data shows that male students have a significant lack of upper body and core strength, and this is a fundamental problem that must be addressed in the revision of the curriculum urgently. Progressive strength training is one type of specific reinforcement for special groups.as shown in the Figure 10 above:

IV. Overall Situation by Grade Level

Table 3. Analysis of the First-Year (Freshman) Cohort

Gender	Number	Excellent	Good	Pass	Fail	Excellence Rate	Good Rate	Pass Rate	Failure Rate
Male	1181	13	162	931	75	0%	4%	22%	2%
Female	2964	3	294	2582	85	0%	7%	62%	2%
Total	4145	16	456	3513	160	0%	11%	85%	4%

Source: Compiled by the author based on university physical fitness test data

A total of 16 first-year students achieved an “excellent” rating, 456 achieved a “good” rating, 3,513 passed, and 160 failed. The good rate was 11%, the pass rate was 85%, and the failure rate was 4%.as shown in the Table 3 above.

Table 4. Analysis of the Second-Year (Sophomore) Cohort

Gender	Number	Excellent	Good	Pass	Fail	Excellence Rate	Good Rate	Pass Rate	Failure Rate
Male	1197	17	160	947	73	0%	4%	23%	2%
Female	2908	4	258	2567	79	0%	6%	63%	2%
Total	4105	21	418	3514	152	1%	10%	86%	4%

Source: Compiled by the author based on university physical fitness test data

A total of 21 second-year students achieved an “excellent” rating, 418 achieved a “good” rating, 3,514 passed, and 152 failed. The excellence rate was 1%, the good rate was 10%, the pass rate was 86%, and the failure rate was 4%.as shown in the Table 4 above.

Table 5. Analysis of the Third-Year (Junior) Cohort

Gender	Number	Excellent	Good	Pass	Fail	Excellence Rate	Good Rate	Pass Rate	Failure Rate
Male	1715	15	165	1352	187	0%	3%	26%	4%
Female	3453	3	295	2989	166	0%	6%	58%	3%
Total	5168	18	460	4341	349	0%	9%	84%	7%

Source: Compiled by the author based on university physical fitness test data

A total of 18 third-year students achieved an “excellent” rating, 460 achieved a “good” rating, 4,341 passed, and 349 failed. The good rate was 9%, the pass rate was 84%, and the failure rate was 7%.as shown in the Table 5 above.

Table 6. Analysis of the Fourth-Year (Senior) Cohort

Gender	Number	Excellent	Good	Pass	Fail	Excellence Rate	Good Rate	Pass Rate	Failure Rate
Male	1125	3	77	968	77	0%	2%	26%	2%
Female	2587	4	237	2263	83	0%	6%	61%	2%
Total	3712	7	314	3231	160	0%	9%	87%	4%

Source: Compiled by the author based on university physical fitness test data

A total of 7 fourth-year students achieved an "excellent" rating, 314 achieved a "good" rating, 3,231 passed, and 160 failed. The good rate was 9%, the pass rate was 87%, and the failure rate was 4%.as shown in the Table 6 above.

IV. Longitudinal Comparative Analysis of Cross-Grade Data at a University

Table 7. Cross-Grade Data Comparison

Grade	Excellence Rate	Good Rate	Pass Rate	Failure Rate	Average Score
First Year	0%	11%	85%	4%	72.18
Second Year	1%	10%	86%	4%	72.04
Third Year	0%	9%	84%	7%	70.79
Fourth year	0%	9%	87%	4%	71.22

Source: Compiled by the author based on university physical fitness test data

The average physical fitness test scores for each grade level were as follows:
First Year > Second Year > Fourth Year > Third Year

Table 7-1. Distribution of the Proportion of First-Year Students Participating in Test Items

Test Item	Excellence Rate	Good Rate	Pass Rate	Failure Rate
BMI	72%	9%	19%	0%
Vital Capacity	14%	16%	65%	6%
50m Sprint	6%	10%	78%	6%
Standing Long Jump	3%	8%	75%	14%
Sit and Reach	11%	15%	69%	5%
800m Run (Female)	1%	4%	73%	22%
1000m Run (Male)	2%	4%	68%	26%
Sit-ups (Female)	1%	4%	93%	2%
Pull-ups (Male)	7%	7%	33%	53%

Source: Compiled by the author based on university physical fitness test data

Table 8. Number of First-Year Students Participating in Each Test Item

Test Item	Excellent	Good	Pass	Fail
BMI	402	957	3006	182
Vital Capacity	494	615	1423	209
Standing Long Jump	361	423	1336	817
Sit and Reach	678	498	1773	209
Pull-ups (Male)	799	155	2754	2776
50m Sprint	591	409	3188	425
1000m Run (Male)	344	246	1121	1433
800m Run (Female)	—	274	2596	613

Source: Compiled by the author based on university physical fitness test data

The total passing rate for first-year students was 96%. According to the analysis of the test items, this group

of students needs to enhance the training for male students in the 1000-meter run and pull-ups to improve their all-around physical fitness. Simultaneously, the endurace-training requirements for female students have been rising.as shown in Table 7 and Table 8 above.

Table 9. Distribution of the Proportion of Sophomore Students Participating in Test Items

Test Item	Excellence Rate (%)	Good Rate (%)	Pass Rate (%)	Failure Rate (%)
BMI	0%	73%	21%	6%
50m Sprint	6%	12%	67%	15%
Standing Long Jump	3%	8%	75%	14%
Sit and Reach	11%	14%	67%	8%
800m Run (Female)	1%	4%	73%	22%
1000m Run (Male)	2%	4%	67%	27%
Sit-ups (Female)	1%	3%	95%	1%
Pull-ups (Male)	9%	14%	38%	39%

Source: Compiled by the author based on university physical fitness test data

Table 10. Number of Sophomore Students Participating in Each Test Item

Test Item	Excellent	Good	Pass	Fail
BMI	224	3001	880	—
Vital Capacity	218	673	2736	309
50m Sprint	478	309	3089	229
Standing Long Jump	—	—	—	640
Sit and Reach	284	433	3028	125
1000m Run (Male)	—	—	—	4065
800m Run (Female)	—	—	—	3064
Sit-ups (Female)	—	—	—	2102

Source: Compiled by the author based on university physical fitness test data

The total passing rate for second-year students was 96%. According to the analysis of the test items, this cohort needs to enhance the training of male students in the 1000-metre run and pull-ups to improve their all-around physical fitness. Simultaneously, endurance exercise needs to be introduced for the female students.as shown in Table 9 and Table 10 above.

Table 11. Distribution of the Proportion of Junior Students Participating in Test Items

Test Item	Excellence Rate	Good Rate	Pass Rate	Failure Rate
BMI	0%	9%	73%	18%
Vital Capacity	7%	17%	65%	11%
Standing Long Jump	3%	8%	75%	14%
Sit and Reach	11%	18%	65%	6%
Pull-ups (Male)	7%	7%	29%	57%
50m Sprint	6%	10%	78%	6%
1000m Run (Male)	2%	4%	67%	27%
800m Run (Female)	1%	4%	73%	22%

Source: Compiled by the author based on university physical fitness test data

Table 12. Number of Junior Students Participating in Each Test Item

Test Item	Excellent	Good	Pass	Fail
BMI	339	3,703	1,126	85
Vital Capacity	437	832	3,417	367
50m Sprint	351	558	3,922	573
Standing Long Jump	136	500	3,671	640
Sit and Reach	604	832	3,057	329
1000m Run (Male)	97	246	1,121	1,433
Pull-ups (Male)	343	352	1,726	2,772
1000m Run (Male)	97	246	1,121	1,433

Source: Compiled by the author based on university physical fitness test data

The total passing rate of third-year students was 93 per cent. Based on the analysis of the test items, it can be seen that the male students in this cohort need to strengthen their training in the 1000-meter run and pull-ups to improve their all-around physical fitness. At the same time, endurance training for female students will also be organised.as shown in Table 11 and Table 12 above:

Table 13. Distribution of the Proportion of Senior Students Participating in Test Items

Test Item	Excellence Rate	Good Rate	Pass Rate	Failure Rate
BMI	0%	9%	73%	18%
Vital Capacity	7%	17%	65%	11%
Standing Long Jump	3%	8%	75%	14%
Sit and Reach	11%	18%	65%	6%
Pull-ups (Male)	7%	7%	29%	57%
50m Sprint	6%	10%	78%	6%
1000m Run (Male)	2%	4%	67%	27%
800m Run (Female)	1%	4%	73%	22%

Source: Compiled by the author based on university physical fitness test data

Table 14. Number of Senior Students Participating in Each Test Item

Test Item	Excellent	Good	Pass	Fail
BMI	802	239	200	166
Vital Capacity	439	317	280	166
Standing Long Jump	17	2777	2617	2617
Sit and Reach	2618	327	90	423
Pull-ups (Male)	49	366	243	668
50m Sprint	1828	113	33	613
1000m Run (Male)	107	243	37	364
800m Run (Female)	274	372	37	613

Source: Compiled by the author based on university physical fitness test data

The total number of fourth-year students who passed was 96%. According to the examination of the test results, this group should increase their training in middle- and long-distance running, including both male and female athletes, to improve their all-around physical fitness.as shown in Table 13 and Table 14 above:

At the level of each grade, the average scores for the physical fitness test showed an inverted "U" shape (First Year 72.18 > Second Year 72.04 > Fourth Year 71.22 > Third Year 70.79). Third-year students performed the worst and had a failure rate of 7%. It is closely related to the increase in academic pressure that students experience at the start of specialized courses, and as a result, their time for independent exercise has significantly decreased. It is also evident that the curriculum system lacks flexibility and adaptability in the organisation of "upper-grade physical education courses". There is no effective curricular transition or support for students moving from "passive participation" in their freshman year to "self-directed management" in their upper years, and thus exercise habits are unlikely to be maintained.as shown in the Table 7 above:

V. Overall Analysis and Curriculum Reconstruction

The physical fitness test data for the university's 2024 cohort shows the main features of students' physical health: "qualified overall, but with a low excellence rate and good rates; prominent weaknesses in projects and uneven grade development". The overall pass rate of 90% was higher than that of other universities in the province, and the pass rate for female students was significantly higher than that for male students. It can be seen that the foundation of the university's physical education courses is solid; however, there are still many deficiencies. The problem of unbalanced body composition is also relatively serious; together, the number of overweight and obese students (3,174) and underweight students (1,575) is about 28.8% of the total population. This shows that students have an unreasonable diet and insufficient exercise time at present. The core deficiencies are muscle strength and cardiorespiratory endurance; for example, 52 per cent of the male pull-up group and 27 per cent of the male 1000-metre run group failed to complete the task, and 22 per cent of the female 800-metre run group failed to complete the task. Therefore, the child is not exercising regularly and lacks strength. The explosive power module has shown poor results, with a 16% failure rate in the standing long jump and only a 3% excellence rate; therefore, strengthening the strength and coordination of the students is urgently required. Grade-level development is uneven; third-year students performed the worst with an excellence rate of 0.3%, a failure rate of 6.8% and an average score of 70.79, which may be due to reduced exercise time under higher pressure from professional course requirements.

Based on the above data, it can be seen that the current physical education curriculum is geared towards "meeting test standards" and thus lacks the conditions for promoting all-around development of students. Therefore, the teaching ideas need to be altered; that is to say, the traditional comprehensive teaching method aiming to raise the overall pass rate should be reformed into targeted-strategy instruction.

The main contents of the curriculum renovation are as follows:

Problem-Oriented: Based on the weaknesses in physical condition identified by data from the "physical

examination report", precisely determine the deficiencies in strength, endurance and explosive power that need to be addressed in the curriculum.

Stratified Intervention: Design differentiated curriculum modules and training plans for students with different levels of physical fitness (obese, underweight), different weaknesses in projects, and different grades.

Data-Driven: Establish a closed-loop system of "testing - analysis - intervention - retesting" to enable data to guide changes in the curriculum and personalised teaching.

Interest Empowerment: By adding new sports, organising challenge competitions and other ways in "hard training" and "smart training", increase the intrinsic motivation for self-directed exercise among students.

VI. Recommendations

Based on the analysis of data and the main ideas of curriculum reconstruction, the following strategies have been proposed:

1. Restructure the Curriculum: Establish a Three-Tier System of “Core Compulsory + Modular Elective + Extracurricular Expansion”

Core Compulsory Module (Targeted Assault): Add weakness items for physical fitness tests, such as pull-ups (for men), standing long jump, and middle/long-distance running, to the compulsory core content of first and second-year physical education courses. Use "progressive training methods" (e.g., incremental pull-ups, variable-speed running) for special reinforcement and ensure that the proportion of class time for these items is no less than 30%.

Modular Elective Module (Stratified Intervention): Offer elective courses based on the needs of different students, such as a "Strength Building Camp" (for students with strength deficiencies), an "Aerobic Fat-Burning Class" (for overweight or obese students), and a "Flexibility Yoga Course" (for underweight students). Thus, specific interventions can be implemented according to a "one-cohort, one-strategy" model.

Extracurricular Expansion Module (Interest-Driven): Form sports interest clubs and introduce new sports such as ultimate frisbee and pickleball. Organise "Campus Joy Run" check-in events and regularly hold "Physical Fitness Challenge Competitions" to motivate students through competition. Add competition results to the curriculum's evaluation system and increase the interest in exercising and competition.

2. Innovate Teaching Methods: Transition from “Uniform Teaching” to “Personalized Prescriptions”

Data Profiling and Dynamic Grouping: Use the results of physical fitness assessments to build a "Digital Profile of Physical Health" for all users.

Learner can know what they are good at and where they need to improve. The three groups of students in class are dynamically divided according to their traits: the "Advancement Cohort", the "Intensification Cohort", and the "Challenge Cohort", and then different classes are taught.

Mission-Oriented and Tiered Advancement: For difficult exercises, such as pull-ups, create a "Four-Stage Challenge System". After completing each stage, provide corresponding rewards and advance the learner in their course to make the improvement more visible and motivating.

Hybrid Instruction and Classroom Expansion: Develop an online "Fitness Booster" application to provide short exercise videos and personalised exercise plans. Students can follow the set-up routines independently after class and record their participation. Teachers can observe the changes in the data provided by the platform and offer feedback; thus, the training organised at school and off-campus will be in line with each other.

3. Optimize Curriculum Evaluation: Shift from “Outcome-Oriented” to “Valuing Process and Value-Added”

Process Evaluation: Include student participation in "leveled challenge tasks", extracurricular exercise check-ins and club activities in the curriculum's process-based evaluation, and increase its weight to 40%.

Value-added evaluation: Focus on the "degree of improvement" in students' physical fitness test data and establish individual honours, such as a "Most Improved Award". For students who performed poorly at first but have shown significant progress, give higher weight to their value-added assessment to motivate the participation of those who are lagging behind.

Based on the curriculum reconstruction above, we hope to create a new physical education ecosystem that is "data-driven, precisely targeted, progressively layered, and integrated across in-class and out-of-class activities". This will help improve the physical health of students and, more importantly, foster their habits and abilities for lifelong exercise, thereby achieving the educational goal of "Health First".

References

Li, M., & Zhang, H. (2025). Research on the innovative application of data-driven teaching in college physical education professional courses. Bulletin of Sports Science & Technology, 33(6), 45-50.

Sun, Q., & Zhou, L. (2025). Application pathways of generative AI-based personalized exercise prescriptions in college physical health interventions. Sports & Science, 46(4), 78-84.

Chen, X. F., & Zhao, J. (2024). Application of Naive Bayes classification algorithm in analyzing college students' physical fitness. Journal of Physical Education, 31(3), 112-118.

Journal of Advanced Academic Research and Studies 高等学术研究期刊
Vol. 3, No.6, 2026 (pp. 56-67)
http://www.nlbaeai.org/
ISSN 3006-4007 (Print)
ISSN 3006-4015 (Online)

Research on Translation of Traditional Chinese Medicine Classics Oriented to International Communication:A Thick Translation Perspective

Bairu Zhao[a]
[a] School of Literature and Education,Shaanxi University of International Trade and Commerce,China

Received 6 March 2026, Revised 1 May 2026, Accepted 27 June 2026

Abstract

Purpose – This study focuses on the causes of comprehension barriers for foreign readers arising from the absence of cultural context, and aims to explore adaptive translation and communication paths for the cross-cultural transmission of TCM culture.

Design/Methodology/Approach – Adopting Thick Translation as the theoretical foundation, this study combines historical literature review and typical case analysis: it first systematically reviews the existing researches in TCM classics' translation, then conducts in-depth analysis of the application mechanisms of Thick Translation strategies through representative translations, and finally put forward a new international communication paradigm for TCM classics based on Thick Translation.

Findings – This study shows that the Thick Translation paradigm shifts focus from linguistic conversion to cultural contextual interpretation. Adopting strategies including paratext supplementation, layered terminology interpretation and multimodal cooperation, it effectively resolves comprehension barriers from cultural gaps and facilitates the localization and integration of TCM culture overseas.

Research Implications – This study not only provides an operable framework for TCM classics translating practice, but also offers new pathways for constructing cultural identity in the international communication of Chinese culture.

Keywords: Traditional Chinese Medicine Classics; Thick Translation; International Communication; Cultural Identity

JEL Classifications: Z11,Z13

Financial source: This paper is sponsored by the following projects "Annotation,Translation, and International Communication of Sun Simiao's Pharmacopoeia"(SMXK22202502); 2023 Key Scientific Research Plan Project of Education Department of Shaanxi Provincial Government "Research on the Translation, Introduction and International Communication of Health Preservation Culture in TCM Classics Driven by Big Data" (23JZ014)

[a] Associate professor, School of Literature and Education,Shaanxi University of International Trade and Commerce, China. First Author, E-mail:327794054@qq.com

Ⓒ 2023 The NLBA Eurasian Institute Limited. All rights reserved.

I. Introduction

As an essential component of Chinese culture, the international communication of Traditional Chinese Medicine (TCM) classics is not only the transmission of medical knowledge, but also the dissemination of Chinese culture and oriental philosophical wisdom.

Opinions of the Central Committee of the Communist Party of China and the State Council on Promoting the Inheritance, Innovation and Development of Traditional Chinese Medicine issued in 2019 has been serving as a programmatic document guiding TCM work in the new era. Implementation Plan for the Traditional Chinese Medicine Culture Promotion Project during the 14th Five-Year Plan Period in 2023 was the first special plan for TCM culture development jointly issued by 8 national ministries and commissions. In 2024, President Xi Jinping further clarifies the core direction of TCM international communication at the highest level, emphasizes that TCM should contribute to building a Global Community of Health for All, and puts forward urgent requirements for accelerating the cross-cultural dissemination of TCM culture and enhancing global cultural identity.

Over the past three decades, 29 or so linguistic and translation theories have been introduced into TCM translation research. Nevertheless, a unified mainstream theoretical system has not yet taken shape. Approximately 80% of academic papers lack solid theoretical support, resulting in insufficient standardization of relevant studies.

Based on the three major rules of Skopos Theory, Zhang J. (2019) has maintained that the translation of TCM classics should be target-audience-oriented , aiming to achieve specific goals for the overseas dissemination of TCM culture. In response to Zhang's viewpoint, Wang Jin et al. (2026) has explored the translation strategy from the perspective of communicative terminology TCM classics in Shandong. They have emphasized in in accordance with the principles of systematicness, contextualization and effectiveness so as to realize the accurate translation of TCM terms. Furthermore, Wang and Wang (2024) have claimed that the lack of appropriate methods in translating practice has led to the misinterpretation of certain TCM terms. Li and Liu(2025) have undertaken a comprehensive research on the key issues of TCM culture translation and dissemination, and come to a conclusion that the international communication of TCM is, in essence, inter-civilizational dialogues transcending time and space. Hence, it is urgent to establish a translation methodology system to promote the standardization of TCM term translation.

Guided by thick translation theory, the author tends to explore the feasible ways to conduct translating traditional Chinese medicine (TCM) Classics so as to communicate TCM knowledge and oriental wisdom conforming to international standards.

II. Thick Translation Theory and Its Adaptability in Traditional Chinese Medicine (TCM) Classics Translation

Researches on the translation of traditional Chinese medicine (TCM) classics have centered on sporadic commentary and analysis in the early stage, later displaying a diversified academic system including theoretical construction, strategic exploration, terminology standardization and paratextual analysis. These researches focus mainly on how to deal with the interrelationship between "inheritance of essence" of TCM culture and the "innovation" of cross-cultural communication, with the purpose of establishing the dominant position of traditional Chinese medicine in the international academic discourse system through standardized conversion in language and in-depth cognitive reconstruction. (Jiang & Liu, 2016).

1. Thick Translation Theory

Thick translation, put forward by Kwame Anthony Appiah(1993), an American philosopher, originated from a anthropological term, "thick description". It is defined as putting original text back into its original cultural context by adding some ancillary materials like annotations, prefaces, endnotes etc. Since there are large quantity of culture-loaded words and terms in TCM classics, it is of great importance to translate them from the perspective of thick translation theory.

2. Textual Features of TCM Classics

After thousands of years of clinical practice, Traditional Chinese medicine has formed a unique system of basic theories and medicinal property theories, which have summarized common properties and major principles. What's more, Traditional Chinese medicine (TCM) classics are deeply rooted in traditional Chinese culture due to its long history, and they integrate three textual features including classical literature, traditional philosophy and ancient medicine, which are fundamentally different from modern medical documents of Western medicine. (Li & Li 2019)Their major textual features can be summarized as the following four points.

Firstly, TCM classics teem with traditional philosophies which contain countless of cultural loadings. Most medical terms in TCM classics integrate philosophical connotations with clinical practices. (Zhu Y. & Li H. 2023)Marked with distinctive Chinese cultural features, there are no equivalent expressions in English language for the culture-loaded terms.

Secondly, the language is highly generalized and abstract. Such terms as meridians, Triple Energizer and visceral manifestations are used to describe the holistic functional system of human Qi-blood circulation and visceral coordination, which differs considerably from Western medical documents.

Finally, since written in concise and implicit classical Chinese,TCM classics teem with extensive medical metaphors, forming a sharp contrast between plain literal meaning and profound underlying medical connotations.

To summarize, these textual features make it difficult for readers from English-speaking countries to understand the profound connotations only by the semantic meaning. Hence, thick translation is a feasible way to communicate connotations behind the surface meaning.

3. Adaptability of Thick Translation Theory in Traditional Chinese Medicine (TCM) Classics Translation

In view of the connotations of thick translation theory, the textual features of traditional Chinese medicine (TCM) classics, and their translation challenges, thick translation is inherently compatible with the international dissemination of TCM classics, which is reflected in the following dimensions.

Firstly, by using thick translation, the translators manage to compensate for cultural defaults and narrows semantic gaps in translating TCM-specific cultural items. TCM classics are replete with philosophical and medical concepts with no equivalents in Western contexts, causing great obstacles in international communication. Secondly, under thick translation, conflicts between Chinese and Western medical discourse systems have been on the decrease and therefore,cognitive barriers have been eliminated to some degree. Furthermore, a balance between textual fidelity and readability has been stricken, thus balancing fidelity to the source culture with readability for readers from English-speaking countries. Finally, multi-tiered readers' needs can be met and diversified international dissemination scenarios are to be created by thick translation strategy. TCM classics mainly serve two distinct groups, and they are researchers and general overseas readers. And by using thick translation, translators can diagnose the depth and format of annotations in their translating process, thus enhancing the effectiveness of TCM classics cross-cultural communication.

III. Application of Thick Translation Theory in Translating Traditional Chinese Medicine (TCM) Classics

1. Constructing Cultural Context Framework Under Paratext Strategies

In translating traditional Chinese medicine classics, paratexts are used to refer to auxiliary texts and symbols promoting cross-cultural understanding and serving as a vital translation strategy. (Hermans, 2003; Chesterman, 2016) Paratexts are usually classified into six types, among which prefaces and introductions establish macroscopic cognition, chapters guide set reading expectations, footnotes and endnotes supplement micro cultural backgrounds of the original works, appendices provide practical indexes, charts and illustrations elucidate abstract concepts and terminology, and postscripts, translator's notes interpret the translating logic. Among these strategies, footnotes and endnotes, charts and illustrations have been typically used in translating Qianjin Yifang.

Footnotes and endnotes have been employed to supplement the cultural connotations of philosophical

terms. For instance, “ 太一 ” , an important term in traditional Chinese philosophy, is defined “the origin of the Universe ”, or “Supreme Truth” in Qianjin Yifang. In order to retain the cultural connotations, and at the mean time, to communicate precisely and understandably, footnote has been used to provide to destruct the original meaning from different perspectives, and then reconstruct a cultural context for target readers.

Charts and illustrations are also utilized to visualize the cultural metaphors in Qianjin Yifang since there are large quantities of cultural metaphors in this classic. The concepts including “ 君臣佐使 ”, a principle of formula composition, “ 五劳七伤 ”, a core concept of TCM etiology and pathogenesis, as well as “ 三部九侯 ”, an important way of TCM pulse diagnosis are deeply rooted in traditional Chinese culture which have no equivalents in the west. Therefore, it is advisable to concretize them by using cultural images in politics and body parts and human organs to make them more friendly for target readers.

2. Translating Terminology in Traditional Chinese Medicine (TCM) Classics by Hierarchical Approaches

Since traditional translation methods meet the dilemma —“loss of meaning by literal translation”, and “loss of image only by free translation”, hierarchical approaches can be adopted in translating terminology in TCM classics aiming to form a progressive cognitive guidance system. The hierarchy of terminology interpretation can be illustrated as table 1.

Table 1. Hierarchical Interpretation of Terminology

Level	Methods	Core Connotation and Practice
Level1	Transliteration	Chinese Pinyin is used to preserve unique TCM cultural symbols.
Level2	Literal / Free Translation	Basic understanding is formed by literal translation or semantic conversion.
Level3	Cultural Annotation	Philosophical connotations and cultural context behind terminology are provided.
Level4	Correlative Interpretation	TCM concepts are incorporated with modern medical theories or daily life experience.

Source: Compiled by the author

As is shown in table 1, by using hierarchical interpretation, the translators can not only retain the uniqueness of traditional Chinese culture, but also eliminate barriers to cross-cultural understanding, striking a balance between accuracy and acceptability in the transmission of TCM terminology.

3. In-depth Engagement of Visual Culture Based on Multimodal Strategies

Multimodal strategies have broken the communication limitations of a single textual mode and achieved the three-dimensional construction of cultural context through the in-depth involvement of visual culture in translating traditional Chinese medicine (TCM) classics.(Xu&Zhang, 2025) Among these translating practices, translations related to Huangdi Neijing are quite noticeable, in which the profound philosophical connotations and abstract theories may cause inherent challenges for target language audiences.

By employing illustrations and diagrams, translators can provide an effective solution to the above problem by conversing abstract TCM theories and concepts into visual language, making it possible for target-language readers. Some English versions include visualized adapted versions of Neijing Tu (Internal Classic Diagram), which describe the circulation routes of meridians vividly and mark the positions of zang-fu organs precisely. Such difficulties consist of those of core theories in traditional Chinese medicine including “ 三焦 ”, “ 卫气 ”, “ 藏象 ”, diagnostic and therapeutic statements, as well as pulse diagnosis texts. By thick translation, readers from English-speaking countries can grasp the core framework of the meridian system without relying on complex textual explanations. For the TCM formula compatibility principle of “monarch-minister-assistant-courier”, translators have adopted graphical forms such as flowcharts and structural diagrams so as to present the hierarchical relationships and compatibility logic clearly. For philosophical concepts including “Qi” and “Yin-Yang”run through the entire book, the translators have employed natural metaphors to help readers in understanding profound connotations in the original works.

By integrating calligraphic elements into translation process, it is possible for translators to produce translated versions with cultural expression at an aesthetic level. Some incorporate Chinese calligraphy alongside chapter titles and core terms, which not only helps to preserve the formal beauty of Chinese characters but also strengthens the uniqueness of TCM culture through visual symbols. Thus readers from English-speaking countries can experience the artistic charm of traditional Chinese culture while reading the text, achieving the goal of semantic transmission and aesthetic experience.

Multimodal practices have further shown a digital extension trend. Cutting-edge versions such as Paul U. Unschuld’s English translation of Huangdi Neijing innovatively include QR codes,standing as a model in this field. (Xu&Zhang, 2025) By scanning these codes, readers can get access to large quantity of video resources, making the abstract diagnostic and therapeutic methods as well as health-preserving concepts more easily to be understood. In essence, these multimodal strategies can be seen as an extension of thick translation. Visual and textual modes are not mere additions but form a synergistic and complementary communication force. The textual mode makes it possible for translators to ensure the academic accuracy and in-depth transmission of the cultural connotations, while the visual mode decreases cognitive barriers considerably for cross-cultural understanding. In complement, they help to construct a complete TCM cultural context, enabling the cross-cultural communication to maintain academic depth while achieving greater readability and appeal.

IV. Constructing a New Thick Translation-Oriented International Communication Paradigm for TCM Classics

With the development of cross-cultural communication of traditional Chinese medicine, translating and transmitting TCM classics have ushered in a new era, and the linguistic-oriented translation model is far from sufficient to convey cultural connotations and gaining public acceptance. Because of the focus on multidimensional context construction, hierarchical interpretation and multimodal collaboration, thick translation is to tackle the dilemma of separation between academic rigor and popular accessibility. On this basis, the author is tentatively committed to constructing a new paradigm of international communication guided by thick translation, with the purpose of exploring a balanced path between cultural authenticity and communication effectiveness, and shedding some light on the global dissemination of traditional Chinese medicine culture.

1. Cultural Turn in TCM Classics Translation

In the development of translating traditional Chinese medicine classics, translators' guiding principles have undergone a profound transformation, which have shifted from semantic conversion centered on linguistic equivalence to cultural interpretation aimed at context restoration and connotation transmission. They differ considerably in both translation philosophy, translator's role, textual form, reader orientation and communication pursuit, clearly reflecting the innovation of communication concepts guided by thick translation. The differences can be seen in table 2:

Table 2. Traditional Paradigm vs.Thick Translation Paradigm

Dimension	Traditional Paradigm	Thick Translation Paradigm
Translation Philosophy	A tool for linguistic conversion	A practice of cultural interpretation
Translator's Role	Language converter	Cultural mediator
Text Presentation	Single text	Multi-voiced composite text
Reader Orientation	Information recipient	Cultural participant

Source: Compiled by the author

As can be seen from table 2, the traditional paradigm regards translation as mere linguistic replacement, where translators only act as language converters to deliver information to readers. By contrast, from thick translation perspective, translation is considered as an act of cultural interpretation. Translators' role has been transformed to cultural intermediaries, who have been constructing composite texts through paratextual and multimodal means. This transforms readers from passive recipients into active participants, ultimately enabling

the authentic localization and dissemination of traditional Chinese medicine culture worldwide.

2. Building a Three-Dimensional Thick Translation Texts Based on Content Production Paradigm

The content production paradigm of three-dimensional thick translation texts achieves an in-depth leap from textual transmission to cultural interpretation through the collaborative construction of the framework layer, main body layer and extension layer.

The framework layer has laid a cognitive foundation through extended introductions and chapter guides, among which extended introduction focuses on the core contextual background of classics. For instance, the introduction in Sabine Wilms' Prescriptions Worth a Thousand in Gold for Every Emergency Vol. II-IV expounds the philosophical origin of Yin–Yang and Five Elements, the medical development background of the Qin–Han period, and the core concepts such as Qi and meridians, by which the translator has established a macroscopic knowledge framework for target readers. What's more, chapter guides precisely focus on the key points and logical clues of each chapter. Taking Venerating the Root Part 1–Volume 5: Pediatrics (I) as an example, in this part the translator has clarified the central interconnection between yang Qi and life activities, sorted out the reading path of "operation rules of yang Qi—harms of imbalance—maintenance methods", and by doing so, he has removed barriers for readers from English-speaking countries to understand the abstract medical theories.

In the main body layer, the core structure of translated text plus hierarchical annotations have been adopted to interpret accurately through diversified annotation types and layered presentation. In this field, annotations are chiefly composed of conceptual interpretation such as the physiological functions of Sanjiao, (an important concept of anatomical locations), allusion interpretation on the cultural origin of dialogues between Qi Bo and Huangdi, textual version annotation on textual differences among ancient manuscripts, and comparative interpretation distinguishing TCM five zang-organs from modern medical visceral organs. Annotations are usually classified into three types: one is a basic layer, providing essential definitions in footnotes, such as the basic meaning of Daoyin; the other is an extended layer, supplementing academic findings, such as discussions on the essence of meridians by physicians of past dynasties. Furthermore, in-text implicit notes are also adopted for complex terms to balance reading fluency and academic depth.

The extension layer is usually composed of a knowledge expansion system consisting of appendixes, terminology compilations and references, among which appendixes collect historical documents such as summaries of annotated editions of Huangdi Neijing across dynasties and research reviews such as international studies on meridian theories, providing clues for in-depth academic exploration. Terminology compilations merge pronunciation, form and meaning as a whole. For example, the entry of Yin-Yang marks its Chinese Pinyin and English translation, elucidates its evolutionary context from philosophical connotation to medical application, and builds a complete conceptual network by labeling correlations between Yin-Yang, cold-heat, and deficiency-excess,which facilitate the readers in shaping systematic cognition. The three-layer structure

enables translators to go beyond simple semantic transfer and evolve into a cultural communication carrier with both readability and academic value in their translating practice.

3. Multi-Channel In-Depth Reach Based on Communication Channel Paradigm

In the communication channel paradigm, researchers mainly focus on how to construct a multi-path outreach system, with the purpose of achieving full-coverage dissemination of TCM classic translations. The academic communication pathway focuses on shaping professional influence by collaborating with internationally renowned university presses to publish professional translated versions, by doing so, they guarantee academic rigor and communication credibility. Meanwhile, it promotes the integration of translated works into the curriculum systems of East Asian Studies and Medical History departments in overseas universities, serving as core textbooks for cross-cultural medical research. Furthermore, by publishing academic book reviews and thematic research papers in top international journals, scholars have started heated discussions and sustained academic dissemination momentum—exemplified by Paul U. Unschuld's English translation of Huangdi Neijing and Sabine Wilms' Prescriptions Worth a Thousand in Gold for Every Emergency Vol. II–IV, which has been adopted as a designated reference book by a large number of higher education institutions over the world.

In broadening the public communication pathway, great emphasis has been attached to lowering access barriers for the general readers to meet their cognitive needs. Popular editions have been developed, adding more core annotations while simplifying textual research and academic controversies to enhance public accessibility of TCM culture, which also realizes synergistic dissemination by integrating audio-visual products such as documentaries and short videos; for instance, Herbal China, an overseas broadcast of the documentary, has been accompanied by the simultaneous release of supporting translations. Additionally, it takes the advantage of social media platforms to establish reader communities, facilitating reading exchanges and interactive discussions through topic-based interactions and online Q&A sessions, thereby strengthening audience engagement.

It can not be denied that technology has upgraded TCM classics translation and dissemination via three pathways in complement, among which digital platforms with hyperlinks provides easy access by integrating translations, annotations with academic resources for easy access. AR/VR creates immersive diagnosis/treatment experiences, facilitating audience's intuitive understanding of TCM practices. Big data is employed to cater for their needs and optimize annotation design by analyzing readers' behaviors. All the three pathways intend to balance academic depth and public reach in supplementation, therefore enhancing efficiency and experience to build a comprehensive 3D communication framework.

V. Challenges and Implications

1. Challenges in Translating TCM Classics in Digital Era

In digital era, there are five prominent problems in the international communication of traditional Chinese medicine culture proposed by researchers.(Zhang etal.,2025)

Firstly, cultural backgrounds, values and medical systems are noticeably different between China and the English-speaking countries. Therefore, the potential cross-cultural barriers in the discourse system make it quite difficult for Western audiences to deeply understanding its cultural connotations. Secondly, new communication carriers such as new media and artificial intelligence are far from fully utilized, with the shortage of platform supervision and development. Thirdly, the coordination mechanism among communicators also needs to be improved, with the government taking the lead while civil forces act separately. Finally, the shortage of interdisciplinary international talents has become a major bottleneck in this field of research.

Therefore, immediate actions should be taken: firstly, in translating TCM classics, translators should not

Merely as language converters, but as cultural intermediaries; secondly, more new media should be utilized to create new paths for cultural communication. What's more, talents training should be strengthened to break the ice.

2. Implications

In translating TCM classics, the translator's role has considerably changed, not merely as a language converter, but as a cultural mediator, which requires translators to possess interdisciplinary literacy encompassing linguistics, medical history, and philosophy. What's more, individual translators can hardly meet such complex demands; hence, a collaborative team model integrating translators, TCM specialists, historians, and communication scholars is urgently needed.(Zhang and Jia, 2025) Fundamentally, this transformation relies on constructing an interdisciplinary training pathway to cultivate compound translation talents who have an excellent mastery of multidisciplinary knowledge and cross-cultural communication competence.

Through thick translation, scholars can construct a comprehensive cultural context for traditional Chinese medicine classics, yet it remains uncertain whether readers can voluntarily accept and engage with such a context. This is mainly constrained by three factors, including the reading conventions of target-language readers, their tolerance for foreign cultures, and the overall cognitive foundation of TCM overseas. In response, it is essential to foster a favorable reception sphere and context. By means of media communication, educational integration and immersive cultural experiences, we can lay a consolid foundation of cultural dissemination and gradually so as to enhance overseas audiences' willingness to embrace the cultural context of traditional Chinese medicine.

VI. Conclusion

The international communication of TCM classics reflects expectations for Chinese culture's global outreach, yet quite a number of translation products fail to live up to stronger cultural recognition among readers from English-speaking countries—linguistic conversion without cultural context transmission fails to resonate with foreign readers. Framing translation as cultural interpretation and communication as meaning co-construction, thick translation theory offers a new solution for this problem . The paradigm evolution of TCM classics' foreign translation, from missionary-era domestication to scholarly philological research and today's communication-focused turn, centers on balancing TCM's heterogeneity with cross-cultural understanding.

The Thick Translation-oriented paradigm has constructed comprehensive cultural contexts via paratexts, hierarchical terminology interpretation, and multimodal collaboration, facilitating readers' understanding and interpretation of TCM terms and abstract concepts beyond semantic decoding. This represents a great transformation and innovation of translation strategy and communication concept, shifting from "sending" to "receiving" and "textual arrival" to "meaning rooting." Amid globalization and digitalization, only by providing rich, accessible cultural contexts can we communicate and disseminate TCM wisdom and oriental healthy philosophy worldwide.

References

Appiah, K. A. (1993),Thick Translation,Callaloo, 16(4), 808-819.

Chesterman, A.(2016),Memes of Translation:The Spread of Ideas in Translation Theory, Shanghai: Shanghai Foreign Language Education Press.

Hermans, T.(2003), Cross-cultural Translation Studies as Thick Translation, Bulletin of the School of Oriental and African Studies, 66(3), 380-389.

Jiang, C.X., Liu K.(2016)A Study of Thick Translation in Paul U. Unschuld's English Translation of Huangdi Neijing,Journal of Basic Chinese Medicine,22(11):1542-4.

Li, X.Y.,& Liu Y.(2025) The Translation and Dissemination of Traditional Chinese Medicine, Beijing: Foreign Language Teaching and Research Press.

Ma, K.,Zhao R. S.,Shi X. L.(2020),A Study on the Application of Thick Translation in Paul U. Unschuld's English Translation of Huangdi Neijing,26(9): 211-213.

Medical Text, Oakland:UC Press.

Munday, J. (2001),Introducing Translation Studies:Theories and Applications, London/New York:Routledge.

Nord C. (2001),Translating as a Purposeful Activity: Functionalist Approaches Explained, Shanghai: Shanghai Foreign Language Education Press.

Que, H.L., Hu, J.(2023),Research on the Translation and International Dissemination of TCM Classics, (4)161-8.

Unschuld,P. U.(2011), Huang Di Nei Jing·Su Wen: Nature, Knowledge, Imagery in an Ancient Chinese

Wang, H. Y., Wang Y. B.(2024),Discussion on the Method of Translating Nouns and Terminologies in Chinese Medicine Classics, Modernization of Traditional Chinese Medicine,26(7)1899-1905.

Xu, M. W., Zhang K. W. (2025),Research on Intelligent Translation and Multimodal Dissemination of Clasisscs of Traditional Chinese Medicine, 221(1),35-41.

Zhang, L.X., Liu Y.(2024),Outward Translation of TCM Classics Inner Canon of Huangdi Situated in International Communication: Fidelity and Creativity, Journal of Basic Chinese Medicine, 30 (12), 2105-9.

Zhang, Y., Jia L. Y.(2025),Style Translation of the English Version of Mai Jing from the Perspective of Translator Behavior Criticism, Journal of North China University of Science and Technology(Social Science Edition),25(5),62-69.

Zhang, Z.Y., Luo. G.B., Lin B.(2025),Research on the Digital International Communication Path of Traditional Chinese Medicine Culture Under the Perspective of Media and Material Properties,Chinese Medical Ethics(6):723-730.

Zhu Y. & Li H.(2023) Analysis on Linguistic Features and Translation Strategies of TCM Texts in Plague Prevention and Control Chapter of Compendium of Materia Medica29,(3) :479-481.

Journal of Advanced Academic Research and Studies 高等学术研究期刊
Vol. 3, No.6, 2026 (pp. 68-74)
http://www.nlbaeai.org/
ISSN 3006-4007 (Print)
ISSN 3006-4015 (Online)

On the Literary Healing Nature of Shi Tiesheng's The Temple of Earth and Me

Yuting Li[a]
[a] School of Literature and Education, Shaanxi University of International Trade and Commerce

Received 20 March 2026, Revised 21 April 2026, Accepted 19 June 2026

Abstract

Purpose – This paper aims to explore how Shi Tiesheng realizes the redemption of fate through literature. How does Shi Tiesheng clarify the contingency of his own experience through writing? How does his work realize the redemption of fate? This paper focuses on the representative works such as Me and Ditan, and analyzes the expressions such as natural picture, fate meditation and philosophical thinking beyond suffering, and explores how its words become readers' spiritual support and spiritual comfort, thus demonstrating the inherent tenacity and transcendence of human spirit.

Design/Methodology/Approach – With the help of text close reading and literature method, this paper analyzes the spiritual core hidden in Shi Tiesheng's natural writing and fatalistic reflection.

Findings – It is found that works such as Me and Ditan integrate natural landscape, philosophical speculation and suffering transcendence, releasing unique healing power. They not only awaken the readers to examine their own living conditions, but also illuminate their inner difficulties and arouse deep resonance, and give them a calm and lasting spiritual comfort.

Research Implications – This discussion not only broadens the horizon of destiny redemption and spiritual healing in Shi Tiesheng's research, but also deepens the rational cognition of spiritual toughness and acceptance mentality in literary texts. It also provides a new way for readers to seek spiritual comfort, and has reference significance for literary creation and interpretation with life care and healing functions.

Keywords: Shi Tiesheng; The Temple of Earth and me; Life experience; Healing
JEL Classifications: Z11,Z13,I31

Financial source: This paper is supported by the following projects at Shaanxi University of International Trade and Commerce: "The Science and Technology Innovation Team for the Dissemination of Traditional Chinese Medicine Scientific Culture" (2025KCTD06); "A Course on the TCM Theory of Concurrent Treatment of Heart and Brain" (Chinese-English Edition) (SMXK22202503).
[a] Associate professor, School of Literature and Education, Shaanxi University of International Trade & Commerce, China
First Author, E-mail: 353863844@qq.com
Ⓒ 2023 The NLBA Eurasian Institute Limited. All rights reserved.

I. Introduction

Healing is the process of helping individuals or groups gradually recover from trauma, illness, or imbalance through physical, psychological, or spiritual interventions, ultimately restoring a sense of wholeness, happiness, and belonging. This concept originated from medicine. In the 4th century BC, Hippocrates proposed the idea of "vis medicatrix naturae," meaning that nature itself possesses a restorative force. By the 1940s, psychologist Carl Jung adapted this notion into psychoanalysis, emphasizing the role of symbols and stories in healing. By the late 1970s, Aaron Antonovsky further identified three key elements for healing: comprehensibility, manageability, and meaningfulness. Later, Michael White integrated these ideas into narrative therapy, suggesting that by retelling one's story, individuals can assign new meaning to past experiences. Over time, healing theory evolved beyond medicine, becoming an interdisciplinary applied practice utilized in psychology, sociology, literature, history, and art studies. Today, its influence extends to literary criticism and cultural studies. In 1995, Ye Shuxian, a scholar of literary anthropology, introduced the term "literary therapy," proposing that literary narratives inherently possess therapeutic effects. Take Shi Tiesheng and his work *I and the Temple of Earth* as an example. The piece conveys profound inner pain, unguarded vulnerability, and ultimately, reconciliation and acceptance, offering solace to many. Through writing, Shi Tiesheng essentially rediscovered himself, using narrative to re-examine his life, affirm his existence, and inspire courage and hope in others.. As Han Shaogong poignantly observed: "Shi Tiesheng was a miracle of life—unyielding and noble through decades in a wheelchair, a literary peak whose imagination and intellect continually redefined contemporary spiritual heights. His warmth resonated with millions, allowing fleeting moments to touch eternity, minute particles to expand into boundlessness, and hardship to dissolve into a heartfelt, magnanimous smile." **(** Han Shaogong **,** 2016**)** This tribute not only honors Shi Tiesheng's personal resilience but also reveals how his work mirrors humanity's fragility and eternal pursuit of goodness and beauty.

II. The Literary Journey of Shi Tiesheng

Like the educated youth of that era, Shi Tiesheng was determined to leave a poem of struggle on the barren land of northern Shaanxi. However, at his prime, he suffered from a latent spinal cord disease due to a severe cold, which ultimately left him paralyzed in both legs and hovering on the brink of life and death. In the darkest moments of life, Shi Tiesheng had too many questions and reflections, making writing a necessity within his abilities.. Shi Tiesheng stated, "At twenty, my legs were crippled. Besides painting decorative eggs for others, I thought I should do something else. After changing my mind several times, I finally decided to write," as if "writing could rescue the disabled from their predicament" (Shi Tiesheng.2011). "When friends left in the evening, under the solitary yet clamorous light of the small desk lamp, I began to think of writing something. That was the initial sprouting of my creative desire. For a moment, I forgot about death" (Shi Tiesheng. 2011). Forgetting death meant confronting how to live and what to live for. He channeled his inner turmoil, defiance

against fate's injustice, and the search for self-salvation and survival into words, thus opening a new path. He immersed himself in fiction and prose, refining the crystalline essence of thought from the ore of physical disability during his long companionship with illness and the wheelchair. Through an alchemy of language, he transformed trauma and soothed emotions, using poetic sensibility and wisdom to reconstruct the meaning of life, ultimately achieving an artistic pinnacle in contemporary Chinese literature where writing became synonymous with existence itself.

I and the Temple of Earth, immensely influential among scholars and readers, has become a classic of contemporary literature due to its profound exploration of illness, suffering, fate, existence, God, and value. Every word in the essay expresses Shi Tiesheng's self-discovery and affirmation of being, and more importantly, his reconstruction of meaning through words and literature—revealing a man gradually accepting, reconciling, and healing deep within his soul. He wrote: "Once a person is born, this is no longer a debatable question but a fact given by God; when God hands us this fact, He has incidentally guaranteed its outcome. So death is not something to be rushed; death is a festival that will inevitably arrive. Thinking this way, I felt much more at ease; everything before me no longer seemed so terrifying" and "I felt grateful for such an arrangement" (Shi Tiesheng, 2011). Moving from resentment and pain over his own plight, to articulating the interplay of fate's necessity and contingency, and finally ascending to religious inquiries about the human condition, Shi Tiesheng gradually came to perceive God's arrangement and wisdom. The boundaries of his narrative expanded, rising to the height of human philosophy. Works like I and the Temple of Earth, Autumn Reminiscence, Grandma's Star, and The Year I Was Twenty-One not only reveal the author's profound understanding of life's essence and his reconciliation with disability and adversity but also embody the redemption of life itself. Their depth of thought and magnanimity have deeply moved countless readers. Professor Sun Yu noted, "The long-dormant spiritual currents of humanity surge forth here; all people with free will can feel a sense of intimacy and solace in his voice. Shi Tiesheng gained friends through his solitude" (Sun Yu. 1998), pointing directly to the quality of his literary creation being isomorphic with life itself, even with the human condition. Through profound questioning, relentless pursuit, and ultimately offering answers and solace, Shi Tiesheng’s literary creation became an ideal pathway for healing.

III. Healing in Literature

Starting from his own physical disability, Shi Tiesheng embarked on a profound reflection on the fragility and intrinsic value of life. In his works, especially in essays and novels such as "Me and the Temple of Earth," he not only candidly confronts his own suffering, but also elevates this personal experience of pain into a reflection on the universal human condition. Through delicate and restrained writing, we lead readers into lives shrouded in disease or suffering, allowing us to see that suffering is not the end, but rather the beginning of growth and transcendence. He uses the tension between his deteriorating physical condition and increasingly enriched spiritual life to reveal the fragility and resilience that life possesses simultaneously. In the long years

of wheelchair life, he realized the repetition and power of life from every blade of grass and every tree on the altar, and experienced the continuation of love from his mother's silent dedication and the sincere response of readers.

Shi Tiesheng did not avoid pain, but chose writing as a way of contemplation and resistance - he transformed physical confinement into spiritual freedom and reconstructed a wilderness for the soul to wander in with language. It is through this literary self reconstruction that he shows us that the value of life lies not in its length or completeness, but in how it carries infinite meaning in its finite form. He refuses to romanticize disability or indulge in self pity, but instead examines existence with a calm and warm gaze, conveying a power rooted in reality but oriented towards light. Therefore, reading Shi Tiesheng's words not only makes us feel the weight of life, but also gives us the courage to start anew - he teaches us how to love life while accepting limitations. This kind of spiritual healing from the inside out not only concerns individuals, but also becomes a public spiritual resource, inspiring generation after generation of readers to find meaning and live to the fullest in their respective difficulties.

First, Shi Tiesheng uses fine brushwork to depict the vibrant vitality of nature across the four seasons: "The whole garden was filled with the rustling sounds ofcompeting to grow." (Shi Tiesheng, 2011)The mild natural scenery becomes an important medium for his emotional sustenance and spiritual healing. Of course, his descriptions of nature in the Temple of Earth do not simply reproduce natural beauty; they are infused with profound insights into life. "In the pervasive, tranquil light, one can more easily see time and catch sight of one's own figure." Here, Shi Tiesheng not only witnesses the revival of spring, the lushness of summer, the falling leaves of autumn, and the white snow of winter, but also comes to understand fate and God: "In a densely populated city, to have such a quiet place to retreat to seems like God's thoughtful arrangement." (Shi Tiesheng, 2011) Through his depictions of nature, he conveys a serenity and harmony that transcend individual suffering, allowing readers to feel a soothing calmness in their reading. He regards nature as the embodiment of life's forces, seeking meaning and value in life through dialogue with nature. "So, for fifteen years, I have always returned to that ancient garden—to sit in silence beneath its old trees, by its withered grass, or beside its crumbling walls; to let my thoughts settle, to push aside the noise around me and straighten my tangled mind, to peer into my own soul." (Shi Tiesheng, 2011) In the tranquility of the Temple of Earth and the rhythm of nature, he finds an opportunity and space for inner dialogue. This dialogue is not only a reflection on his own life experiences but also a profound exploration of the essence of life. "If there were no suffering in the world, could the world still exist? Without stupidity, what glory would wisdom have? … So it seems we must accept suffering—the entire drama of humanity requires it, existence itself requires it." (Shi Tiesheng, 2011) Shi Tiesheng finally realizes that the path to redemption from all unfortunate fates lies in acceptance and transcendence, in the equality of all beings.

Second, by accepting the impermanence of life and transcending suffering, Shi Tiesheng reminds us to face life's ups and downs squarely and to rebuild the value and meaning of life. He believes that suffering is part of life, inescapable, yet it can be overcome through inner transformation and spiritual elevation. "The universe, with its unceasing desire, refines a song and dance into eternity. What human name this desire goes by is of

little consequence." (Shi Tiesheng, 2011) In accepting life's impermanence, he finds the courage and strength to face suffering. As he writes in Designing Good Fortune: "You perceive life through color, grasp space through form, smell the flow of time in lines, and discover the cries of living beings where heaven and earth meet. You are a fortunate person, because you are truly lucky; thus you prostrate yourself before the creativity of nature, offering your awe and gratitude, while Heaven bestows upon you an unyielding and endless creative passion." (Shi Tiesheng,2011) Through such contemplation and inquiry, Shi Tiesheng achieves reconciliation with himself, with fate, and with the God who arranges all things. He then transmits this process of reconciliation through his words to readers, inspiring them to seek hope in adversity and find a path toward inner peace.

In The Temple of Earth and Me, Shi Tiesheng amidst the torment of pain, questioning, and resentment, gradually comes to his disability, comprehends a new life, courageously transcends it, and transforms it into spiritual wealth, striving to condense it into the stature of a fully realized human being. Using his own experience, he tells readers that suffering is not the entirety of life but an opportunity for growth and self-transcendence. Thus, readers feel an awakening and enlightenment—just as Hemingway said, "A man can be destroyed but not defeated"—and thereby experience release from pent-up emotions and spiritual comfort. Therefore, the Temple of Earth, a place laden with history and culture, becomes the stage on which Shi Tiesheng confronts suffering, contemplates life, and stands up again. In this work, every encounter with the Temple of Earth, every dialogue, every inner struggle and moment of release is narrated with gentle clarity. He writes, "When life proves its value in the form of beauty, happiness is enjoyment, and pain is also enjoyment." (Shi Tiesheng, 2014) Every time he comes to the Temple of Earth, "it seems this ancient garden has been waiting for me, enduring centuries of vicissitudes just to wait." In his dialogue with the Temple of Earth, he finds the courage and strength to face suffering, a strength that allows him to view life's disappointments with detachment. This feeling lets him momentarily forget physical pain and life's hardships, allowing him to enjoy a tranquility, harmony, and sense of connection, thereby achieving spiritual healing.

Shi Tiesheng further explores the transformation and transcendence of suffering through fictional characters and stories in his works. He creates a series of figures who face suffering yet remain tenacious: the husband whose body is stiff, as if nailed in place by fate, yet still gazes out the window every day, feeling the world's warmth with his eyes; the young man who loves to sing and, even after losing a leg, still leans on his crutch at the alley entrance humming a broken but vibrant tune; the person who sits alone drinking at dusk, the silent stone-like man catching birds at the edge of the city, and the pretty but intellectually disabled siblings who always hold hands. These characters do not wallow in pathos; instead, with an almost simple composure, they knead suffering into their daily lives, piecing together a complete posture of existence from shards. Through their experiences and inner growth, Shi Tiesheng reveals to readers that suffering is not the end of life but often becomes the starting point for understanding love, dignity, and hope. His characters do not shout or protest; in silence, they complete a solemn self-transcendence. These stories are not grand, yet they allow many readers to touch the astonishing power hidden within ordinary human—a stubbornness that grows toward the light even in the cracks. For this reason, they transcend the page and quietly enter readers' realities, inspiring countless ordinary people, in the face of life's difficulties, not to yield or languish, but to maintain a deep-seated positivity

and brightness.

IV. Renewal through Healing

Starting from his own physical disability, Shi Tiesheng launches a profound meditation on the fragility and intrinsic value of life. In his works, especially prose pieces like The Temple of Earth and Me and his novels, he not only frankly confronts his own suffering but also elevates this personal pain into a contemplation of the universal human condition. Through delicate and restrained prose, Shi Tiesheng leads readers into the inner worlds of those shrouded by illness and fate, showing us that suffering is not the end but rather possibly the beginning of understanding and the starting point of transcendence. Through the tension between his deteriorating physical condition and his increasingly rich spiritual life, he reveals life's simultaneous fragility and resilience. Over his long years in a wheelchair, he learns from every plant and tree in the Temple of Earth, from the cycle of seasons, the rhythms of life's renewal; from his mother's silent devotion and readers' sincere responses, he experiences love's continuity.

He deeply understands life's impermanence and brevity, a realization derived from his long struggle with illness and profound reflection on existence. In The Temple of Earth and Me, he writes: "God never bestows the word 'happiest' on anyone; He places an eternal distance before everyone's desires and fairly gives limits to each person." (Shi Tiesheng, 2011) This statement not only reveals his understanding of the fairness of fate but also his acceptance of human limitations. By continuously opening up and scrutinizing through his writing, he deeply explores his inner world, thereby profoundly discovering life's meaning and value—not by escaping suffering, but by embracing it to achieve transcendence. "Fate pushes me to the edge of a cliff; I will sit down here and sing a song for you." These calm and steadfast expressions stem from his most authentic experiences of life, facing life's challenges and accidents with a detached attitude. In challenges, he not only discovers human potential and wisdom but also learns to find hope in despair and create infinity within limitations. This reverence and love for life, this unique understanding of transforming and transcending suffering, not only inspires himself but also deeply moves every reader. His words provide spiritual comfort and support, becoming a motivating force for people facing life's difficulties and seeking meaning in life, allowing countless individuals to see a beam of light in darkness and walk more courageously on their life's journey.

V. Conclusion

Through the power of literature, Shi Tiesheng's works demonstrate the resilience of the human spirit and the possibility of transcending suffering. His words are not merely records of personal experience but a profound exploration of life's meaning, a calm reflection on suffering, and a candid acceptance and spiritual release from the vicissitudes of fate. With plain yet philosophically rich prose, he elevates individual disability and pain

into a contemplation of universal human life, giving private memories the thickness of public significance. In representative works such as The Temple of Earth and Me and Fictive Notes, Shi Tiesheng, through ordinary yet intensely vital characters—whether the silently enduring mother or the strangers encountered by chance in the Temple of Earth—provides models for us to persist in faith and guard dignity in adversity. These characters are not heroes, yet they ignite hope in the most authentic way, showing us that human beings can maintain spiritual brightness even in extreme circumstances.

Through the power of literature, Shi Tiesheng's works demonstrate the resilience of the human spirit and the possibility of transcending suffering. His words are not merely records of personal experience but an exploration of life's meaning, a profound reflection on suffering, and a candid acceptance and release from the whims of fate. His delicate depictions of nature, his continuous reflection on life experiences, and his dialogue with and transcendence of suffering not only accomplish his own spiritual redemption but also provide readers with a new perspective for facing life's difficulties and seeking life's meaning. He teaches us that suffering is not the opposite of life but a part of life; the value of life is not about whether one stands in the light, but about whether one can still orient oneself toward the light while in darkness. His words are composed and affectionate, possessing metaphysical reflection yet never losing warmth and compassion for the human world. Therefore, Shi Tiesheng and his literary existence make literature truly a warm light that cares for life and human existence. His works transcend time and will continue to inspire generations of readers to move forward bravely on the path of seeking the true meaning of life.

References

Han Shaogong. (2016) Famous Writer Shi Tiesheng's Soul Returns to the Temple of Earth. NetEase Web.

Shi Tiesheng. (2011) The Temple of Earth and Me · The Acacia Tree. Beijing: People's Literature Publishing House.

Shi Tiesheng. (2011) The Temple of Earth and Me ·The Year I Was Twenty-One. Beijing: People's Literature Publishing House.

Shi Tiesheng. (2011) The Temple of Earth and Me. Beijing: People's Literature Publishing House.

Shi Tiesheng. The Temple of Earth and Me · Designing Good Fortune . Beijing: People's Literature Publishing House.

Shi Tiesheng.(2011) The Temple of Earth and Me. Beijing: People's Literature Publishing House1.

Shi Tiesheng.(2011) The Temple of Earth and Me · Designing Good Fortune. Beijing: People's Literature Publishing House.

Sun Yu. (1998) The Path to Philosophy: Reading Shi Tiesheng. Contemporary Writers Review.

Journal of Advanced Academic Research and Studies 高等学术研究期刊
Vol. 3, No.6, 2026 (pp. 75-87)
http://www.nlbaeai.org/

ISSN 3006-4007 (Print)
ISSN 3006-4015 (Online)

Inheritance and Development of Xianyang Traditional Dance from the Perspective of Intangible Cultural Heritage Protection

Fengchao Yin[a]

[a] Shool of Continuing Education, Shaanxi University of International Trade & Commerce ,China

Received 20 March 2026, Revised 15 April 2026, Accepted 19 June 2026

Abstract

Purpose – From the perspective of intangible cultural heritage (ICH), this study takes the provincial-level traditional dance heritage items selected in Xianyang City as the research object, analyzes their current status of inheritance and development, reveals the main dilemmas faced, and provides theoretical basis and practical guidance for the protection and sustainable development of traditional dance ICH in Xianyang.

Design/Methodology/Approach – This study combines literature review with field investigation. It first traces the current state of inheritance for traditional dance items on the intangible cultural heritage (ICH) list in Xianyang. Then it examines the three obstacles to their transmission from three perspectives. These obstacles are cultural voicelessness (difficulty in expressing cultural meaning), cultural attrition (loss of original elements), and cultural decline (weakening of vitality).

Findings – This study shows that there are still three major dilemmas while certain headway has been made in the transmission and development of Xianyang's traditional dance ICH items. These are respectively characterized as cultural voicelessness, cultural attrition, and cultural decline — each reflecting a different layer of heritage erosion.

Research Implications – To tackle these dilemmas, this paper puts forward six strategies: boosting cultural confidence, integrating heritage into daily production and life, building a favorable cultural ecology, enriching dance content and forms, improving living inheritance, and constructing intergenerational heritage channels. These suggestions offer theoretical support and practical guidance for inheriting Xianyang's traditional dance intangible cultural heritage.

Keywords: Xianyang; Traditional dance; Intangible Cultural Heritage; Inheritance and Development
JEL Classifications: Z11,L83

[a] Lecturer, School of Continuing Education , Shaanxi University of International Trade &Commerce, China. First Author, E-mail:745545539@qq.com
Ⓒ 2023 The NLBA Eurasian Institute Limited. All rights reserved.

I. Introduction

The concept of intangible cultural heritage (hereinafter referred to as "ICH") protection has gained widespread public acceptance. As an important component of ICH, traditional dance accounts for 356 items in the national representative list of ICH, representing 9.86% of the total (China Intangible Cultural Heritage Digital Museum, n.d.). "From the perspective of ICH protection, traditional dance primarily refers to dance forms created by the general public, possessing a long historical and cultural tradition, passed down through generations, widely circulated, and continuing to the present day in a living manner, characterized by distinctive ethnic styles and regional features" (Ma, 2023). With the rapid processes of modernization and urbanization, traditional dance as a form of ICH is facing severe challenges. So it urgently requires research and protection. Therefore, Examining how Xianyang safeguards and evolves its traditional dance heritage offers lessons for the inheritance and development of traditional dance ICH in Shaanxi Province and elsewhere in China.

II. Current State and Basic Profile of Xianyang Traditional Dance ICH

Xianyang, located in the heart of Shaanxi's Guanzhong Plain, is flanked by the Wei River to the south and the Zong Mountains to the north. It was once the capital region for twelve dynastic periods, including the Zhou, Qin, Han, and Tang dynasties. The local climate belongs to the warm temperate semi-arid continental monsoon category with four distinct seasons, moderate conditions, and an annual average temperature of 13.3°C. Therefore, over centuries of daily life and productive labor, the region's hardworking people have produced a diverse array of traditional dances. These performances carry distinct local characteristics and deep cultural meanings, which reflect how local people live, think, and appreciate beauty. As of January 2026, Shaanxi Province had released eight batches of provincial-level ICH representative projects, totaling 1,161 items. 76 items (or 6.54%) are traditional dance items. Within the city of Xianyang, there are 121 projects which have made it onto the provincial ICH protection list. Seven of them (5.79%) fall under the category of traditional dance, and they are distributed across six designated protection units (see Table 1).

Table 1. Statistics of Provincial-Level Intangible Cultural Heritage Traditional Dance Items in Xianyang City

No.	Announcement Date	Item No.	Name	Level	Batch	Declaring Area/ Institution/ Community
1	May 17, 2007	III-4	Ox-Drawn Drum	Provincial	1st	Xianyang City
2	May 17, 2007	III-5	Jiaolong Spinning Drum	Provincial	1st	Qian County, Xianyang City
3	June 24, 2009	III-27	Dragon Dance (Sanyuan Old Dragon)	Provincial	2nd	Sanyuan County Cultural Center
4	June 24, 2009	III-37	Jinghe Bamboo Horse	Provincial	2nd	Jingyang County Bureau of Culture and Sports
5	June 24, 2009	III-39	Dongzhai Eighteen Arhats	Provincial	2nd	Sanyuan County Cultural Center
6	September 26, 2013	III-50	Changwu Backed Core Child	Provincial	4th	Changwu County Intangible Cultural Heritage Protection Center
7	December 10, 2025	III-71	Qindu Dongnanfang Ox-Drawn Drum	Provincial	8th	Dongnanfang Economic Cooperative, Weibin Subdistrict, Qindu District, Xianyang City

Note: Data source: Shaanxi Provincial People's Government Website: https://www.shaanxi.gov.cn/

1. Ox-Drawn Drum

The Ox-Drawn Drum, which belongs to the traditional Shehuo drum dances found across Xianyang, is a notable form, particularly popular in Qindu and Weicheng districts. The name comes from the drum's size and weight. It is too large for people to lift and carry by hand, so it originally had to be transported on an ox-drawn cart. Over time, as drums grew even bigger, tractors and trucks gradually took the place of ox carts. And this shift also gives drummers more freedom to show off their dance moves.

The typical instrumental setup for Ox-Drawn Drum includes two large drums, one small drum, four large gongs, six small gongs, four horn trumpets (sometimes horse trumpets), eight pairs of Bangjiao clappers, and anywhere from forty to fifty pairs of cymbals (which can reach two to three hundred pairs on grand occasions).

Based on “Shiyangjin” or “Shehuo Gu” rhythms, the drum and gong patterns coordinate with each other. In terms of the formation, Bangjiao players lead at the front, followed by over a hundred pairs of cymbals. Large and small gongs are arranged in two rows, with a small drum placed in the middle. Four horn trumpets line up horizontally, and two large drums anchor the rear. Dancers adopt poses such as Tiger Pouncing on Prey and Golden Rooster Standing on One Leg. Their movements are both forceful and graceful. In essence, they dance as they drum, giving the performance a distinctive character—steady, poised, elegant, and full of energy.

2. Jiaolong Spinning Drum

Jiaolong Spinning Drum comes from Dawang Village in Qian County, which is home to a folk spinning drum dance. The name refers to the flood dragon (jiaolong) designs painted on the drum bodies. Local legend shows that this piece was originally called Song of Triumph. It served as a ceremonial drum and music ensemble reserved for the Ming emperor, performed just outside the Meridian Gate to greet military commanders returning from victorious campaigns.

As for the instrumentation, there are many traditional setups. These include six drums, six gongs, fourteen nao (an antique percussion instrument), and two horse trumpets roughly two meters long. However, bugles are more common today. Later on, a larger command drum was added, and the cymbal count rose to forty or fifty pairs. The dance gets its character from the spinning motion, which appears in two forms: self-spinning and circle-spinning. Basic moves include the jumping strike, bouncing spin, carp turning over, and phoenix fluttering a single wing. Performers wear white headscarves, traditional white shirts with black waistcoats, coordinating their movements in various combinations. The overall effect is rugged, bold, vigorous, and lively.

3. Sanyuan Old Dragon

Sanyuan Old Dragon, also called the Xiguan Old Dragon by locals because most performances take place in the villages around the county town’s West Gate (Xiguan), is from Sanyuan County which has an old folk dragon dance tradition. It is said that this dance was related to Emperor Taizong of the Tang Dynasty, Li Shimin. When this area suffered drought conditions, he came across a painting of a dragon hanging in an art shop along the Qinghe River in Longqiao Town. Because the dragon in the painting had no pupils in its eyes, the emperor painted them in. Then the dragon came to life on the spot. And it flew into the sky, gathered clouds, and brought rain, ending the drought. From then on, the people saw this dragon as their protector and began performing dragon dances as a ritual to seek the dragon god’s blessing.

The performance of this dance follows Dragon Making, Eye Dotting, Fish-Dragon Transformation, and Dragon Roaming the World. So artisans build the dragon’s body but leave the eyes unpainted. The dragon becomes truly alive only after a respected elder from the community dots in the pupils. Then, accompanied by drum and gong music, the performers move to the riverside. Typically, the old dragon leads the way, with the Fire God Tower following behind. When the performance arrives at a home, the dragon’s head enters the

doorway first, which symbolizes blessings arriving at the household.

And the dance includes a range of movements and postures, such as "Giant Dragon Overturning the River," "Dragon Coiling at the Gate," and "Dragon Rolling Over." These moves bring the dragon's mystery, majesty, and power into the dancing, creating a feeling of unity between man and dragon. The overall performance is grand and imposing, carrying a strong sense of good fortune and joy.

4. Jinghe Bamboo Horse

The Jinghe Bamboo Horse gets its name from the construction of the horse's skeleton which is made from bamboo strips. Jinghe Bamboo Horse from Zaoping Village stands out as the most representative among the various bamboo horse performances in the area. The local legend traces this tradition back to the late Ming Dynasty. That's when the ancestors of the Gao family in Zaoping Village founded a Bamboo Horse Association. They put on bamboo horse dances as a tribute to Sun Simiao, the revered King of Medicine.

People usually perform this dance from the 1st to the 3rd day of the second lunar month. There are 11 to 13 people involved in the typical show. One of them leads the horses at the front, two bring up the rear, and ten horses occupy the middle. The performers split into three groups. They are the bamboo horse group, the drum and gong group, and the lantern procession group. One additional person sets off fireworks to liven up the atmosphere. Most of the content and storylines draw from ancient military battle dramas. The performance includes five major routine categories, which are Horse Exit, Single Horse Exit, Double Horse Exit (also known as Fierce Young Horse Emergence), Lantern Tour, and Double Appearance (also called Wind Stirring Snow). Together, these cover over 80 different formations. That said, depending on the space available or the number of performers on hand, only a selection of these routines may be performed on any given occasion.

The heart of the bamboo horse performance is running, which is why people also call it Running Bamboo Horse. Throughout the entire show, whether you look at rhythm, dynamics, or emotion, the artists consistently rely on the small step (also referred to as the scattering foot run) as their basic movement. The overall style comes across as elegant, refined, and graceful.

5. Dongzhai Eighteen Arhats

Dongzhai Eighteen Arhats comes from a traditional folk Shehuo dance called the Eighteen Arhats in Dongzhai Village, Sanyuan County. The name comes from what happens on stage. Eighteen young men use their body postures and intertwined arms to shape themselves into different arhat images. Local tradition holds that similar performances existed as far back as the Eastern Han Dynasty.

When the dance begins, nine strong and robust performers act as the bases for the entire show. With drum and gong music playing in the background, each base carries one performer on their shoulders. Together, they move in circles, shift between formations, and execute a variety of movements. Some of the signature postures include Sun Illuminates Four Gates, Single Incense Stick Pointing to Heaven, Lotus Giving Birth to a Child,

Child Worshipping Guanyin, Strong Man Carrying a Child, Golden Gate Memorial Archway, Golden Snake Shedding Its Skin, Joyfully Crossing the Skybridge, Laozi Riding an Ox, and Ascending the Altar to Appoint a General.

The postures of this dance are unique, the movements graceful, and the major and minor arhats wear distinctive costumes. Together, these elements give the dance an artistic style that is elegant, vigorous, and uninhibited.

6. Changwu Backed Core Child

Changwu Backed Core Child, also known as “Backed Pavilion,” is a form of Shehuo folk performance found mainly in Wujiagou Village, Changwu County. Legend has it that a village was once threatened by a demon, and the local children used their wisdom and courage to drive the evil away. In memory of these brave children, the "Core Child" performance was created, in which children are dressed as heroes to symbolize courage and fearlessness.

The carrying frame used in the Changwu Backed Core Child is typically made of locust wood and shaped like a cross-shaped single ladder. The frame consists of five parts: the main frame board, backrest board, foot board, shoulder board, and waist board, all joined together using mortise and tenon joints. The performance usually involves more than 20 people divided into eight groups. Strong adults are chosen to carry children aged three to five on the frames for high-altitude performances. The children wear colorful costumes and painted masks, and the upper and lower performers are fixed together as a single unit.

During the performance, the participants line up in columns. The lower performers either walk in circles or perform cross steps, while the upper performers pose with props, wave sleeves, fan themselves, and swing gracefully through the air. The performance is light, elegant, magnificent, and highly distinctive.

7. Qindu Dongnanfang Ox-Drawn Drum

Qindu Dongnanfang Ox-Drawn Drum is a traditional drum performance form which is prevalent in Dongnanfang Village, Qindu District, Xianyang City, Shaanxi Province. It has a long history which can be traced back to the Qin Dynasty. With its traditional functions primarily manifested in military drum encouragement and sacrificial rituals, it has profound cultural origins. In modern times, through the continuous inheritance and development of multiple generations of artists such as Yu Zhilin, Yu Kai, and Liu Shengbo, and driven by Yu Kai and others in the 1990s, its influence has increasingly expanded. In contemporary times, it is mainly used on festival occasions.

In contemporary times, it is mainly used on festival occasions. The performance instruments feature the large drum as the core, supplemented by small drums, gongs, cymbals, ox-horn trumpets, long trumpets, and others, forming a comprehensive performance form with percussion as the main body combined with dance movements. And the large drum player undertakes the guiding and conducting functions throughout the entire

performance, constituting the core element of this performance form, while other instruments play a supporting and echoing role. The performance repertoire has been innovated based on tradition, forming various technical features such as Great Roc Spreading Its Wings and Skyward Cannon. The performance form is characterized by grand lineup, powerful momentum, and strong impact, demonstrating formidable presence and infectious appeal.

III. Realistic Predicaments Facing the Inheritance and Development

Over the course of its history, Xianyang has managed to preserve a considerable number of traditional dance items. Beyond the provincial-level ICH dances already mentioned, the city's districts and counties are home to many other forms, for instance, traditional Yangge, drum dances, Shehuo dragon dances, stilt walking, and more. These dances are not just performances but they serve as important carriers of Xianyang's folk customs, rituals, and festivals. Moreover, they show how local people understand the world and nature, and they represent a kind of excellent traditional performing art that has been passed down through generations in this region. In order to protect and develop these traditional arts, local governments, industry associations, experts and scholars, and community leaders in Xianyang have worked together to protect these traditional dances. Thanks to these joint efforts, the dances have received a certain level of safeguarding. That said, when it comes to inheritance and development, some problems still remain.

1. Cultural Aphasia: The Absence of Transmission Subjects in the Inheritance and Development of Xianyang Traditional Dance

Xianyang traditional dance is an art form spontaneously created and transmitted by the broad masses of Xianyang people. It not only originates from the lives and practices of Xianyang's populace but also resonates closely with their emotions and needs. In recent years, due to the acceleration of urbanization in various districts and counties of Xianyang and the impact of industrial structure transformation, Xianyang traditional dance has gradually lost its former confidence in the process of urban and rural development. It now faces a series of problems, including "aging inheritors," "art vanishing with its master," "lack of successors," and "cultural discontinuity", falling into a predicament where no one carries on the tradition.

As is well known, many traditional dance items have no identifiable founders or original creators. Some are difficult to trace due to their long history, while most are the crystallization of collective creation, passed down orally from the older generation to the younger, generation after generation. According to the author's field investigations in villages and towns across various districts and counties of Xianyang in recent years, there are very few young people in the villages on ordinary days. Even in urban communities and parks, young people are rarely seen. Toward evening, elderly people in the villages gather at the village entrances to chat about daily life, while in urban communities and parks, retired elderly men and women can be seen taking walks or doing

square dancing. However, performances or displays of Xianyang's folk traditional dances are rarely seen.

Interviews with local community leaders, village officials, and residents in relevant districts and counties revealed several contributing factors. First, because of unbalanced urban-rural development, many young people from the region choose to work and settle in cities, where they can enjoy the material comforts and living standards offered by modern metropolises. Second, many traditional dance intangible cultural heritage (ICH) projects lack market viability and have no economic returns and most rural youth leave for cities for better-paying jobs, inadvertently breaking their ties with their hometowns. Third, some traditional dances place high demands on learners. Without a certain level of artistic aptitude and learning ability, it is difficult to master the techniques in a short time, which discourages many young people from even trying to learn. So very few members of the younger generation are currently engaged in the transmission of traditional dance ICH. This has led to a lack of transmission subjects for the inheritance and development of traditional dance across Xianyang's districts and counties, resulting in cultural aphasia.

2. Cultural Loss: The Crisis of Extinction Facing Xianyang Traditional Dance

As Kong (2016) notes, "Traditional dance is closely related to the environment in which people live, their relationship with nature, and historical conditions. As people's living environments change, some traditional dances have already begun to disappear." In Xianyang, most surviving traditional dances are transmitted through family lineages or group-based master-apprentice relationships, and are typically performed during festivals and celebratory events. For instance, traditional dance forms such as the Ox-Drawn Drum, Yangge, Bamboo Horse, stilt walking, Core Child, and dragon dance are all primarily performed during the Spring Festival, often as mass participatory activities.

However, due to large-scale population out-migration and the impact of multiculturalism, young people's forms of entertainment and media have continuously increased, and the younger generation has lost interest in traditional dances. As a result, fewer people know how to make the performance props and costumes required for traditional dances, and fewer people have mastered traditional performance forms, vocal repertories, accompanying music, and basic dance movements. Local traditional dances such as Yangge, Bamboo Horse performance, stilt walking, dragon dance, tiger fighting, and lion dance are no longer the main forms of entertainment during festivals and celebrations, having become neglected non-mainstream activities.

Although local governments have included traditional dances such as Ox-Drawn Drum, Jiaolong Spinning Drum, Sanyuan Old Dragon, Jinghe Bamboo Horse, Dongzhai Eighteen Arhats, and Changwu Backed Core Child in the provincial ICH protection lists, and many traditional dance items have been included in municipal and district/county ICH protection lists, covering different types such as traditional dances in social practices, rituals, and festival activities, they still face numerous problems. These include the destruction of traditional performance environments, limited transmission bases, low social participation, and insufficient funding for transmission. Of course, in many areas, rescue protection of traditional dance ICH projects merely involves the static preservation and display of material carriers such as props and costumes collected from the public, failing

to fundamentally solve the development problems faced by traditional dances in terms of transmission sites and environments.

3. Cultural Decline: The Fading of Cultural Memory in Xianyang Traditional Dance

"Cultural memory refers to the collection of memories and knowledge shared within a specific society or group and passed down from generation to generation. This theory studies how people remember past events and experiences, as well as how these memories influence current culture and society" (You & Wu, 2025). As an important component of the life and emotional memory of Xianyang people, Xianyang traditional dance carries the historical and cultural memory and aesthetic codes of the Xianyang populace. Relying on the unique natural environment and cultural ecological environment, the working people of Xianyang have used dance as a form to record history, depict lifestyles, unite the spiritual will of the people, and express the aesthetic and life aspirations of the populace.

From the powerful and majestic Ox-Drawn Drum to the vivid and lifelike Changwu Backed Core Child, each of these dances is the crystallization of Xianyang's regional charm and the wisdom of its ancestors. They carry the unique cultural memory of Xianyang's local culture and manifest the living customs and spiritual beliefs of the Xianyang people. Nowadays, in the context of modernization and globalization, due to rapid economic development and increasingly advanced transportation networks, the traditional ecology of the areas where many of Xianyang's traditional dances are located has been disrupted. The public's awareness of protecting traditional dances has gradually weakened, while identity recognition and mindsets have become increasingly complex. Many authentic traditional dance rituals, props, and procedures cannot be restored amidst the continuous changes in the cultural environment, facing cultural decline.

IV. Practical Pathways for the Inheritance and Development of Xianyang Traditional Dance from the Perspective of ICH Protection

Max Weber argued that with the development of science, rationality, and modernity, the world has gradually become disenchanted. "To some extent, intangible cultural heritage has also undergone a process of disenchantment, gradually facing the risk of being forgotten or instrumentalized, while also weakening social cultural identity and cohesion" (Yang & Ma, 2024). From the perspective of intangible cultural heritage protection, the inheritance and development of Xianyang traditional dance as ICH requires strengthening confidence in native culture, creating a cultural ecological environment, and enhancing living heritage practices.

1. Strengthening Confidence in Native Culture and Promoting Inheritance through People's Production and Daily Life

Most of Xianyang's traditional dances originate from folk culture and have coexisted and co-evolved with local customs, religious beliefs, thoughts, emotions, and aesthetic tastes. They serve not only as entertainment and games for the common people but also as a form of production and way of life. As one scholar notes, "In many so-called economically underdeveloped areas, local art forms are directly derived from traditional production practices. Although some labor patterns and behaviors have later been infused with aesthetic elements and even acquired performative significance, they still remain a natural extension of production and lifestyle and behavior" (Wan, 2016). This determines that the main body of traditional dance is the broad populace, characterized by its life-oriented and collective nature. Whether it is the Ox-Drawn Drum or the Sanyuan Old Dragon, the spectacle of people gathering in droves to dance joyfully is magnificent. Although their cultural connotations and artistic styles differ slightly, they all belong to the category of collectively performed folk dances.

"In maintaining their vitality through inheritance centered on the people, the broad populace engages in impromptu performances such as singing, dancing, acting, storytelling, drumming, and playing music to celebrate harvests, worship ancestors and gods, and pray for disaster relief and blessings. These performances embody their profound spiritual pursuits and rich emotional desires, and through these popular art forms, people's cultural and psychological needs can be satisfied" (Li, 2019). Based on this, the protection of Xianyang's traditional dances should first focus on their life-oriented and collective nature, adhering to inheritance and development on their native soil and within the production and daily life of the people. In recent years, whether through the government's active participation in promoting Xianyang's traditional dances or through advocacy and research from the media and scholars, with the assistance of ICH protection efforts, the public has continuously revised their understanding of traditional dances and continuously strengthened their recognition of these dances as symbols of local culture.

2. Creating a Cultural Ecological Environment to Enrich the Content and Forms of Traditional Dance Performances

"Cultural ecology refers to a complete system composed of variables such as the natural environment, science and technology, livelihood systems, social organizations, and values that influence the emergence and development of culture. It addresses not only the natural ecology but also the coexistence relationships between culture and the aforementioned variables" (Editorial Board of Encyclopedia of China · Sociology, 1991). Throughout history, the emergence and development of Xianyang traditional dance have been closely related to the local natural and humanistic environments.

Taine emphasized that "there is a kind of spiritual climate, namely customs and the spirit of the times, which plays the same role as the natural climate... In both complex and simple cases, it is always the environment—customs and the spirit of the times—that determines the type of artwork" (Taine, 1983, pp. 34-39). The emergence and continuation of Xianyang traditional dance are closely related to meeting the various needs of specific groups and local folk activities. It is necessarily parasitic on specific cultural ecological environments

and related folk contexts. If detached from the soil on which it depends for survival, it will inevitably face the predicament of extinction.

Based on this, for the inheritance and development of Xianyang traditional dance, the key lies in maintaining and creating an appropriate cultural ecological environment. First, local government departments should establish the concept of holistic protection for traditional dance ICH projects. This can be achieved by establishing corresponding cultural ecological protection zones or organizing relevant cultural and art festivals to provide platforms for promoting and displaying traditional dance inheritance and development. Particular attention should be paid to reconstructing cultural ecological environments that have been altered due to urbanization. Second, traditional dance performers and the general audience should enhance their sense of mission. For a long time, influenced by the folk concept of the “three teachings and nine schools of thought” (social hierarchy), many folk performance practitioners often suffered from prejudice. In recent years, with the rising popularity of ICH protection, their social status has also risen accordingly. Performers should strengthen their sense of responsibility and mission as inheritors, making greater efforts to enrich the content and forms of traditional dance performances. Ordinary people should also actively engage with and participate in traditional dance activities in their places of residence, understand their cultural connotations and values, cultivate an appreciation for folk arts, and enable them to develop in daily life.

3. Strengthening Living Heritage Practices and Building Intergenerational Bonds for Traditional Dance

Regarding living heritage practices, Qiao Xiaoguang argues that “folk living cultural resources are not isolated, simple, or superficial art forms, but rather survival behaviors that reflect a need for existence and a temporal order, recreating themes of survival through holistic activities. Intangible cultural heritage achieves communication between the present and the past through living, undeniable, perceptible, and tangible authentic processes” (Qiao, 2004, pp. 15-16). Wang Wenzhang states that “the transmission of intangible cultural heritage exhibits a living and fluid nature, making the sharing of intangible cultural heritage possible, and this is also one of the important differences between intangible cultural heritage and tangible cultural heritage” (Wang, 2013, p55).

From this perspective, the inheritors of Xianyang traditional dance, as the subjects of transmission, should actively teach their skills. Governments, ordinary citizens, social organizations, research scholars, and especially young people, as the subjects of protection, should spontaneously promote, learn, and study these traditions, fostering an atmosphere where "elderly artists are willing to teach and young people are willing to learn," thus achieving living heritage practices.

It is worth noting that in recent years, with the continuous advancement from ICH on campus to ICH in campus, an increasing number of ICH projects have actively expanded their dissemination channels, broken down barriers between circles, and entered campuses and classrooms. However, few traditional dance ICH projects have made their way into schools. Xianyang is rich in higher education resources, including several

universities and colleges such as Xianyang Normal University, Xizang Minzu University, Shaanxi University of Chinese Medicine, Shaanxi Industrial Vocational and Technical University, Shaanxi Vocational College of Finance and Economics, Shaanxi Energy Institute, Shaanxi Post and Telecommunication College, Xianyang Vocational and Technical College, Shaanxi Institute of International Trade and Commerce, Shaanxi Fashion Engineering University, and Haojing College of Shaanxi University of Science and Technology.

If these local Xianyang institutions of higher education, through their long-term educational practices, can actively integrate local history and culture such as Xianyang traditional dance, they may be able to shape this into their own campus cultural characteristics. For example, Xianyang Normal University has integrated Qin and Han War Drums and Jiaolong Spinning Drum into its talent cultivation program for music and dance majors. On this basis, it has specially established the “Qin and Han War Drums Transmission Base” and related research platforms, applied for research projects, and published monographs such as Research on the Art of Qin and Han War Drums. This has not only established relationships between older generation artists and young students and teachers that transcend mere skills but has also transformed traditional dance from museum exhibits back into a living, warm way of life, with far-reaching influence. If other institutions of higher education and primary/secondary schools in Xianyang could also introduce Xianyang traditional dance ICH projects as part of their quality cultural education programs, it would greatly benefit both the inheritance of Xianyang folk culture and the enhancement of knowledge and skills among teachers and students at local Xianyang institutions.

V. Conclusion

For any Xianyang traditional dance ICH project, its inheritance and development in the contemporary era imply "survival of the fittest." The likelihood of Xianyang traditional dance remaining active in the lives of contemporary or future people in a completely "traditional" manner is low. Although after Xianyang traditional dance was inscribed on the ICH list, local government protection efforts have, to some extent, stimulated the cultural consciousness of multiple subjects. A large number of media outlets, scholars, industry associations, and local gentry have also intensified their promotion and research of Xianyang traditional dance, inspiring the public's subjective status and cultural consciousness as inheritors of cultural traditions such as traditional dance, and forming an inheritance ecology with broad participation from the people of Xianyang. However, to ensure that Xianyang traditional dance remains vibrant and enduring, it is still necessary to invest thought and energy, continuously exploring development models that suit its adaptation.

References

China Intangible Cultural Heritage Digital Museum (n.d.), National intangible cultural heritage representative project list, available at: https://www.ihchina.cn/project.html?tid=3#sy_target1 (accessed 10 June 2026).

Editorial Board of Sociology of the Encyclopedia of China and Editorial Department of China Encyclopedia Press (eds.) (1991), Encyclopedia of China · Sociology, Beijing: Encyclopedia of China Publishing House, 471.

Kong, L. P. (2016), Protection and research of traditional dance from the perspective of intangible cultural heritage [Master's thesis], Chinese National Academy of Arts.

Li, R. Q. (2019), On the protection and inheritance of traditional performing arts, Chinese Culture Research, (01), 1-14.

Ma, S. D. (2023), Why can't traditional dance intangible cultural heritage be trained through the "academic" education model?, Contemporary Dance Research, 8(02), 41-46.

Qiao, X. G. (2004), Living culture, Taiyuan: Shanxi People's Publishing House, 15-16.

Taine, H. (1983), Philosophy of art (Fu, L. trans.), Beijing: People's Literature Publishing House, 34-39. (Original work published 1865)

Wan, J. Z. (2016), Three dimensions of folk literature and art identification: Reflections based on misunderstandings of folk literature and art, Ethnic Arts, (04), 18-23.

Wang, W. Z. (2013), Introduction to intangible cultural heritage, Beijing: Education Science Publishing House, 55.

Yang, Y. and Ma, C. W. (2024), "Well-being": The enchantment phenomenon and inheritance mechanism of Yunnan traditional dance intangible cultural heritage, Ethnic Art Studies, 37(06), 84-92.

You, M. H. and Wu, S. W. (2025), From ritual to text: The relationship between cultural memory and its authenticity, Journal of Henan Institute of Science and Technology, 45(03), 52-58, 66.

Journal of Advanced Academic Research and Studies 高等学术研究期刊
Vol. 3, No.6, 2026 (pp. 88-100)
http://www.nlbaeai.org/
ISSN 3006-4007 (Print)
ISSN 3006-4015 (Online)

From Cultural Expression to Brand Narrative: A Study on the Symbolic Value Generation of Ethnic Tourism Products

Haiyan Zhai[a] Qian Liu[b] Min Zhu[c]
[abc] School of Business,Shandong Xiehe University,Shandong, School of Business,Shandong Xiehe

Received 28 March 2026, Revised 24 April 2026, Accepted 1 May 2026

Abstract

Purpose – This study addresses the prevalent market failure characterized by the superficial application of cultural elements and weak brand storytelling, which results in a severe deficiency in product symbolic value.
Design/Methodology/Approach – Drawing on cultural branding theory, narratology, and semiotics, this research builds an integrative analytical framework centered on the dual constructs of "Cultural Expression" (CE) and "Brand Narrative" (BN). The study deconstructs symbolic value generation into a dynamic, two-tiered process: CE constitutes the "deep structure" (providing content and legitimacy), while BN forms the "superstructure" (acting as a strategic engine for market activation and transformation).
Findings – This paper argues that Cultural Expression, through its core dimensions of authenticity, aesthetics, and storability, provides the foundational content and legitimacy for symbolic value. Brand Narrative, in turn, employs structured, emotionalized, and interactive strategies to activate, amplify, and convert this latent cultural value into consumer-perceivable brand equity. Their relationship is not linear but a mutually empowering, upward-spiraling mechanism. This process elevates a product from a mere "object" into a "symbolic entity" endowed with profound cultural connotation and strong emotional connection, ultimately unifying its market and cultural worth.
Research Implications – For both theory and practice, this study proposes a "generative" process model that bridges the gap between macro cultural branding theories and micro consumer experience research. It calls for a strategic shift in organizational logic: from "mining" cultural elements to "cultivating" cultural expression, and from one-way marketing "bombardment" to "narrative-led" community co-creation. The CE-BN framework provides a diagnostic and prescriptive tool for tourism and cultural organizations to achieve the creative transformation of cultural resources and the high-quality branding of their products.

Keywords: Cultural Expression; Brand Narrative; Symbolic Value; Ethnic Tourism Products;Branding
JEL Classifications: L83, O33, Z13, I31, M10

基金来源：本文系中国民族贸易促进会研究项目“民族文化旅游商品开发与品牌塑造路径研究”（2025B009）研究成果。
[a] First Author, E-mail: hyzhai5@126.com
[b] Corresponding author, E-mail:liuqianphd2024@163.com
[c] Second author, E-mail: 798957347@qq.com
Ⓒ 2023 The NLBA Eurasian Institute Limited. All rights reserved.

I. Introduction

As special cultural and commercial articles, the important value of ethnic tourism products is based on their ability to convey and spread cultural ideas rather than their physical functions. With the increase of the experience economy, they have changed from common material souvenirs to "mobile symbols" representing the local culture and "means for tourists to express themselves" (Zeng, 2024). Therefore, it is significant to establish and improve their symbolic values systematically, which is necessary for both the protection of cultural heritages and the sustainable development of the tourism industry.

Furthermore, there is an existing contradiction: although the market requires more and more "culture", most ethnic tourism products still face the problem of "dual aphasia". One kind of aphasia is the lack of cultural expression. The use of ethnic symbols on a large quantity of products is limited to superficial reproduction and accumulation, making them "empty signs" without inner vitality (Huo et al., 2025). By adopting this way of "having elements without a story", it can not stimulate the consumers' emotional response and even weaken or change the cultural value carried by these symbols during the commercial process (Dai, 2014). The other kind of aphasia is the brand construction. Most developers are stuck in the marketing concepts of traditional fast-moving consumer goods, unable to understand the principles of building brands for cultural products. As a result, they encounter the situation of "having products without a brand". Such kind of "noise selling" can not establish a deep emotional bond with the consumers, finally causing ineffective price competition in the homogeneous market.

To solve this problem, scholars from different fields have provided valuable theoretical materials, but these ideas are like searchlights which do not meet each other. Cultural branding theory explains that brands should enter the consumer's mind through cultural stories, thus indicating the significance of brand storytelling (Lu et al., 2023). Tourism anthropology, such as the works of Ning (2017) and MacCannell (1973), has investigated the multi-layered aspects of 'authenticity', clarifying the consumers' demand for cultural experiences (Ning, 2017; MacCannell, 1973). At the same time, domestic research in design and folklore studies has concentrated on how to select and convey cultural factors, studying the method of implementing cultural expression (Zang & Wu, 2026).

Although these contributions have been made, a significant research deficiency exists regarding the relationship between these theories: we do not have a comprehensive process model which systematically elucidates the effective transformation of profound cultural meanings (content) into brand symbolic values with strong appeal (result) via various strategic marketing measures (form). Consequently, this paper intends to establish an integrated analytical structure to link these theoretical discrepancies. We will specifically focus on the following three main issues by introducing the 'Cultural Expression - Brand Narrative (CE-BN)' model.

What fundamental aspects should a "Cultural Expression" have to effectively convey symbolic meaning?

What crucial strategies should a "Brand Narrative" adopt to effectively promote cultural content?

What is the nature of the interactive relationship between "Cultural Expression" and "Brand Narrative" which jointly promote the creation and evaluation of symbolic values?

By responding to these queries, the study intends to offer a novel analytical approach for examining the branding of cultural resources, and also a more organized intellectual way for industrial application.

II. Theoretical Framework: The Binary Architecture of Cultural Expression-Brand Narrative (CE-BN)

To systematically explain the formation of symbolic value, this paper puts forward the Cultural Expression-Brand Narrative (CE-BN) model. We believe that the symbolic value should not be presented in a single way, but rather a two-way procedure with a Binary Structure. In this structure, 'Cultural Expression' plays the role of the Deep Structure of symbolic value, supplying both its content and supporting reasons. 'Brand Narrative' forms the Superstructure, acting as the conveying method which initiates, strengthens and implements the market change of this concealed value.

1. Construct 1: Cultural Expression (CE) — The Deep Structure and Legitimizing Foundation of Symbolic Value

In this paper, "Cultural Expression" is not merely a replication of the traditional components. It represents the change and integration process of a people's Symbolic Grammar, which consists of their historical experience, values, artistic concepts and lifestyle, into a work. This forms an important basis which endows the brand with content, depth and reliability. A cultural expression without substantial meaning and having only surface features can not maintain a significant and appealing brand story. From the studied materials (for example, Wang et al., 2011; Berger, 2019; Dong et al., 2009; Polfuß, 2021), we think that a stable profound structure is mainly based on the following three aspects:

Authenticity is the moral-legal basis for the whole symbolic value structure (Lee, 2025). It determines the right and qualification of the brand to use and interpret a certain culture, being an essential condition for consumer trust. It is not limited to mean "the original flavour", but has several layers. According to Wang's (1999) comprehensive classification, it may be "objective authenticity" based on historical evidence; "constructed authenticity" which is considered real by tourists although there is commercial arrangement; or "existential authenticity" which arouses deep personal emotional feelings. A non-authentic expression will make the brand story meaningless and reduce the product to a superficial "pseudo-ancient", or bring about charges of "cultural exploitation", thus destroying its symbolic value instantly.

Aesthetics plays the role of the deep structure's Sensory Signature and Capital Converter (Hu, 2026). As a sensory signature, it converts abstract cultural meanings into a special brand aesthetic style through a unique combination of visuals, textures and even scents (Pei, 2013). As a capital converter, it follows Bourdieu's (2018) theory to change cultural resources into the holder's 'cultural capital', which can be used as a symbol to differentiate social tastes and express personal identities. An outstanding aesthetic presentation can make the

culture overcome its own limitations and achieve resonance with other groups.

Storability is the important characteristic of the Narrative Gene Pool (Duero, 2019). It indicates that the cultural expressions have a large number of narrative 'genes' which can be chosen and rearranged, like exciting backgrounds, conflicts, characters or plots. For instance, the design of a piece of jewellery may be related to a legend; the particular method of a certain fabric may reflect the family history. According to Bruner (1991), people build their reality by means of narratives. These inherent 'story seeds' are the best materials for the brand narrative framework.

2. Construct 2: Brand Narrative (BN) — The Superstructure and Transmission Engine of Symbolic Value

If Cultural Expression stands for the precious "mineral deposits" buried in the deep ground, then Brand Narrative is the proper machine applied for discovering, refining and presenting them to the whole world. It is an efficient way of communication which transforms the hidden value in the internal structure into a brand reputation that can be noticed, retained and transmitted by the consumers. This 'machine' includes three main strategies (or 'parts'):

Strategy 1: Structuring - Transforming Disorder into Order: Culture is generally complicated, ambiguous and sometimes contradictory. The purpose of structuring is to organize this disarranged cultural information into a well-defined and coherent narrative structure (like the "Hero's Journey"). It defines the roles in the brand's world (for example, the brand as a guide and the consumer as the hero), constructs a plot and finally forms a meaningful theme (for instance, "retrieving roots" or "praising craftsmanship"). This process of "ordering" can decrease the consumer's cognitive burden, enabling them to comprehend and remember the complex culture more easily (Sanders & Van Krieken, 2018).

Strategy 2: Emotionalizing - Changing from Object to Feeling: This approach is applied to modify the brand story, aiming at transforming "object to feeling." By developing sympathetic characters and constructing some emotional settings, the difficult product is turned into an emotional carrier. The significance of the symbolic value is not to understand the symbol itself, but the emotions it arouses (e.g., being touched, a feeling of belonging or pride). Consumers buy the emotion rather than the product itself (Ai, 2008). Emotion is the "magic key" to touch the consumer's heart (Enterprise Research, (6), 18-19).

Strategy 3: Interaction - From Monologue to Polyphony: In the present era, the presentation of the brand's story has transformed from a single-directional "monologue" to a diversified "polyphonic" performance. Based on Service-Dominant Logic (Holt, 2007), customers are not only the receivers of value but also the "co-creators" of value. Through the use of platforms like social media, an interactive strategy motivates customers to participate in the narration, alteration and spread of the story. This approach can enhance the brand's vitality and at the same time enables customers to be the most active creators and communicators of symbolic values by their usage and diffusion.

III. The Engine of Value Generation: Bidirectional Empowerment and Spiral Appreciation in the CE-BN Framework

The relationship between Cultural Expression and Brand Narrative is not a series of actions such as 'do A first, then do B', but a dynamic system of mutual promotion and mutual influence. We consider it as an 'innovation' in value creation. This innovation is achieved through two main procedures-'Content Assistance' and 'Value Stimulation', leading to a continual increase and appreciation process, called 'The Spiral of Symbolic Value'.

1. Stroke 1: Content Substantiation — How Cultural Expression Injects "Legitimacy" and "Potential Energy" into Brand Narrative

This is the "intake and compression" stage of the engine. During this period, a profound and abundant Cultural Expression supplies the Brand Narrative with the "high-energy fuel" needed for ignition, mainly shown as:

Authenticity endows the story with both 'reliability' and 'power'. A brand's story constructed on an authentic cultural background will acquire the reliability to express itself. When there is plenty of information and people are generally 'ad-sensitive', this kind of story, supported by cultural truths, can successfully pass through the consumer's trust obstacles and cause an Ontological Security-feeling - meaning the story is not fabricated. This trust is the foundation for a brand to resist conventional competition and gain a considerable competitive advantage (Xu et al., 2020). A story without authenticity is similar to a fairy tale.

Aesthetics gives the "perceptibility" and "Focus of Desire" in the story. A special aesthetic is the main basis for expressing the culture of a brand. It changes an abstract cultural story into a clear form which can be observed, handled and sensed, making the story "lived through" instead of just "told". In the battle for attention, a good aesthetic is the key factor in capturing the consumer's interest and arousing his desire to know more and possess it. It assists in distinguishing a story from others and turning it into an attractive object of desire (Hoyer & Stokburger-Sauer, 2012).

Storability gives vitality to the story through "dramatic potential" and "Core Fuel." The "story kernels" contained in Cultural Expression supply the Brand Narrative with the most important dramatic tension and emotional power. It provides the basic outline for forming conflicts, determining heroes and building suspense. The main purpose of a Brand Narrative is to select, modify and rearrange these dispersed, hidden story elements (a myth, a craftsman, a ritual), converting them into a Brand Story from Cultural Materials. If there is no storability of cultural expressions, the brand narrative will be like a river without a source, and the engine will stop due to lack of fuel.

2. Stroke 2: Value Catalysis — How Brand Narrative Reversely Activates and Reshapes Cultural Expression

This is the stage of "starting and enhancing" for the engine. At present, the "exact devices" in the Brand Narrative are being improved. It not only shows the strength of "fuel", but mainly affects the Cultural Expression itself, giving it new vitality and enabling its update in the contemporary age.

A Structured Narrative creates a "Cognitive Map," leading to the transition from "Cultural Field" to "Brand Pathway." The Brand Narrative arranges the abundant and complicated cultural information (a broad "cultural field") into a clear and consistent story framework, offering consumers a "Cognitive Map." Following this carefully planned "brand pathway," consumers can easily understand the essence of the culture and its inner meaning, thus changing the vague and latent "cultural cognition" into a clear and firm "brand cognition," finishing the first process of value transformation (Chen, 2024).

An Emotionalized Narrative constructs a "Psychic Bridge," which connects the "Grand Narrative" to "Personal Relevance." Focusing on human emotions and destiny, Brand Narrative forms a "Psychic Bridge" between "grand culture" and "personal life." It evokes feelings of happiness, nostalgia, respect or aspiration in the consumers, transforming abstract cultural values into specific life experiences and personal emotions. It is this introduction of emotion that makes the cultural symbol warmer, achieving the important stage from "cultural identification" to "brand affection" (Chen et al., 2014).

An Interactive Narrative activates the "Meaning Engine", which is essential for changing "Historical Heritage" into "Living Culture". This is the main point for the whole engine to form a value-added cycle and start the next cycle. In the historical river, traditional culture is like a "past-tense" Heritage. By asking the consumers to participate in creating the story (by using, sharing, commenting and making derivatives), they are given the new positions of "cultural inheritors" and "contemporary interpreters". In this process, culture is no longer an exhibit in a museum but a Living Culture - a vital organism which is closely connected to people's daily life. Each time a consumer shares with his personal ideas, it adds new and modern meanings to the cultural symbol (Hu et al., 2026). This "meaning reproduction" thus greatly improves and strengthens the authenticity and storability of the "Cultural Expression", offering high-quality "fuel" for the next higher level of brand narration.

In conclusion, the process including "Content Substantiation → Value Catalysis → Meaning Reproduction → Content Re-fortification" is the main dynamic mechanism for the gradual increase in the symbolic value of the product. Each cycle enables the accumulation and appreciation of the product's symbolic value at a higher level.

IV. Framework Deployment: A Mechanistic Analysis of Paradigm Cases

If the CE-BN framework is the theoretical engine presented in this paper, then successful business cases

are the "test tracks" to prove its effectiveness. Our purpose is not only to apply the framework to the cases, but also to use it as an analytical tool. By a systematic analysis of two revolutionary brands in the Chinese market, "Florasis" and "The Palace Museum Cultural and Creative Products", we intend to illustrate, practically, the "Symbolic Value Spiral" operation in reality.

1. Case 1: Florasis — The Architectural Blueprint of an Aesthetics-Driven Brand

As a prominent company which has gained popularity in recent times, the achievement of Florasis is not due to a chance marketing success, but the outcome of a thorough brand establishment following the CE-BN framework strictly. It demonstrates the way to construct a stable brand foundation based on the concept of "Eastern Aesthetics", beginning with nothing.

Foundation of the Deep Structure (CE):

Authenticity: The brand studies extensively the ancient Chinese pharmacopoeia books such as the Compendium of Materia Medica, ensuring the objectivity and credibility for its main idea of "makeup nourished by flowers." This is not only a promotional story, but is clearly shown in its ingredient lists, which bases the consumer's trust.

Aesthetics: The "Eastern micro-carving" technique in its original form reproduces traditional designs such as landscapes and auspicious animals inside a miniature product. This special, clearly different aesthetic is able to change a quick-selling commodity into a "social currency" with collecting value, thus converting the cultural symbol into aesthetic wealth.

Storability: From the intangible cultural heritage stories contained in its "Miao Ethnic Silver" collection to the thousand-year-old love covenants related to its "Concentric Lock" lipstick [ref: 5, 8], each of Florasis's main product lines is not a single design but a particular "story embryo" drawn from a wide range of narrative gene pool.

Construction of the Superstructure (BN):

Structuring: The company has developed a great story about "Inheriting Eastern Beauty and Promoting Chinese Craftsmanship", considering itself as the "Spokesman of Eastern Aesthetics" and aiming at making its consumers as "Contemporary Adherents to Eastern Beauty". This traditional "mentor-protector" narrative scheme gives the process of purchasing a cultural mission which is not limited to the purchase itself.

Its "Concentric Lock Lipstick" portrays an emotional story. It successfully integrates the important cultural theme of romantic fidelity and eternal love in China, not only making the lipstick a color but also a significant object with a deep emotional commitment.

Interacting with many "Guofeng" (Chinese national style) Key Opinion Leaders (KOLs)" and participating

in "Eastern Makeup" challenges on the Internet indicates inviting people to discuss the concept of "What is the modern Eastern beauty?". During this procedure, consumers change from passive buyers to joint creators and active interpreters of the brand story, thus forming a value co-creation cycle.

The successful implementation of Florasis confirms the effectiveness of the "Content Substantiation → Value Catalysis" working principle. Its deep Cultural Expression (CE) gives the Brand Narrative (BN) an unquestionable authority and abundant dramatic resources. Consequently, the exact Brand Narrative (BN) transforms these abstract cultural ideas into realistic forms which the consumers can understand, feel and own. It should be mentioned that the "interacting" strategy used in forming the community collaboration continually introduces new, lively cultural contents recognized by the present youth into the brand. This helps to maintain and update the authenticity and lastingness of its Cultural Expression, thus promoting the next stronger cycle of value.

2. Case 2: The Palace Museum Stationery — The Alchemy of a Dormant Cultural IP

If Florasis indicates construction "from nothing to something", the development of The Palace Museum's cultural products shows a kind of cultural transformation which changes "something to a living thing". It proves that a famous, serious and possibly dull cultural image can be aroused and changed into a national famous brand with great vitality, by using the CE-BN system.

Revitalization of the Deep Structure (CE):

Authenticity: The creativity of our products originates from our own genuine relics or real historical events, like the "Got it." (朕知道了) tape which is derived from the vermilion inscriptions of the Kangxi Emperor. This authenticity, confirmed by 'national treasures', possesses special credibility and serves as the foundation for all the related stories.

Aesthetics: Its main approach is "the translation and reduction of aesthetics." It integrates classical styles with modern pop art and minimalist designs, for example, using the scenery images from the painting A Thousand Li of Rivers and Mountains in stationery. This leads to an aesthetic change from "cultural relic" to "fashionable article," which is accepted and favored by a wider young group.

Storability: Since the Forbidden City has existed for about 600 years, each artifact, each emperor and each part of the palace walls contains a story. The Palace Museum possesses an abundant source of narrative materials.

Subversion via the Superstructure (BN):

Structuring: The final result arranged and classified the imperial figure. It modified the former serious and formal appearance of the imperial, and created an "adorable", "humorous" and "human-like" IP character with

a "cute contrast" through social media. Consequently, a humorous story about "What if the Emperor were in the present day?" was conceived.

Through the products such as "Travel by Imperial Decree" luggage tag and "I'm Just That Kind of Guy" folding fan, it made the distant and majestic imperial figure become an approachable and humorous "neighborhood CEO". This immediately reduced the psychological gap between the ordinary people and the supreme imperial power, establishing a strong and new emotional bond.

By regularly publishing posts like "The Palace Museum Cats," "The Palace Museum Lipsticks" and "The First Snow at the Palace Museum" on the Internet, the company has conferred its copyright to the public. It has succeeded in turning "visiting the Palace, purchasing the products and exhibiting them" into a popular cultural fashion, enhancing the spread of the brand's story throughout the country.

The Palace Museum provides a good illustration of the significant "catalyzing" and "stimulating" effect of Brand Narrative on Cultural Expression. Before the establishment of the CE of The Palace Museum, it was in a "high energy state but low activity state" for a long time. By applying the "cute-contrast" narrative structure and the "down-to-earth" emotionalized narrative, The Palace Museum has accomplished a remarkable cultural change. They have transformed the grand and distant history into a language which is easily understood, attractive and shared by the young customers. The interactive narrative, involving numerous people's participation, forms a positive feedback process: every sharing and discussion from the public add new contemporary vitality to this inactive Intellectual Property (IP), thereby truly "refreshing" it from a historical heritage to a living cultural entity coexisting with the current society.

V. Discussion: From Theoretical Construction to Practical Divergence

The main objective of this paper is to disclose the "black box" in the process of generating symbolic values in ethnic tourism products. By setting up the CE-BN framework, we have created both a "map" and an "analysis and implementation" model for value generation. The chapter aims to clarify the theoretical progress and practical distinctions brought by this framework.

1. Reshaping the Dialogue: Three Levels of Theoretical Contribution

The theoretical contribution of this study is not only to put forward new concepts, but also to rearrange and establish a new discussion on cultural branding from three different perspectives by "reorganizing" and "connecting" the existing theories.

The main significance of this study is to bridge the persistent theoretical gap between macro-level cultural branding theory (such as Holt, 2004) which deals with the response of brands to social and cultural trends, and micro-level tourism experience research (such as Wang, 1999) which concentrates on the tourist's personal perception of "authenticity". By harmoniously combining the fundamental structure of "Cultural Expression"

with the upper structure of "Brand Narrative", the CE-BN model systematically solves the fundamental problem of "how grand culture is converted into individual identity" for the first time, providing an opportunity to link these two important theoretical aspects.

At the analytical level, we present a 'Middle-Range Theory'. For the complicated and vague concepts of 'culture' and 'brand', this research specifies them into six analytically understandable dimensions (Authenticity, Aesthetics, Storability; Structuring, Emotionalizing, Interacting). This is referred to as a 'Middle-Range Theory' according to Robert K. Merton's idea. It is not too abstract to help empirical research as a grand theory, nor does it fail to have extensive explanatory power as pure empirical induction. The CE-BN framework, as an analytical heuristic, offers a set of analysable elements for future researchers to use in both theoretical reasoning and empirical verification.

At the Research Perspective Level: Proposing a "Generating" approach instead of a "Constituting" one. Previously, most research has followed a "constituting" principle - that a successful cultural brand is "constituted" by factors A, B and C. In this study, we suggest a "Generating" research strategy. By using the model of "Content Supportation → Value Activation → Meaning Reproduction", we point out that the symbolic value is not a fixed combination of elements but an interactive, continuous and spiraling increasing "Generating" procedure. This change in research direction leads us to focus on the more process-oriented and dynamic main question: "How does the symbolic value of a cultural brand develop?"

2. Reconfiguring Practice: Two Core Shifts in Organizational Logic

For industry practitioners, the CE-BN framework is not only an operating guide; it mainly promotes two significant changes in the organizational logic.

From "Mining Cultural Elements" to "Cultivating Cultural Expression," the role of the enterprise should be changed. It is no longer enough for the enterprise to merely extract cultural symbols superficially, but rather it has to cultivate culture deeply. The managers cannot be satisfied with merely taking cultural symbols as visual elements. Therefore, the organization should set up a function of "cultural researcher" or "cultural translator" to study the symbolic grammar behind the cultural symbols systematically. During the initial stage of product development, the three aspects of the CE framework (Authenticity, Aesthetics, Storability) should be used as the main criteria for evaluation, just like cultivating a plant to ensure it has strong roots and abundant foliage for the brand story. This may also lead to the establishment of a new position in the organization, the Chief Culture Officer.

From "Marketing Bombardment" to "Brand Narrative Leadership." It is necessary for the brand department of a company to change from a broadcasting station which only does one-way "information bombardment" to a campfire leader who initiates "meaning co-creation" in the community. The brand managers should be regarded as "Brand Bards", whose main task is not to repeatly announce the Unique Selling Proposition (USP) of a product, but to plan and keep the "Narrative World" rich. By using the three strategies of the BN framework (Structuring, Emotionalizing, Interacting), the brand should be able to "set the stage" and attract customers to

"perform on it", thus transferring part of the control of the brand story to the community in order to stimulate strong network effects and cultural vitality.

In summary, the CE-BN model proposes a novel concept of "Cultural Ambidextrous Organization." This organization should have two contradictory but compatible abilities. On the one hand, it should be similar to an ethnographer or a museum director, valuing culture greatly and conducting thorough and strict exploration and presentation. On the other hand, it must also be like a film director of Hollywood or a product manager in Silicon Valley, being aware of the current consumer psychology and the media situation to carry out effective and attractive narration and communication. Only when both these abilities are mastered can a company effectively control the source of symbolic value creation and establish a lasting cultural brand in the intense market competition.

VI. Conclusion, Limitations, and Future Outlook

The final result of this study is the construction and initial validation of the Cultural Expression-Brand Narrative (CE-BN) model to explain the variations of symbolic values in ethnic tourist products. It indicates that symbolic value is not an invariant factor but a changing procedure. The fundamental rule consists of a cyclic process "Content Confirmation → Value Activation → Meaning Transmission." "Cultural Expression" (CE) provides "Brand Narrative" (BN) with its foundation and considerable help. Additionally, an efficient "Brand Narrative" (BN) can promote, modify and improve the present symbolic value. By promoting the collaborative creation of the consumers, it constantly introduces new meanings to the whole system, thus promoting the continuous appreciation of symbolic value.

This research on theoretical construction has some restrictions. Firstly, the CE-BN framework was established by theoretical reasoning and case study; its general applicability and the relationships among its different aspects need to be verified by empirical studies with a bigger sample. Secondly, in this paper, only successful examples were chosen and there is not enough discussion about the cases where value creation has not been achieved.

Therefore, future research can be expanded in the following directions:

Quantitative Verification: Construct well-established measurement scales for the six aspects of the CE-BN model. Then, Structural Equation Modeling (SEM) can be applied to verify the relationships among these aspects and the outcomes such as symbolic value and purchase intention.

Comparative case studies should be carried out to analyze successfully and unsuccessfully examples in order to investigate the underlying obstacles resulting in failure in symbolic value creation. This will improve the framework's diagnostic ability.

Cross-cultural verification and "dark side" investigation: Examine the suitability of the framework in various national and cultural backgrounds. At the same time, carry out detailed studies on its "dark side". For example, under which circumstances does a brand's message change from "cultural empowerment" to the unethical

situation of "Cultural Appropriation"? This kind of study is of great practical significance for guaranteeing the healthy growth of cultural industries.

In summary, this study intends to offer a conceptual framework for both theoretical reasoning and practical use, with the purpose of going beyond simple explanations of "what is," to a more profound understanding of "why" and effective suggestions on "how to." Our main objective is to discover a balanced position, combining a respectful attitude towards cultural conservation with an innovative spirit in business, thus promoting a more responsible and significant culture industry through continuous investigation and thought.

References

Ai, X. (2008). Qínggǎn——dǎkāi xiāofèizhě xīnsuǒ de “jīn yàoshi” [Emotion: The "golden key" to unlocking consumers' hearts]. Qiye Yanjiu [Enterprise Research], (6), 18–19.

Berger, A. A. (2019). Brands and cultural analysis. Springer.

Bourdieu, P. (2018). The forms of capital. In The sociology of economic life (pp. 78–92). Routledge.

Bruner, J. (1991). The narrative construction of reality. Critical Inquiry, 18(1), 1–21. https://doi.org/10.1086/448619

Chen, S. (2024). Research on the path to realize brand value from the perspective of consumers.

Chen, T. Y., Yeh, T. L., & Chu, C. H. (2014). Storytelling and brand identity in cultural digital archives industry. International Journal of Information and Management Sciences, 25(2), 157–179.

Dai, W. (2014). Méiyǒu gùshì, bùchéng rénshēng——qiǎn xī guǎnggào pǐnpái xíngxiàng zhī “gùshì sùqiú” lùn de xiàndài shāngyè yùnyòng [No story, no life: A brief analysis of the modern commercial application of "story appeal" theory in advertising brand image]. Shangqing [Business Information], (17), 274.

Dong, L., & Tian, K. (2009). The use of Western brands in asserting Chinese national identity. Journal of Consumer Research, 36(3), 504–523. https://doi.org/10.1086/598015

Duero, D. (2019). La narrativa como modalidad básica de cognición: Aportes narratológicos a la ciencia psicológica [Narrative as a basic mode of cognition: Narratological contributions to psychological science]. Límite (Arica), 14, Article 30. https://doi.org/10.4067/S0718-50652019000100030

Holt, D. B. (2004). How brands become icons: The principles of cultural branding. Harvard Business Press.

Holt, D. B. (2007). How brands become icons: The principles of cultural branding. Journal of Direct, Data and Digital Marketing Practice, 8(3), 281–285. https://doi.org/10.1057/palgrave.dddmp.4350077

Hoyer, W. D., & Stokburger-Sauer, N. E. (2012). The role of aesthetic taste in consumer behavior. Journal of the Academy of Marketing Science, 40(1), 167–180. https://doi.org/10.1007/s11747-011-0250-y

Hu, J., Yang, X., & Zhou, X. (2026). From symbol to emotion: Exploring the consumption culture of "the first cup of milk tea in autumn". Journal of Education, Humanities and Social Sciences, 63, 274–279.

Hu, W. (2026). Wǔ dà gǎnguān zài shěnměi jīngyàn zhōng de zuòyòng yǔ zhuǎnxiàng——cóng sāngtǎyénà “měigǎn” tán qǐ [The role and turn of the five senses in aesthetic experience: Starting from Santayana's "The Sense of Beauty"]. Renwen yu Shehui Kexue Xuekan [Journal of Humanities and Social Sciences], 2(5), 216–222.

Huo, J., Abd Jamil, A., & Yang, Z. (2025). Traditional cultural symbols in packaging design: A semiotic study on misinterpretation and commercialization. Malaysian Journal of Social Sciences and Humanities (MJSSH), 10(4), e003340. https://doi.org/10.47405/mjssh.v10i4.3340

Lee, E. J. (2025). Authenticity at the heart of communication. Journal of Communication, 75(2), 85–89.

Lu, M., Lu, Q., & Kahn, H. (2023). Brand storytelling: A review and agenda for future research. Journal of Global Business Research, 35(1), 1–33.

MacCannell, D. (1973). Staged authenticity: Arrangements of social space in tourist settings. American Journal of Sociology, 79(3), 589–603. https://doi.org/10.1086/225585

Ning, W. (2017). Rethinking authenticity in tourism experience. In The political nature of cultural heritage and tourism (pp. 469–490). Routledge.

Pei, X. (2013). Měixué “tǐyàn jiégòu” zài xiāofèi shídài de biànqiān [The transformation of the aesthetic "experience structure" in the consumer era]. Luoyang Shifan Xueyuan Xuebao [Journal of Luoyang Normal University], 32(4), 32–36.

Polfuß, J. (2021). “Made in China” and Chinese brand management across cultures: A new matrix approach. Journal of International Consumer Marketing, 33(1), 19–37. https://doi.org/10.1080/08961530.2020.1762143

Sanders, J., & Van Krieken, K. (2018). Exploring narrative structure and hero enactment in brand stories. Frontiers in Psychology, 9, Article 1645. https://doi.org/10.3389/fpsyg.2018.01645

Wang, T., Zhou, L., Peng, C., & Zhu, X. (2011). Jiǎng gùshì sù pǐnpái: Jiàngòu hé chuánbò gùshì de pǐnpái xùshì lǐlùn——jīyú dáfúnī pǐnpái de ànlì yánjiū [Telling stories and shaping brands: Brand narrative theory for constructing and disseminating stories—A case study based on the Daphne brand]. Guanli Shijie [Management World], (3), 112–123.

Xu, L., Jiang, Y., Cui, N., Zhang, L., & Zhao, S. (2020). Hometown is the most reassuring place: The impact of ontological security threat on preference of hometown brands. Acta Psychologica Sinica, 52(4), 513–523.

Zang, W., & Wu, F. (2026). Lǐngnán wénhuà yuánsù zài xiàndài jiājù shèjì zhōng de zhuǎnyì luójí yánjiū [A study on the translation logic of Lingnan cultural elements in modern furniture design]. Yatai Yishu yu Sheji Qianyan [Asia-Pacific Frontiers of Arts and Design].

Zeng, Y. (2024). Explore the symbolic meaning and value of national tourism.

Journal of Advanced Academic Research and Studies 高等学术研究期刊
Vol. 3, No.6, 2026 (pp. 101-108)
http://www.nlbaeai.org/

ISSN 3006-4007 (Print)
ISSN 3006-4015 (Online)

Research on Fire Safety Governance of High-rise Buildings: A Case Study of Panzhihua City

Yi wang[a] Yali Zhai[b] Yina Li[c]

[a] Law School Law Major, Panzhihua University, China

Received 12 March 2026, Revised 15 May 2026, Accepted 17 June 2026

Abstract

Purpose – This paper explores fire safety status, hazards and governance predicaments of high-rises in dry-hot valley Panzhihua, proposing targeted, actionable comprehensive governance strategies.

Design/Methodology/Approach – Drawing on public safety and urban risk governance theories, this paper employs mixed methods including field surveys, statistical analysis and case studies. Taking 25 high-rises in Panzhihua as samples, it sorts 2021–2024 fire data and conducts comparative analysis referencing best practices from Hangzhou, Shenzhen and Shanghai.

Findings – This study develops a three-dimensional collaborative governance framework integrating technical, human and institutional prevention, and proposes five targeted approaches: upgrading intelligent technical prevention systems, boosting residents' safety awareness and property management performance, optimizing institutional safeguards and credit constraints, mitigating EV fire risks via integrated blocking and dredging, and enhancing cross-departmental law enforcement and oversight.

Research Implications – Practically, this study standardizes daily fire safety management and eliminates hazards for high-rise buildings to safeguard public security, offering references for fire safety governance of high-rises in dry-hot valley cities and analogous areas. Theoretically, it broadens the research dimension of urban fire safety collaborative governance and lays a foundation for follow-up fire safety studies in special climate regions.

Keywords: Asian Blepharoplasty, Double Eyelid, Surgical Design, Levator Aponeurosis, Complications
JEL Classifications: R58,H11,Q54

基金来源：高层建筑消防安全隐患现状及对策调查——以攀枝花市为例，攀枝花学院 2024 年大学生创新训练计划项目，省市级，项目编号 S202411360016
[a] Law School Law Major,Panzhihua University, China,First Author, E-mail:1145237532@qq.com
[b] Lecturer,Law School Law Major,Panzhihua University, China,Second Author, E-mail: 32446565@qq.com
[c] Law School Law Major,Panzhihua University, China,Third Author, E-mail: 2109604395@qq.com
© 2023 The NLBA Eurasian Institute Limited. All rights reserved.

I. 引言

攀枝花，这座坐落于亚热带干热河谷的城市，阳光赋予了它水果生长的温床与避寒胜地的美誉，却也埋下了火灾肆虐的伏笔。干燥炎热的气候禀赋，叠加风速大、蒸发量高的气象特征，使得城市火灾荷载显著高于一般地区（李宏伟，2011）。随着城市化进程加速，高层建筑如雨后春笋般拔地而起，这类建筑体量大、功能复杂、人员密集，一旦发生火灾，火势蔓延快、人员疏散难、扑救难度大，成为城市公共安全治理的“心病”（郭国春，2011）。

高层建筑消防安全治理是一直都是公共安全管理关注的重要课题。现有研究多聚焦于硬件设施和技术防范，对“人防”缺失与管理机制失灵的关注不足（刘和平，2013）。在攀枝花的干热河谷特殊的自然环境下，高层建筑消防的安全治理面临着更为严峻的挑战。因此，建立符合攀枝花实际的长效治理机制，具有重要的理论意义和实践价值。

为了更好对攀枝花市高层建筑消防安全的隐患根源及治理进行分析，本课题组研究采用实地调研、数据分析和案例研究相结合的混合研究方法，通过分析 2021–2024 年火灾统计数据、25 个高层建筑实地调研样本以及典型火灾案例，揭示攀枝花市高层建筑消防安全的主要风险源和治理短板，并借鉴杭州、深圳、上海等城市的先进治理经验，提出符合干热河谷城市实际的高层建筑消防安全治理路径。

II. 攀枝花市高层建筑消防安全现状

所谓高层建筑，系指高度大于 27m 的住宅或大于 24m 的非单层厂房、仓库等。依据《建筑防火通用规范》(GB55037–2022)，此类建筑在消防救援口、消防电梯及通道设置上均有严苛标准。实地调研表明，攀枝花市在建筑竣工验收环节把控严格，硬件“骨架”基本健全，绝大多数高层建筑都是严格遵守相关规范要求，在消防设备设施的修建和配套上毫不马虎。然而，硬件的完善并不能掩盖管理的“骨质疏松”。很多消防设施虽配套完备但是在后期使用时却乱象频出，占用消防通道的现象屡见不鲜，更有甚者将消防通道出口大门锁死，一旦发生火灾则会造成惨痛的后果。因此，责任单位必须按照有关规定将开展定期检查工作，将监管落在实处，督促整改相关违法乱象，保障消防安全。

本次调研覆盖攀枝花市 25 个高层建筑样本，结合钢厂大厦、怡景阳光小区、学府华庭、仁和区福乐园、蜗牛公寓等典型点位的实地情况，发现管理层面的消防安全漏洞集中体现在以下方面，且各消防隐患在调研点位中均呈现高发性特征：

1. 消防通道与楼道管理失范，疏散隐患突出

72% 的调研点位存在消防通道被杂物挤占问题，其中福乐园、仁和区部分老旧民用住宅问题尤为典型，底层唯一进出通道被纸箱、旧家电、自行车等杂物堆放，部分通道宽度不足 1 米；钢城大厦消防通道虽整体畅通，但出口处散落建筑废料，成为逃生阻碍，与 80% 点位存在的楼道杂物堆放问题形成共性隐患。

2. 电动车违规停放充电成普遍顽疾

84% 的调研点位存在电动车违规停放充电现象，学府华庭有十余辆电瓶车密集停放，充电电线交织缠绕累计超 100 米，存在高空飞线、一板多充问题；仁和区福乐园、蜗牛公寓等小区还出现住户将电动车推入楼道唯一通道充电，甚至通过电梯运入户内充电的极端情况，电线裸露老化、车辆堆放密度过大等问题叠加，火灾连环引燃风险极高。

3. 消防设施维护缺位，基础功能失效

48% 的调研点位存在消防设施维护不到位情况，钢城大厦部分安全指示灯故障未及时维修，怡景阳光小区某单元楼道无照明设施，白天需借助手机灯光辨认楼梯位置，且多个小区消防应急指示灯仅作装饰未接电，与 40% 点位消防指示灯未通电的共性问题一致，火灾时无法发挥逃生指引作用。

4. 现场值守与监管流于形式，应急响应缺失

地标建筑钢城大厦地下车库值班人员沉迷电子产品，值守形同虚设，火灾发生时难以第一时间做出反应；各小区虽均张贴 “禁止私拉电线”“禁止楼道停放电动车”等警示标语，但物业未对违规行为进行有效制止，常态化巡查机制缺失，导致居民违规行为屡禁不止。

III. 问题原因分析：

攀枝花地处干热河谷，气候干燥炎热、风速大，火灾荷载本就高于一般地区，叠加高层建筑数量增多、居民结构复杂等特点，消防安全问题的成因并非单一因素导致，而是居民意识、管理履职、设施保障、监管机制等多方面问题交织的结果，结合本地实际调研和火灾数据分析，具体原因可归结为以下几点：

1. 居民消防安全意识淡薄，不良行为习惯根深蒂固

我市不少居民存在严重的侥幸心理，对火灾隐患的危害性认知不足，将楼道、消防通道等公共区域视作个人使用空间，随意堆放杂物；同时私拉飞线、一板多充为电动车充电，甚至将电动车推入户内、电梯的行为屡禁不止，即便小区张贴警示标语仍置若罔闻。部分老年群体还存在卧床吸烟、随意摆放明火等不良习惯，成为亡人火灾的重要诱因，而居民对建筑物区分所有权、相邻关系等法律规定理解偏差，也进一步加剧了违规行为的发生。

2. 物业主体责任落实缺位，日常管理流于形式

我市部分物业服务企业缺乏消防安全管理意识和专业能力，常态化巡查机制不健全，对楼道杂物

堆放、电动车违规充电等问题未能及时制止和清理；对消防指示灯、应急照明、消防电梯等设施的日常维护和检修不到位，导致部分设施故障失灵、形同虚设。部分小区还存在值班人员值守不严、应急处置能力不足的问题，即便硬件设施达标，也因管理缺位无法发挥应有作用。

3. 基础设施配套不足，供需矛盾突出

我市不少老旧高层小区建设年代较早，规划设计未充分考虑电动车充电需求，80% 的调研点位缺乏足量的集中充电设施，充电桩配置比例偏低，导致居民为图方便不得不违规充电；部分老旧小区还存在消防设施老化、楼道照明缺失等问题，2021 年西区福才巷“5・5”火灾、2022 年米易县“12・17”火灾 , 皆因电气线路老化故障引燃可燃物 ; 加之后期改造升级资金不足，基础设施保障能力与消防安全需求之间的矛盾较为突出。

4. 监管联动机制不畅，执法震慑力不足

我市消防、住建、城管、社区等部门之间的联动协作不够紧密，存在监管职责交叉、信息共享不畅的问题，对高层建筑消防安全的常态化监管合力尚未形成。同时，针对电动车违规充电、消防通道堵塞等轻微违法行为，缺乏高效的惩戒机制，2024 年仁和区“6・27”电动车火灾则暴露了新能源时代的全新挑战。车主违规改装、商家非法提供改装服务、企业充电桩管理缺位法律条款在实际执行中缺乏具体判断标准，导致部分违规行为难以有效追责，执法震慑力不足，未能形成有效约束 .

5. 特殊气候与人口特征，叠加火灾防控难度

作为干热河谷城市，我市常年干燥炎热的气候易加速电气线路老化、增加可燃物起火概率，进一步提升了火灾发生风险；同时，我市康养城市的定位吸引了大量老年群体定居，如 2023 年东区 3.26 火灾均是由于未熄灭烟蒂等不良生活习惯引起的，加之部分老年居民行动不便、安全意识薄弱，且存在独居情况，成为火灾防控的重点薄弱群体，而针对这类群体的专属消防安全保障和监护机制尚未完善。

IV. 他山之石：先进城市的治理经验

1. 杭州模式：数字化赋能 " 智慧消防 "

杭州市以 " 城市大脑 " 平台为支撑，构建了消防安全的数字化防控体系。通过在高层建筑关键节点布设水位水压、电气火灾等物联网传感设备，实现对消防设施运行状态的全天候云端监测。当水压异常或电路温度超标时，系统自动触发预警信号，并同步推送至物业服务企业和消防部门的终端平台，将火灾防控关口从事后处置前移至事前预警（朱立宇丰，2021）。据杭州市消防救援支队公开数据，截至 2021 年，全市已建成区级智慧消防平台 12 个、街道级平台 40 个，通过物联网远程监控、智慧用

电、感烟探测等技术手段，实现了火灾风险的实时感知与智能处置（杭州市消防救援支队，2021）。杭州高新区（滨江）进一步深化了这一模式，投用全省首套 " 高空瞭望烟火智能识别系统 "，融合热成像与人工智能技术，实现 24 小时全域巡检，火情识别准确率超 98.5%，AI 预警最快不到 20 秒，构建了 " 数字技术 + 网格力量 " 的立体防护网络（杭州市人民政府，2026）。2025 年，杭州市火灾起数同比下降 9.86%，" 救早灭小 " 率从 2023 年的 83% 提升至 96.7%（杭州市人民政府，2026）。

攀枝花市可借鉴杭州 " 数据治火 " 的逻辑，将 " 事后扑救 " 的被动模式转变为 " 事前预警 " 的主动防控。鉴于攀枝花市财政实力相对有限，宜采取 " 试点先行、分步实施 " 的策略，优先在人员密集、火灾风险高的老旧高层建筑区域部署独立式感烟探测器和电气火灾监控设备，逐步构建覆盖全市的智能感知网络（齐从月等，2025）

2. 深圳经验 : 立法破解 " 电动车进楼 " 顽疾

针对电动自行车进楼入户停放充电这一长期存在的治理难题，深圳市采取了 " 堵疏结合 " 的综合性治理方案。 在 " 堵 " 的方面，2023 年 11 月 1 日修订施行的《深圳经济特区消防条例》明确规定，公共门厅、楼梯间、电梯轿厢以及用于居住、办公等人员聚集的室内场所，禁止电动自行车、电动摩托车及其蓄电池停放、放置或者充电；违规停放且拒不改正的，对单位处一千元以上五千元以下罚款，对个人处五百元以上一千元以下罚款（深圳市人民政府，2023）。在技防层面，深圳市消防救援支队综合运用 AI 电流指纹算法等手段，推出电动自行车用电安全监测平台，通过对电气运行数据的智能识别，实现对入户充电行为的动态监测和预警（应急管理部，2024）。部分小区还部署了基于 AI 视觉识别的电梯阻车系统，当识别到电动自行车进入轿厢时，自动锁停电梯并播放警示语音，有效阻断了电动车上楼的物理通道。 在 " 疏 " 的方面，《深圳经济特区消防条例》要求对拟建、在建的建设项目设置集中停放、充电场所，对既有建筑由产权人或管理人设置或改造集中充电场所，区人民政府为无法设置的场所优先就近规划公共充电设施（深圳市人民政府，2023）。2026 年 2 月，深圳市交通运输局、住建局、消防救援局等部门联合印发《深圳市电动自行车停放场所设置指引（试行）》，进一步规范了停放场所的设置标准，推动充电设施的科学布局。 深圳 " 以技术手段堵塞风险漏洞、以服务供给畅通合理需求 " 的治理路径，为攀枝花市仁和区等受 " 飞线充电 " 问题困扰的区域提供了从源头解决电动自行车消防安全隐患的实践参照。

3. 上海做法 : 消防管理“物业化”与信用挂钩

上海市从制度约束层面切入，将消防安全管理纳入物业服务企业的信用评价体系，以信用约束倒逼物业履职。2017 年 9 月 1 日施行的《上海市住宅物业消防安全管理办法》（沪府令 55 号）明确要求，物业管理行业协会应将物业服务企业履行消防安全责任情况纳入行业诚信惩戒和项目评优范围；对违反消防安全管理规定的单位和个人，公安机关及其消防机构按规定将其违法信息提供至本市公共信用信息服务平台，行政机关可依法采取相应的惩戒措施（上海市人民政府，2017）。2021 年施行的《上海市消防安全领域信用信息管理办法》（沪消规〔2021〕1 号）进一步细化了信用管理规则，将消防安全领域信用信息分为守信信息和失信信息两类，其中失信信息分为一般失信信息和严重失信信息，并

明确了跨领域、跨部门的联合惩戒机制（上海市消防救援总队，2021）。2023 年 7 月 1 日施行的《上海市物业服务企业和项目经理失信行为记分规则》（沪房规范〔2023〕3 号）规定，因未遵守安全管理相关法律法规被消防等部门给予行政处罚的，对物业服务企业给予记录 18 分（最严重等级）的处理，信用评价结果直接影响物业企业的招投标资格和市场准入（上海市房屋管理局，2023）。

上海模式的核心价值在于，通过信用约束机制将物业消防安全管理的软性要求转化为刚性约束，使消防设施维护缺位、疏散通道堵塞等问题的后果不再限于行政罚款，而是直接关联企业的市场准入和经营资格，从而倒逼物业服务企业从被动应付转向主动履职。这对攀枝花市钢城大厦等暴露出的物业消防管理缺位问题具有较强的借鉴意义。

值得注意的是，自 2025 年 3 月 1 日起施行的《攀枝花市物业管理办法》已为消防信用管理提供了法律基础。该办法授权消防救援部门对物业服务人履责情况进行监管，并依法查处电动自行车违规停放充电、消防通道不畅通、共用消防设施未保持完好等违法行为，为技术预警、信用约束等创新机制提供了执法依据。

V. 构建三维协同治理路径

1. 理论意蕴：技防、人防、制度防的协同机制

本研究构建了“技防 + 人防 + 制度防”的三维治理框架，为理解高层建筑消防安全治理提供了新的理论视角。

技防、人防、制度防三者相互依存、相互促进。技防是物质基础，包括消防设施、监测设备、预警系统等，为消防安全提供硬件支撑；人防是核心关键，包括居民安全意识、物业专业能力、监管执法水平等，决定技防效能的发挥；制度防是根本保障，包括法律法规、标准规范、信用评价等，规范技防建设与人防行为。

攀枝花的实践表明，单一维度的治理难以奏效。只有将技防、人防、制度防有机结合，才能构建起全方位、无死角的消防安全防护网。这与现有研究结论相呼应，但本文进一步强调了三者之间的协同效应，丰富了高层建筑消防安全治理的理论内涵。

2. 实践路径：技术赋能、责任压实、制度创新

2.1 完善技防体系，推进智慧消防建设

在重点高层建筑推广安装物联网传感器、电气火灾监控系统、独立式感烟探测器等设备，实现火灾风险的实时监测和智能预警。考虑到攀枝花干热河谷气候特点，应选择耐高温、防干燥的设备材料，确保设备稳定运行。

2.2 强化人防能力，提升全民安全素养

加强居民消防安全宣传教育，特别是针对老年人等重点人群开展入户宣传；加大对物业服务企业的培训力度，提升其专业管理能力；加强对物业值班人员的监督，确保值班值守到位。同时，建立“邻里守望”机制，鼓励居民相互提醒、共同防范。

2.3 健全制度保障，压实属地管理责任

将消防管理纳入物业服务企业信用评价体系，建立奖惩分明的激励约束机制；完善《攀枝花市物业管理办法》中关于消防安全管理的实施细则，明确业主委员会、物业服务企业、消防救援部门等各方责任；建立消防安全“红黑榜”制度，定期公布检查结果，形成社会监督压力。

2.4 破解电动车难题，实施疏堵结合策略

推广“阻车系统”，禁止电动车进入电梯；加快充电设施建设，实施“满电下楼”工程；加强对电动车改装销售的监管，切断违规改装链条。同时，建立充电安全责任追溯机制，明确充电设施运营方的安全管理责任。

2.5 加强执法监管，形成高压震慑态势

消防救援部门应加大执法检查力度，对消防通道堵塞、消防设施损坏、电动车违规充电等违法行为进行严厉查处，形成有效震慑。建立“双随机、一公开”检查机制，提高监管的公平性和有效性。

3. 本土化适配：干热河谷城市的差异化治理

先进经验的本土化适配需要考虑攀枝花的特殊性和约束条件。

从气候条件看，攀枝花属干热河谷气候，干燥炎热，火灾荷载高，这与杭州、深圳等湿润气候城市存在差异。因此，在推广智慧消防系统时，应特别注意高温环境下的设备稳定性和数据准确性，选择耐高温、防干燥的设备材料。

从经济条件看，攀枝花作为老工业基地，财政实力相对有限，大规模推广智慧消防系统面临资金压力。可采取“试点先行、分步实施”的策略，在人员密集、火灾风险高的重点区域优先试点，逐步推广至全市。

从管理基础看，攀枝花的物业服务企业发展水平相对滞后，专业能力不足。在推广上海信用评价制度时，应考虑物业企业的实际承受能力，设置合理的过渡期和培训机制，确保制度落地见效。

VI. 结论

攀枝花市高层建筑消防治理虽已构建起硬件“骨架”，但管理的"血肉"仍显苍白。无论是“1·8”火灾中的设施瘫痪，还是“6·27”事故中的违规改装，亦或是亡人火灾中频现的吸烟陋习，均指向同一个命题——硬件的短板易补，意识的洼地难填。

本研究的主要发现包括：第一，攀枝花市高层建筑消防安全隐患主要集中在管理层面，表现为消防通道堵塞、消防设施维护不到位、电动车违规充电等问题；第二，电气线路故障、吸烟、电动车违规充电是三大主要风险源，需要重点防控；第三，杭州、深圳、上海等地的先进经验为攀枝花提供了借鉴，但需要结合本地实际进行本土化适配；第四，构建“技防 + 人防 + 制度防”的三维协同治理框架，是破解高层建筑消防安全治理难题的有效路径。

未来的治理之路，必须跳出“头痛医头”的怪圈，构建“软硬结合”的长效机制。唯有让“人防”的意识匹配上"物防"的标准，让“制度防”的约束保障“技防”的效能，方能真正筑牢高层建筑消防安全的铜墙铁壁，守护好这座干热河谷城市的万家灯火。

参考文献

郭国春．攀枝花市西区格里坪工业园区消防安全存在的问题及对策 [J]． 攀枝花学院学报，2011, 28(03)：32-35.

杭州市人民政府． 杭州重塑基层应急消防治理体系 [EB/OL]．(2026-05-12)． https://www.hangzhou.gov.cn/col/col812269/art/2026/art_18e607652f2c46049dd07ced956ef06f.html.

杭州市消防救援支队． 杭州支队打造〞数据治火〞智能防控平台架设火灾防控网 [EB/OL]． (2021-11-27)． https://zj.119.gov.cn/art/2021/11/27/art_1229460471_1535.html.

李宏伟．关于推进消防监督管理工作的探讨 [J]．才智，2011，(22)：287-288.

梁正． 城市大脑：运作机制、治理效能与优化路径 [J]． 人民论坛，2021(9)：58-65.

刘和平．浅议当前消防监督管理所面临的形势及对策 [J]．中国西部科技，2013，12(02)：87-89.

齐从月， 谭清华， 廖继． 基于物联网的在建超高层建筑火灾防控技术 [J]． 施工技术（中英文），2025(20)：60-64,78. DOI：10.7672/sgjs2025200060.

上海市房屋管理局． 上海市物业服务企业和项目经理失信行为记分规则（沪房规范〔2023〕3 号）[Z]． 2023.

上海市人民政府． 上海市住宅物业消防安全管理办法（沪府令 55 号）[Z]． 2017.

上海市消防救援总队． 上海市消防安全领域信用信息管理办法（沪消规〔2021〕1 号）[Z]． 2021.

深圳市人民政府． 深圳经济特区消防条例 [Z]． 2023.

应急管理部． 广东省深圳市消防救援支队扎实推进电动自行车安全隐患全链条整治工作 [EB/OL]． (2024-09-13)． https://www.mem.gov.cn/xw/jyll/202409/t20240913_501167.shtml.

朱立宇丰．〞智慧消防〞在防火监督中的运用策略 [J]．数字化用户，2021，(14)：78-79.

Ethical Guidelines

Chapter 1. General Rules

Article 1 (Purpose)
The purpose of the following rules is to present the basic ethical principles and direction needed to ensure the research ethics of editorial board members, peer-reviewers. and authors who examine or submit articles to the Journal of Advanced Academic Research and Studies (JAARS). NLBA Eurasian Institute publishes these rules to present the procedure and actions for research misconduct.

Article 2 (Object of the Study and Scope)
The research is subject to sanction, investigation and judgement to determine whether research ethics were followed when any of the following occurs:

i.The study was submitted to the Journal of Advanced Academic Research and Studies,
ii.The study was confirmed to be published in the Journal of Advanced Academic Research and Studies,
iii.The study has already been published in the Journal of Advanced Academic Research and Studies.

Chapter 2. Honesty and Social Responsibility of the Research

Section 1. Honesty in the Research

Article 3 (Honesty of the Research)
a.Researchers must conduct every research behavior (proposing research, researching, reporting and presenting research, investigating and judging) honestly and sincerely.
b.Researchers must describe the content and the importance of the study clearly and objectively, and must not delete or add results arbitrarily.
c.Researchers must carry out every study without any bias or prejudgment.

Article 4 (Ethics for Researchers)
a.Researchers must not commit research misconduct during any part of the research process.
b.A study must not be submitted if it has been published in other journals, and researchers must not request review of the study to different journals at the same time. However, a thesis or a paper presented in a conference as a working paper shall be exceptions.

Article 5 (The Record, Storage, and Report of Research Data and its Disclosure)
a.All research information must be clearly and precisely recorded, processed, and preserved so that it may be accurately analyzed and confirmed.
b.Researchers shall use proper research methods and statistics, and those shall be available to the public if necessary.

Section 2. Fairness in Researchers'Contributions

Article 6 (Collaborative Research)

Researchers must make the roles and contributions of all contributors clear if they conduct a joint study with other researchers, and shall take full responsibility for establishing this. Prior to conducting research, mutual agreement and understanding shall be made with regard to property rights and ownership issues, research director selection, authorship and the standard of order. the data collection method. individual role in the study. and expectations and objectives of the study.

Article 7 (Responsibility and Duty, Order of Authors)

a.Researchers are responsible only for the study that they carry out or are involved in as an author, and are recognized for that achievement.

b.Authors must accept requests for proof of their contributions.

c.The order of authors must accurately reflect the academic contribution by each author to the research contents or results, regardless of the authors'relative positions.

Article 8 (Corresponding Author)

a.Corresponding authors shall take overall responsibility for the results of the study and proofs.

b.Corresponding authors shall have the burden of proof with respect to the order of the author and co- author(s).

Article 9 (Affiliation of Author)

When indicating the affiliation of author(s), the author's current status in principle shall be given. However, it is possible to follow the customs of the author's academic field if their field of affiliation follows a different custom.

Chapter 3. Research Misconduct and Unethical Research Conduct

Section 1. Methods and Principles of Citation

Article 10 (Methods and Principles of Citation)

a.The author may cite a part of other researchers'studies in his/her research paper using their original text, or the translated version by introducing, referring to or making a comment on the original.

b.The author shall take all possible measures to ensure the accuracy in stating sources and making the list of references.The author must confirm all elements of a citation(author's name, number/volume of the journal, page and published year)not depending on the secondary source but solely on the original work. However, when inevitable, the author can include with acknowledgment.

c.The author must cite in a reasonable manner and use the good faith principle, so that uncited works can be clearly distinguished from cited works.

d.The author must cite published works only. However, in the case of citing unpublished academic materials that have been acquired through personal contact, paper review or proposal review, the author must acquire consent from the relevant researcher(S).

e.When the author introduces ideas or theories in his/her work that have been presented in another study, the source must be stated.

f. The author must distinguish his/her own ideas from cited materials when borrowing substantive parts from one source, so readers can clearly recognize the author's work.
g. If a reference has a significant impact on the direction of the research or can help the reader understand the contents, the author must include all such works on the list of references, except in such cases where the relevant research can theoretically and empirically be inferred.

Article 11 (Method of General Knowledge Citation)

a. If the author uses someone else's idea or a fact provided by them, the source should be provided.However. general knowledge or material that general readers will already recognize shall be an exception.
b. If the author is unsure whether any concept or fact qualifies as general knowledge, it is recommended to cite the original text.

Section 2. Research Misconduct

Article 12 (Definition of Research Misconduct)

"Research misconduct" refers to any instances of forgery, falsifcation, plagiarism, failure to give proper credit to co-authors or redundant publications that may emerge during the entire research process (research proposal, conduct of research, report and presentation of research, investigation and judgement).

a. "Forgery" refers to the act of presenting non-existent data or research results.
b. "Falsification" refers to the acts which artificially manipulate research processes, randomly modify, or delete data resulting in distorted research content or research results. (Here. "deletion" refers to the act of using only favorable data and intentionally excluding the data that might cause unexpected or undesired results.).
c. "Fabrication" refers to the act of intentionally creating a document or record that does not exist.
d. "Plagiarism" refers to the acts which pirate other's work, ideas or research, using ideas, hypotheses, theories, research contents, or research results without justifiable approvals, citation, or quotations, as if those were his/her own.
    i. "Idea Plagiarism" refers to the act of using someone else's ideas (explanations, theories, conclusions, hypothesis and metaphors)in full, substantial proportions or in a fragmented revised form without giving appropriate credit to the originator of the words and ideas. Authors have moral responsibility to indicate the source of ideas through a footnote or a reference. Authors must furthermore not steal other's ideas which are known through peer review of research proposals and submitted articles.
    ii. "Text plagiarism" refers to the act of copying text from another's work without clarifying the original author.
    iii. "Mosaic plagiarism" refers to the act of combining a part of a text with a few words added, inserted or replaced with synonyms, and others without clarifying the source or the original author.
e. "Redundant Publication" refers to the act of publishing a paper that is identical or highly similar text to one that has already been published in the past in another academic journal without alerting the editors or readers of the fact that this work was previously published elsewhere. If the contents of the paper are almost the same as his/her previously published paper, the later paper is regarded as a redundant publication even if the text has a different point of view or perspective, or including a diferent analysis based on the same data that has been previously published. In the case in which the author would like to publish a paper using a previously published paper, he/she must acquire permission from the chairperson after providing the information about the publication and double-checking whether it is a redundant publication or duplication of a publication.

f.“Self-plagiarism” refers to the act of using images, graphs or part of one's own research already published without identifying the source, and it is regarded as redundant publication.

g.“Failing to give proper credit to co-authors” refers to the act of failing to list those who have contributed academically to the research process or results as a co-author or conversely to the act of listing those who have not made any academic contribution as co-authors.

Article 13 (Research Misconduct and Copyright Infringement)

a.Generally, the copyright of all papers and instances published through NLBA Eurasian Institute is assigned to the author. However, if they are utilized for public objects like education, NLBA Eurasian Institute owns the right of use.

b.The full term of copyright is assigned to the academic journal publisher in all papers published in academic journals.

c.It should be noted that “Redundant Publication” may cause copyright violation.

d.It should be noted that the author should use proper quotation marks when widely citing text from copyrighted sources, and even if the text is properly cited, it could infringe copyright.

Section 3. Inappropriate Writing

Article 14 (Inappropriate Writing)

The following are regarded as inappropriate writing:

i.Inappropriate citations

ii.Distorting references

iii.The act of depending on abstracts when citing the published paper

iv.Citing papers that the author did not read or understand

v.The act of partially citing despite intensively borrowing from a single source

vi.The act of reusing text

Article 15 (Prohibition of Distortion of References)

a.References must only include documents that are directly related to the article content. Unrelated references for the purpose of intentionally manipulating the citation index of the paper or academic journal should not be included.

b.As a moral responsibility, the author should not only cite the references which will be favorable to his/her data or theory, but also cite references which may contrast with his/her point of view.

Article 16 (Reuse of Text)

a.“Reuse of Text” refers to the act of re-using a part of the manuscript that he/she has used in a previous paper.

b.Text reuse is an act contradictory to ethical writing, so the author must avoid re-using text already used. In case of unavoidable text re-use, the author should not violate copyright infringement by following standardized reference practices including the use of quotation marks or proper indication.

Chapter 4. Ethical Rule Enforcement

Section 1. Research Ethics Committee

Article 17 (Ethical Rule Pledge)
New members who have enrolled in the research pool of NLBA Eurasian Institute shall acquaint and pledge to abide by these research ethics when submitting to the "Journal of Advanced Academic Research and Studies" and conducting research. Current members shall be regarded as having pledged to abide by these research ethics when initiated.

Article 18 (The Announcement of Violation of Ethical Rule)
If a member learns that another member has violated any ethical rules, he/she should endeavor to correct the mistake by helping make him/her be aware of the rules. However, if he/she does not correct the violation or the ethical violation is obviously unveiled, the member must report to the committee immediately.

Article 19 (Organization of the Research Ethics Committee)
NLBA Eurasian Institute shall establish a Research Ethics Committee (hereinafter referred to as the "Committee") mandated to deliberate on matters falling under each of the following sub-paragraphs:
a.Matters concerning establishment and revision of these rules.
b.Matters concerning acceptance and handling of misconduct.
c.Matters concerning beginning actual investigation and decision, approval, and re-deliberation of investigation results.
d.Matters concerning protection of informant and examinee.
e.Matters concerning investigation of research integrity, handling of investigation results and follow up measures.
f.All the matters concerning operations of other committees.

Article 20 (Organization of Research Ethics Committee)
a.The Committee shall consist of one chairperson and members of no less than five but no more than nine persons.
b.The chairperson and the members shall be appointed by the chairman of NLBA Eurasian Institute.
c.The members of this committee shall hold a one year term and they may be reappointed.
d.The chairperson and the members of this committee shall maintain independence and confidentiality with respect to the details relating to deliberations and decisions.

Article 21 (Organization of Research Ethics Committee)
a.The chairperson of the committee shall convene any meeting and preside over such meetings.
b.The committee's meetings shall open with the attendance of a majority of the total members including the chairperson and resolve with the concurrent vote of a majority of those present.
c.No meeting of the committee shall be open to the public. [The meeting shall not be open to the public in principle, but whenever deemed necessary, the committee can ask the related party and hear their opinions.]
d.Whenever deemed necessary, the committee can ask the related party and hear their opinions.
e.Any member who is involved in the research subiect to an investigation will not be permitted to attend the concerned meeting due to a conflict of interest.

Article 22 (Authorities and Responsibilities of the Committee)

a.The committee can summon for attendance and data submission any informants, examinees, witnesses and testifiers, in the process of an investigation.

b.When the examinee refuses to attend the meeting or data submission without a justifiable reason, it could be presumed as an indication that he/she has acknowledged the allegations.

c.The committee can take substantial measures to prevent any loss, damage, concealment or falsification of research records or evidence.

d.The committee members should comply with confidentiality concerning deliberation-related matters.

Section 2. Research Integrity Investigation

Article 23 (Reporting a Fraudulent Act)

An informant can report a fraudulent act using any means available when reporting using their real name. However, when reporting anonymously, he/she must submit the title of the paper, and the evidence and detail of the misconduct in writing or by e-mail.

Article 24 (Confidentiality and Protection of Rights of Examinee and Informant)

a.The committee should not reveal the personal information of the informant unless it is necessary.

b.The committee must take action to protect the informant if the informant experiences illegitimate pressure or threats due to reporting the fraudulent act.

c.Until the investigation of a fraudulent act is completed, the committee must be careful not to infringe upon the rights or reputation of the examinee. If the person turns out to be innocent, the committee must make efforts to recover the reputation of the person.

d.The identity of the informant, investigators, testifiers, and consultants should not be disclosed.

e.All facts relating to research ethics and authenticity investigations must remain confidential and the people involved in the investigation must not reveal any information obtained during the process. If there is a need to disclose related information. the committee can vote to make such a decision.

Article 25 (Raising an Objection and Protection of Defense Right)

a.The committee must ensure the informant and examinee have equal rights and opportunities to state their opinions and obiections. Such procedures must be informed to them beforehand.

b.An examinee or informant may require the avoidance of deliberation and decision after explanation in case he/she expects an unfair decision.

c.The research ethics commitee must give the examinee a chance to submit their opinion and clarify any fact revealed during the first report or any additional report.

Article 26 (Preliminary Investigation of Research Misconduct)

a.The committee must investigate the presence of misconduct if there is a considerable doubt about legitimate conduct or detailed information about misconduct.

b.The chairperson can officially carry out the investigation (hereinafter referred to as the “preliminary investigation") which is a procedure to decide whether the suspected misconduct should be investigated after consultation with the chairman of NLBA Eurasian Institute.

c.The committee shall form the preliminary investigation committee consisting of no more than five members within 30 days of reporting.

d.The committee shall inform the informant and examinee of the formation of such a committee, and give the examinee a chance to clarify within 30 days.

e.A preliminary investigation is initiated within 30 days of the formation of the preliminary investigation committee and the investigation should be completed within 30 days of the start of the investigation except in unavoidable circumstances.

f.If it has been more than five years since a misconduct was committed, the reporting is not handled in principle even if the reporting is accepted.

g.Through preliminary investigation, the following is reviewed:

i.Whether the reported instance qualifies as research misconduct

ii.Whether the reporting is specific and clear enough to lead to an actual investigation

ii.Whether more than five years has passed since the reported misconduct was committed

Article 27 (Report and Notice of the Preliminary Investigation Result)

a.The result of the preliminary investigation shall be notified to the informant and examinee within ten days of the committee's decision, and reported to the chairman of NLBA Eurasian Institute.

b.The result report of the preliminary investigation must include the following:

i.Specific information regarding the alleged misconduct

lii.Facts regarding the alleged misconduct

iii.Grounding for decision on whether to conduct an actual investigation

Article 28 (Raising an Objection and Protection of Right of Defense)

a.The committee must ensure that the informant and examinee have equal rights and opportunities of opinion statement and objection. Such procedure must be informed beforehand.

b.The informant and examinee can make an objection within ten days from the day of being notified of the preliminary investigation.

Article 29 (Beginning and Duration of an Actual Investigation)

a.The actual investigation begins within 30 days after a positive result from a preliminary investigation. During the period, the actual investigation committee consisting of no more than nine persons (including the preliminary investigation committee) must be formed to conduct an actual investigation.

b.The actual investigation must be completed within 90 days from the beginning date.

c.If the investigation committee decides that it cannot be completed within the specified period, it can explain the reason to the committee and request a 30 day extension (one time only).

Article 30 (Formation of an Actual Investigation Committee)

a.An actual investigation committee is composed of no more than nine members.

b.Formation and duration of an actual investigation committee is determined by the committee. The chairperson of the actual investigation committee is elected among the actual investigation members.

c.The investigation committee shall include at least two members with specialized knowledge and experience in the relevant field.

d.A person who has a stake in the investigated matter must not be included in the actual investigation committee.

Article 31 (Request for Appearance and Document Submission)

a.The actual investigation committee can request the examinee, informant(S), and testifiers to appear for testimony and the examinee must comply.

b.The actual investigation committee can ask the examinee for submission of a document, and retain and store the relative research materials about the person involved in the misconduct after the approval of the head of the research organization in order to preserve evidence relating to the investigation.

Article 32 (Exclusion, Avoidance and Evasion)

a.The examinee or informant(s)can require exclusion by identifying the reason if there are reasons to believe that a committee member is unable to maintain fairness. When such request for exclusion is recognized, the member subiected to the request shall be excluded from the concerned investigation.

b.If the committee member is directly related to the corresponding matter, he/she shall be excluded from all deliberation. decisions and investigation of the matter.

c.The chairperson can suspend the qualification of a member who is related to the corresponding matter in connection with the corresponding investigation.

Article 33 (Investigation Report Submission)

The actual investigation committee must submit the result to the committee within the actual investigation period, and the result must include the following:

i.Specific details of the alleged misconduct
ii.Facts regarding the alleged misconduct
iii.Evidence, witness list and affidavits
iv.Investigation results
v.Other data useful for decisions

Article 34 (Decision)

a.The decision must be made within six months from the beginning of the preliminary investigation.

b.The committee shall make the decision confirming that the examinee committed research misconduct after reviewing the result report.

Section 3. Action after Investigation

Article 35 (Action in accordance with Investigation Result)

When a decision is made confirming the research misconduct, the committee can sanction the author with applicable punishment to each of following, or impose corresponding retribution.

i.The publication is postponed until the final decision of the research ethics committee is made even if the paper has been confimed to the author that it will be published.

ii.The publication of the paper to which the research misconduct is related is to be canceled and deleted from the article list of the journal even if the volume has already been published.

iii.The author found to have committed such misconduct is prohibited from submitting papers to the journal for three years, and these facts are made public on the homepage of the journal (http://www.nlbaeai.org).

iv. If there is an author found to have committed plagiarism or redundant publication, the editorial board stores the relevant investigation details for five years.
v. The chairperson of the organization with which the author(s) is affiliated is notified of the final decision.

Article 36 (Investigation Result Notification)
The chairperson of the committee shall immediately notify the related persons such as the informant and examinee of the commitee's decision regarding the investigation result in writing.

Article 37 (Investigation Result Notification)
a. If the informant or the examinee refuses the committee's decision, he/she must submit a re-deliberation request to the committee within 15 days from receipt of the result notice as prescribed in Article 37.
b. The committee must decide whether re-deliberation is necessary within 10 days of the receipt of the re-deliberation request.
c. The committee will decide there-deliberation procedure and method.

Article 38 (Follow-ups such as Recovery of Author's Honor)
If the results of the investigation confirm that no research misconduct has been identified, the committee must take follow-up steps to recover the reputation of the examinee.

Article 39 (Storing the Record and Confidentiality)
a. All records regarding the preliminary and actual investigation are stored for five years from the date of the investigation's conclusion.
b. All facts relating to research ethics and the investigation must remain confidential and the people involved in the investigation must not reveal any information obtained during the process. If there is a need to disclose investigation information, the committee can vote to make such decision.

Article 40 (Etc.)
Matters that are not determined by these rules are to be decided by the editorial board.

Article 41 (Date of Effectiveness)
These regulations shall be effective as of January 1, 2024.

Editorial Regulations

Journal of Advanced Academic Research and Studies (JAARS)

Chapter 1. General Roles

Article 1 (Purpose)

The purpose of the following rules is to prescribe matters regarding the editorial work and standards for the Journal of Advanced Academic Research and Studies (hereinafter referred to as "JAARS") published by NLBA Eurasian Institute.

Chapter 2. Editorial Committee

Article 2 (Editorial Committee)

The editorial committee (hereinafter referred to as "committee") is established in order to accomplish the purpose of Article 1.

Article 3 (Formation of Editorial Committee)

a.The editorial members shall be appointed by the chairman of NLBA Eurasian Institute, and the committee shall consist of no more than 50 members.

b.The chief editor shall be appointed by the chairman of NLBA Eurasian Institute and is in charge of all editing.

c.The editorial committee shall be composed of two chief editors, one editor, and one managing editor. The editors are appointed by the chairman of NLBA Eurasian Institute among editorial members.

d.The term for the chief editor is three years, and the term for the editorial members is two years, and editorial members may be reappointed.

e.This committee makes decisions with a majority attendance of the members and a majority agreement of the members present.

Article 4 (Qualification of Editorial Members)

The editorial members shall meet the following qualifications:

i.Being at least an associate professor in a domestic/international university or a person equally qualified

ii.Someone who studies in an area within the JAARS's specialty and who has published at least 3 articles in a journal (or l article in an SCI, SSCI and/or SCOPUS indexed journal) within the last three years

Article 5 (Responsibilities and Obligations of Editorial Members)

a.Editorial members are fully responsible for the decision to publish JAARS-submitted papers, confirm their integrity during the deliberation process, and observe candidates during the editing process.

b.Editorial members should respect the author's person and independence as a scholar, and make the process of the evaluation of the research paper public if there is a request.

c.Editorial members should handle submitted papers only based on the quality and submission guidelines, not based on the author's gender, age, or affiliation.

d.Editorial members should request a reviewer with specialized knowledge and fair evaluation ability in the relevant field to evaluate submitted papers. However, if evaluations of the same paper are remarkably different, editorial members can acquire advice from an expert in the relevant field.

e.Editorial members should not disclose the matters of the author and the details of the paper until a decision is made pertaining to the publication of the submitted paper.

Chapter 3. Paper Submission and Peer Review Committee

Article 6 (Qualification of Submission and Submission)

a.All the paper submitters must be members registered with JAARS.

b.All papers should be submitted through the JAARS's online submission system (http://www.nlbaeai.org/) and Email:edubscon@outlook.com, and can be submitted at any time. English-language papers from authors outside of the United States of America may also be submitted using e-mail.

Article 7 (Formation of Peer Review Committee)

a.Peer reviewers are appointed by the chief editor, and selected based on the field of the reviewer's expertise. (According to circumstances, a peer reviewer who is not a member of JAARS may be appointed.)

b.Editorial members for each content subject such as international economy, international management, or practice of trade can also serve as peer reviewers.

c.The chief editor represents editorial members, handles all the matters relating to review, and reports the results of peer review to the committee.

d.The managing editor is in charge of the procedure relating to review.

e.The classification and selection of submitted papers is decided by the chief editor and the managing editor, and they report it to the committee.

Article 8 (Qualification of Peer Reviewers)

Peer reviewers shall have the following qualifications:

i.Being at least an associate professor in a domestic/international university, or a person who is as equally specialized as the person above.

ii.Someone who studies an area within the JAARS's specialty and has published at least 3 articles in a iournal (or 1 article in an SCI, SSCI and/or SCOPUS indexed journal) within the last three years.

ii.Someone who presents a paper, chairs a session or serves as a discussant at an academic conference at the same level of the institution, or has served as a reviewer of a study which has been indexed in a domestic or international journal within the last three years.

Article 9 (Responsibility and Duty of Peer Reviewers)

a.Peer reviewers should evaluate papers and report the results of the evaluation to the committee within the time period set by the committee. However, if he/she believes that they are not appropriately qualified to review the paper, they should notify the committee without delay.

b.Peer reviewers should respect the author's person and independence as a scholar. Peer reviewers may request for revision of the paper with detailed explanations if needed in the evaluation of the research paper.

c.Papers are reviewed confidentially using a method in which the name and affiliation of the author is confidential to the public. Showing the paper and/or discussing the contents of the paper with a third party is not desirable unless a consultation is needed for purposes of review.

Article 10 (Unethical Behavior in the Review Process)

a.Peer reviewers must not manipulate either directly or indirectly the related research-specific information contained in the research proposal or review process without the consent of the original author.

b.Peer reviewers must be careful of the following since it could be regarded as unethical research practices in the review process:

i.The act of handing over are quested paper to students or a third party

ii.The act of discussing the details of a paper with colleagues

ii.The act of obtaining a copy of the requested material without shredding it after review

iv.The act of disgracing the honor of others or fabricating a personal attack in the review process

v.The act of reviewing and evaluating a research paper without reading it

Article 11 (Personal and Intellectual Conflict)

a.Peer reviewers must fairly evaluate using an objective standard regardless of personal academic conviction.

b.Peer reviewers must avoid personal preiudice when reviewing a paper. If there is a conflict of interest including personal confict, it must be notified to the committee.

c.Peer reviewers must not propose rejecting a paper due to a confict in interpretation or with the point of view of the reviewer.

Chapter 4. Principle and Process of Paper Review

Article 12 (Papers for Peer-review)

Review shall proceed based on the writing and submission guidelines. If the submitted paper substantially diverges from the writing and submission guidelines, the paper may not be reviewed.

Article 13 (Request for Review and Review Fee)

a.The chief editor discusses the selection of reviewers with editorial members and selects two reviewers for each paper after submitted papers pass the eligibility test.

b.The chief editor immediately requests the two selected reviewers to review the relevant submitted paper.

c.Papers are reviewed by confidential method in which the name and affiliation of the author is confidential to the reviewer, the name of the reviewer is confidential to the author.

d.The chief editor requests a review after deleting the name and the affiliation of the author from the submitted paper, so that the reviewer cannot obtain the identity of the author.

e.A review fee shall be paid to the reviewer.

Article 14 (Review of Paper and Decision)

a.Reviewers shall submit a decision report via the JAARS's online submission system (http://www.nlbaeai.org/) and Email:edubscon@outlook.com within two weeks after they are asked to review a paper.

b.The reviewer shall decide whether the paper should be published based on the following standard. However, if the paper receives less than 30 points in the suitability and creativity of the topic, it will not be published.

i.The suitability of the topic(20 points)
ii.The creativity of the topic (20 points)
iii.The validity of the research analysis (20 points)
iv.The organization and logic development of the paper (20 points)
v.The contribution of the result (10 points)
vi.The expression of the sentence and the requirement of editing (10 points)

The reviewer must give one of the following four possible marks within the two week period: A (90~100 points, acceptance), B (80~89 points,acceptance after minor revisions), C (70~79 points,re-review after revision), F (Rejection), and write an overall review comment concerning the revision and supplementation of the paper.

c.In an instance where the reviewer does not finish the review within the two week period, the chief editor can nominate a new reviewer.

Article 15 (Correction of Papers according to the Editing Guideline)

a.Before holding an editorial committee meeting, the chief editor shall request editorial staff correct those papers that receive“acceptance”or “acceptance after minor revisions”, using the journal's paper editing guidelines. However, if there is a paper that receives “acceptance” after the editorial committee meeting, the chief editor will request the editorial staff to correct the paper after the meeting.

b.The chief editor shall notify each author of the result of his or her paper review after receiving the corrected version of the paper from the editorial staff. However, papers which receive a “rejection” shall not be notified of their result.

Article 16 (Decision of Paper and Principle of Editing)

a.The chief editor shall call an editorial board meeting and make publication decisions after receiving finished papers from reviewers.

b.The editorial board will make decisions to publish based on the following chart. The editorial board should respect

Results of 2 peer-reviews	Overall evaluation(average)	Decision to publish
AA	A	Acceptance
AB, AC, BB	B	Acceptance after minor revisions
AD, BC, BD, CC	C	Re-evaluation after revision
CD. DD	F	Rejection

reviewers'decisions on relevant papers, but can make decisions based on the editorial policy of the JAARS.

c.The paper that is awarded “acceptance” should receive a “B” or higher from reviewers or the level of overall evaluation (average) should be“B"or higher, and the paper that is awarded “acceptance after minor revisions” should have its satisfactory revisions and/or developments confirmed by the initial reviewer after re-submission.

d.The editorial board shall confirm that papers in consideration for publication are suitable to the writing and submission guideline of JAARS, look through detailed matters, and decide particular issue policies such as the number of papers and the order of them.

e.In the case where a paper was presented or submitted for review previously, it cannot be published in JAARS.

f.In the case where an author submits two or more papers for consideration, only one paper that receives "acceptance"shall be published in the same issue.

Article 17 (Notification of the Result)

a.The chief editor shall notify an author of the review result after the initial evaluation or re-evaluation is finished, but can request the author to revise and develop the paper based on the evaluation report. If the editorial board makes a final decision on publication, the author should be notified.

b.The author must be notified of the review result within one month from the day of receiving the paper or revised paper (or the deadline of submission). If it is impossible to notify the author within one month, the reason and the due date of notification must be notified to the author.

c.Unless there is a specific reason, the author must submit a file including a response to the evaluation report, revision to and/or development of the paper to the chief editor after editing the paper within the period the editorial board suggests when he/she is asked to edit the paper. The changed details must be confirmed by the editorial board as well. In case the author does not submit the revision and development to the editorial board within the period, it shall be automatically postponed until this process is finished.

d.A paper that receives a "C" in the overall evaluation (average) shall be re-evaluated after the chief editor sends the revised article and revision report to the initial reviewer(s).

e.In cases where the evaluations of the same paper are remarkably different among reviewers, the chief editor can nominate a third reviewer and request a re-evaluation. In this case, the chief editor shall send the evaluation report to three different reviewers and have them submit the final evaluation report based on the details of the paper, and the paper can be published after revision only if the final mark awarded the revised paper is higher than a "B" in the overall evaluation.

f.The chief editor will issue an acceptance letter for the papers confirmed to be published.

Article 18 (Proofreading and Editing)

a.The chief editor shall request domestic/international members to proofread and edit papers confirmed to be published.

b.Proofreading and editing members shall be recommended by the chief editor and appointed by the chairman of NLBA Eurasian Institute.

c.The chief editor shall send the results of proofreading and editing to the original author and request the author to edit the paper appropriately.

d.The author, unless there is a specific reason, must submit the revised paper and revision report to the chief editor after editing the paper within the period the editorial board suggests when he/she is asked to edit the paper. The changed details must be confirmed by the editorial board as well.

e.Even if a paper is confirmed to be published, it will be rejected if it has not fulfilled the editing procedure following the result of proofreading and editing, or has been found to have committed research misconduct of any kind.

f.If an editing member finds plagiarism, inadequate form, or low quality in the process of editing a paper that the journal has confirmed to be published, he/she must notify the chief editor. and can suggest proper responses to the findings. g. The chief editor suggests whether to avoid publication of a paper or have the author re-submit the paper after revision and development according to the guidelines stipulated in Article 5. In the case of a paper requested to be revised and developed, publication can be postponed based on the degree of completion and the schedule of revision and development.

Chapter 5. Editing and Publication

Article 19 (Editing and the Date of Publication)
JAARS is published six times a year in principle. However, if there is a reason such as the number of submitted papers, the committee can increase or decrease the number of issues.

Article 20 (Notification of Editing)
a.The chief editor shall acquire publication consent from the authors of the confirmed papers before printing.
b.The chief editor shall report to the chairman of NLBA Eurasian Institute when the editorial process following editorial policy is completed, and shall further follow the outlined process for printing and editing.

Article 21 (Sanction on Plagiarism and Redundant Publication)
If the ethics committee finds that a submitted paper or a published paper contains plagiarism or was published in another journal, the following sanctions will be taken:
a.Distributing after deleting the relevant paper in the journal if the journal has not been distributed yet,
b.Notification of paper deletion on the website if it the related issue has already been distributed,
c.Notification of the plagiarism or redundant publication of the relevant paper on the website,
d.Banning the relevant author from submitting papers to all journals published by JAARS for two years from the date when plagiarism and redundant publication is found and from presenting in conference,
e.Notifying the author's affiliated organization or institution of the fact of the plagiarism or the redundant publication, if necessary.

Article 22 (Transfer of the Rights of Publication, Duplication, Public Transmission, and Distribution)
a.The right of publication of the paper is owned by NLBA Eurasian Institute unless specified.
b.The author(s) shall transfer the right of duplication, public transmission, and publication to NLBA Eurasian Institute.If they do not agree, the relevant paper cannot be published in JAARS.

Article 23 (Notification of Paper on Homepage)
Papers published in JAARS shall be publicly notified on the JAARS homepage (http://www.nlbaeai.org/)

Article 24 (Etc.)
The matters that are not decided in these rules are either subject to the submission guidelines or decided by the editorial board.

Article 25 (Date of Effectiveness)
These regulations shall be effective as of January 1, 2024.

Author's Check List

Journal of Advanced Academic Research and Economics (JAARS)

Title of Manuscript: _____

Manuscript ID: _____

Please check ☑ to confirm fulfllment of instructions below before submitting your manuscript.

1.General guidelines

□ The submission contains an original manuscript, a checklist, and a copyright transfer agreement.
□ The manuscript follows the journal template, using MS Word.
□ The manuscript consists of a title page, abstract, keywords, JEL Classifications, acknowledgement (if any), main text, references, appendix (if any), tables and figures.
□ The pages are numbered consecutively beginning with the title page.

2.Title page

□ The manuscript consists of title, author(s)name(s), and affliation(s).
□ The lower area of the title page includes the name(s)of the author(s)and e-mail of the corresponding author only.

3.Abstract, Keywords and JEL classifications

□ The Abstract is less than 250 words for an original article.
□ Includes no more than six keywords.
□ Includes no more than five JEL classifications.

4.Main text

□ Subtitles are ordered according to the journal template.
□ All figures and tables are cited in numerical order as they are first mentioned in the text.
□ All figures and tables are referenced within the text.

5.Tables and figures

□ The titles of figures and tables are set flush left above them, capitalizing the first letter of each word in these titles except for prepositions and articles.
□ Vertical lines are avoided in tables.
□ Pictures or photos are supplied in high resolution (minimum 300 dpi) .
□ Pictures or photos are supplied at a reasonably legible size for printing if they may be affected by resizing in the printing process.

6.References

□ References follow KITRI style.
□ Each entry in the reference list is cited in the main text.
□ All references are listed in alphabetical order followed by the year published.
□ The title of books and journals is expressed in italics.
□ Complete references are included with the full title of the article and up to six author names. Where there are seven or more authors,they are identified as "et al."
□ Journal articles have been double-checked as to whether the author name, (published year), title, joumal name, volume (issue number) and pages are correct.
□ Books have been double-checked as to whether the author name, (published year), title of book (editions, if any), place of publication, publisher's name, and pages are correct.

Copyright Transfer Agreement

NLBA Eurasian Institute

Title of Manuscript:

All Authors:

All authors of this manuscript must agree to the following:

1. All authors certify that the manuscript does not violate any copyright and confirm its originality.

2. All authors have made an actual and intellectual contribution to this manuscript and hold responsibility for its contents.

3. This manuscript has not been published or will not be submitted to another journal for publication.

4. The "Journal of Advanced Academic Research and Studies" has rights in legal action against the infringement of copyright of this manuscript without authors'permission.

5. All authors of this manuscript confirm the transfer of all copyrights in and relating to the above-named manuscript, in all forms and media, through the world, in all languages, to "Journal of Advanced Academic Research and Studies".

6. If each author's signature does not appear below, the signing author(s)represent that they sign this Agreement as authorized agents for and on behalf of all the manuscript authors, and that this Agreement and authorization is made on behalf of all the authors.

In order for my manuscript to be accepted for publication in the Journal of Advanced Academic Research and Economics (JAARS), I hereby assign and transfer to the NLBA Eurasian Institute all rights, title, and interest in and the copyright in the manuscript, entitled.

Date:

Corresponding Author: Signature:

*Submission:You must submit a scanned file (file type: jpg, gif, or pdf) of this signed confirmation and final manuscript file (file type:MS Word) online after the manuscript has been accepted for publication.

Call for Papers

Journal of Advanced Academic Research and Economics (JAARS)

The Journal of Advanced Academic Research and Economics (JAARS) is the official publication of the NLBA Eurasian Institute publishes manuscripts of significant interest that contribute to the theoretical and practical basis of business, economics, and international trade studies. JAARS's broad scope and editorial polices create accessible, thought-provoking content for the general academic community of business, economics, and international trade.The goal of JAARS is to publish insightful, innovative and impactful research on business, economics, and international trade. JAARS is multidisciplinary in scope and interdisciplinary in content and methodology.

Subject Coverage

JAARS is an interdisciplinary journal that welcomes submissions from scholars in business, economics, and trade disciplines and from other disciplines (e.g,political science) if the manuscripts fall within the JAARS domain statement. Papers are especially welcome which combine and integrate theories and concepts that are taken from or that can be traced to origins in different disciplines.

JAARS is a methodologically pluralistic journal.Quantitative and qualitative research methodologies are both encouraged, as long as the studies are methodologically rigorous.Conceptual and theory-development papers, empirical hypothesis-testing papers, and case-based studies are all welcome. Mathematical modeling papers are welcome if the modeling is appropriate and the intuition explained carefully.

Notes for Prospective Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. All papers are referred through a peer review process.

All manuscripts should follow the submission guidelines on the JAARS homepage ((http://www.nlbaeai.org/).

JAARS operates an on-line submission system. Manuscripts should be submitted to the on-line submission system at http://www.nlbaeai.org following all prompts on the screen.
There is no firm submission deadline for papers and the submitted articles will be evaluated on a rolling basis.
Any queries should be sent to the Editor of JAARS at the following address:edubscon@outlook.com

Guidelines for Authors (In Brief)
[Journal of Advanced Academic Research and Studies (JAARS)]

How to submit the paper

The authors submit their manuscripts (in MS Word Format) to the on-line submission system at http://www.nlbaeai.org

Blind Review Policy

The journal follows double blind peer review policy. The paper is sent to two reviewers appropriately qualified experts in the field selected by the editor to review the paper in the light of journal's guidelines and features of a quality research paper. For papers which require changes, the same reviewers will be used to ensure that the quality of the revised paper is acceptable.

Manuscript Preparation Guidelines

The author(s) must follow the Manuscript Preparation Guidelines in preparing the manuscript before submission.

1. Language

The language of the manuscript must be English (American English, e.g. "color" instead of "colour").

2. Length of Paper

The length of the paper should not exceed 30 pages (Times New Roman, 12 Font) excluding tables, figures, references and appendices (if any). Articles should be typed in double-space (including footnotes and references) on one side of the paper only (preferably Letter size) with 1 inch margin. Authors are urged to write as concisely as possible, but not at the expense of clarity.

3. Title Page

The title page should include: (i) A concise and informative title, (ii) The name(s) of the author(s), (iii) The affiliation(s) and address(es) of the author(s), and (iv) The e-mail address, telephone and fax numbers of the corresponding author.

4. Abstract

Please provide an abstract of 200 to 250 words. The abstract should not contain any undefined abbreviations or unspecified references. The content of abstract must include Purpose, Design/Methodology/Approach, Findings, and Research Implications.

5. Keywords and JEL Classification Code

Please provide 4 to 6 keywords which can be used for indexing purposes.

6. Acknowledgement

The author may use acknowledgement section in the title page of the paper (if any).

7. Subdivision of the article

Divide your article into clearly defined and numbered sections. Sections should be numbered in Roman numerals (e.g., I, II). Subsections should be numbered using the decimal system (e.g., 1., 1.1., 1.1.1., 1.1.2., 1.2., …, 2., 2.1.). The abstract is not included in section numbering.

8. Table and Figure

Present tables and figures within the article, not at the end of the article. Please note that the article will be published in black and white (print), although online version will contain the colorful figures (if any). However, the color print will be available in extreme cases as per the request of the author.

9. References

Author(s) should follow the latest edition of KITRI style in referencing. Please visit www.nlbaeai.org to learn more about KITRI style.

■ **Citations in the text**

Please ensure that every reference cited in the text is also present in the reference list (and vice versa).

■ **Reference List**

References should be arranged first alphabetically and then further sorted chronologically if necessary.

■ **Examples:**

Reference to a journal publication:

Wegener, D. T., J. F. Dollan and Soon-Hwan Jeon (2015), "Current Trends of Marketing Activities in Parallel Imports", Journal of Asia Trade and Business, 11(5), 55-57.

Hyun, Jun-Seog and Won-Joong Kim (2015), "A Study on the Effects of Export-Import Share and Exchange Rate", Journal of International Trade & Commerce, 11(1), 142-145. http://dx.doi.org/10.16980/jitc.11.1.201502.139

NB: For Oriental authors such as Korean, Chinese and Japanese authors, the first names are spelled out. Names shall be romanized according to their own preference. For Korean authors, the first and second syllables of first names shall be hyphenated.

Reference to a book:

Schmithoff, C. M. (2010), Letter of Credit, New York, NY: Pitman Press, 158.
Jeon, Soon-Hwan (2017), International Trade Practices (5th ed.), Seoul: Hanol, 156.

Reference to a chapter in an edited book:

Bomhoff, E. J. (1998), "Introduction". In E. M. Rogers and S. Taylor (Eds.), The Global Leadership Mindset (2nd ed.), Oxford, UK: Oxford University Press, 12-25.

Reference to a web source:

Liu, Chengwei (2005), Price Reduction for Non-conformity: Perspectives from the CISG. Available from http://www.cisg.law.pace.edu/cisg/biblio (accessed January 11, 2016)

Manuscript Review Timeframe

Manuscripts will be initially reviewed by the Editor within two weeks from submission.

The Editor will contact the corresponding author with news of whether or not the submission will be advanced to the first round of blind reviews (or is being rejected as not suitable for publication in the journal).

Typically, the blind review process takes approximately six to eight weeks.

The JAARS does not process any submission that does not comply with complete requirements of submission guidelines.

Contributors of articles accepted for publication will receive a complimentary copy of the issue in which their article appears.

ISSN 3006-4007 (Print)
ISSN 3006-4015 (Online)

JAARS

www.nlbaeai.org
edubscon@outlook.com
Unit 616, 6/F., Kam Teem Industrial Building, 135
Connaught Road West, Sai Wan, H.K.
USD$60

ISSN 3006-4007
06>
9 773006 400266