

The Practical Challenges and Future Strategies for the International Dissemination of Martial Arts Culture from an Ecosystem Theory Perspective

Jiesi Chen, Ruhan Lin*

Department of Sports Science, Wenzhou Medical University, Wenzhou, Zhejiang, China

*Corresponding author email: 806326038@qq.com

Abstract

The international dissemination of martial arts culture holds significant importance for promoting cross-cultural dialogue. However, the current dissemination is superficial, which makes it difficult to effectively convey the profound cultural connotations of martial arts. This study, based on an ecosystem theory perspective and qualitative research methods, analyzes the core challenges faced by the international dissemination of martial arts culture through microsystem, mesosystem, exosystem, macrosystem and chronosystem, and proposes future development strategies.

Keywords

Ecosystem Theory; Martial Arts Culture; International Dissemination.

1. Introduction

Martial arts are traditional sports rooted in Chinese cultural theories. Martial arts culture is a multi-level and multi-dimensional cultural complex derived from martial arts, reflecting its views on combat, morality, and values. In the context of globalization, the international dissemination of martial arts culture not only promotes dialogue and understanding among different civilizations but also provides an effective medium for the world to understand China and Chinese civilization^[1].

In recent years, relevant institutions both at home and abroad have fully recognized the significant value of martial arts as a cultural resource and an international communication medium^[2-5]. However, current dissemination still faces some limitations. Existing literature mainly focuses on the development of individual martial arts schools^[6, 7], or emphasizes technical demonstrations and visual presentations^[8], or explores its impact on physical health^[9]. Although these methods have effectively enhanced the international society's understanding of martial arts culture, they have significant disconnections from the deeper cultural connotations, philosophical basis, aesthetic principles, and health preservation concepts of martial arts culture. Few scholars have systematically analyzed the multi-level and structural obstacles in the dissemination process through a theoretical framework, identified the root causes, and proposed overall solutions. Continuing to ignore its systematic nature will not only exacerbate the marginalization and misunderstanding of martial arts in the global cultural domain but also waste the key opportunities for cross-civilization dialogue through sports culture. Therefore, this study aims to use an ecosystem model as its core analytical framework to deeply explore the challenges faced by the international dissemination of martial arts and to focus on exploring possible ways to reshape and disseminate martial arts culture.

2. Research Methods

2.1. Literature Search and Inclusion Criteria

The relevant literature for this study was retrieved from Chinese and international databases. These databases include CNKI, Wanfang Database, Google Scholar, Web of Science, PubMed, Scopus, and others. Search keywords encompassed terms related to theoretical frameworks, such as "ecosystem" and "ecosystem theory", martial arts-related terms including "wushu," "martial arts," "wushu culture," and "martial arts culture", and terms linking martial arts and communication, such as "wushu culture AND promotion" and "martial arts AND promotion." The search was conducted in English.

2.2. Theoretical Analysis

This study employs qualitative research methods within the framework of ecological systems theory to systematically examine the practical challenges facing the international dissemination of martial arts culture. It aims to reveal the underlying mechanisms of its multi-level interactions and explore viable pathways for the international transmission of martial arts culture.

Ecological systems theory, proposed by Urie Bronfenbrenner, posits that the challenges individuals face are societal issues, emphasizing that individual development is embedded within a series of interrelated environmental systems^[10]. These systems are categorized as, micro system, meso system, exo system, macro system, chrono system. The international dissemination of martial arts culture is a multi-level and complex system involving individuals, communities, organizations, and even macro policies. Each system is not isolated from one another. Therefore, the ecological theory provides an ideal analytical framework for this study.

3. Current Challenges

3.1. Microsystem

The cultural cognitive biases of learners, difficulties in integrating physical and mental practices, and weak internal motivation and emotional experiences are the three major dilemmas within the micro-system.

The micro-system focuses on the individual itself, corresponding to the internal psychological and physical experiences of the international martial arts learners. The cultural cognitive biases, the difficulties in physical and mental training, as well as weak internal motivation and emotional experiences, are the three major challenges within the micro-system.

Firstly, cultural cognitive biases are the primary dilemma. As martial arts became popular in international films, games, and other media, learners, before receiving systematic training, were generally influenced by the media and simply regarded martial arts as "supernatural skills" or "violent fighting" ^[11], resulting in cognitive conflicts and acceptance obstacles regarding the philosophical connotations such as "self-cultivation" and "moderation and harmony" within it. Secondly, martial arts have high requirements for flexibility, coordination, and core strength. Learners with zero foundation in international martial arts are prone to experience muscle soreness in the early stages. At the same time, learners also have difficulty comprehending concepts such as "qi" and "will" that require internalized experiences due to cultural differences^[11]. This physical discomfort and the gap in understanding can easily cause learners to only remain at the level of action imitation and fail to truly understand martial arts culture. Moreover, the internal motivation and emotional experiences of learners can also affect the sustainability of learning. Once practice is regarded as a boring task rather than a physical and mental enjoyment, learners will find it difficult to make the transition from passive

acceptance to active love, ultimately leading to the breakdown of the transmission chain at the microsystem.

3.2. Mesosystem

Mesosystem connects individuals with the external environment and its dysfunction directly leads to the disruption of communication. In the international dissemination of martial arts, mesosystem represents such aspects as teacher-student relationships, peer relationships, and community activities. Currently, the three major challenges faced by the mesosystem are the superficiality of teacher-student interaction, the hindrance of peer culture, and the lack of clubs and community activities.

Firstly, teacher-student interactions tend to be superficial. In many international classrooms, the teacher-student relationship is often simplified to "instructor" and "student", with teaching focusing on the standardization of techniques and force application skills, lacking the explanation of cultural logics such as "yin-yang" and "flexibility-stiffness" [12], making it difficult for learners to internalize the cultural connotations and weakening the depth of dissemination. Secondly, in multicultural classrooms, due to language, communication, and cultural differences, international learners have limited communication, difficulty in forming stable practice partnerships, and are prone one-sided cultural understanding [13, 14]. Moreover, overseas martial arts dissemination mostly relies on scattered classroom teaching, lacking club and community activities for international students. Once outside the classroom, learners' practice and cultural exploration often come to a halt [15, 16], and cultural immersion is difficult to sustain.

3.3. Exosystem

Exosystem constitutes the institutional and organizational framework for the international dissemination of martial arts culture. Coordination failure, unbalanced resource allocation, and shortage of talents are the main challenges faced by the exosystem.

Firstly, the coordination among different organizations fails, which restricts the synergy of the dissemination. Although institutions such as Confucius Institutes have actively promoted cultural diplomacy, there is a lack of regular linkage mechanisms among national promotion agencies, international sports organizations (such as the International Wushu Federation), overseas universities, and local associations, resulting in fragmented dissemination. Secondly, current resources are overly concentrated on classroom teaching or competitions, while insufficient support is provided for key areas such as after-school community activities and cultural experience programs, making it difficult to meet the needs of international students for continuous cultural immersion and limiting the actual effectiveness of the dissemination. More importantly, there is a talent gap [15]. Martial arts competitive talents generally lack systematic cultural knowledge, while cultural dissemination talents mostly lack professional skills in martial arts, leading to insufficient supply of comprehensive talents with both martial arts literacy, cross-cultural communication, and theoretical interpretation abilities [17]. Moreover, the martial arts teachers of Confucius Institutes are mostly short-term volunteers with strong mobility and lack long-term training mechanisms, further weakening the professionalism and continuity of the dissemination.

3.4. Macrosystem

The interruption of cultural dissemination and the local economic and cultural conditions are the challenges faced by macrosystem.

Firstly, the competitive orientation of international sports has weakened the cultural connotation of martial arts. To adapt to the scoring system of competitions, the technical standards of martial arts have leaned towards indicators such as "action difficulty" and "height

of leap", resulting in the gradual marginalization of traditional techniques and cultural implications. Secondly, in economically underdeveloped regions, due to limited professional venues and coaching resources, the audience often chooses sports with lower costs and greater popularity. In regions with stronger cultural competitiveness, taekwondo, judo, and other projects have occupied the market through mature local promotion. Due to the lack of dissemination strategies that are compatible with local culture for martial arts, it is difficult for it to break through cultural barriers and its development lags significantly behind similar projects.

3.5. Chronosystem

Chronosystem emphasizes that cultural dissemination should evolve dynamically with the times. Currently, this system is facing challenges of insufficient intergenerational transmission and lagging performance.

Firstly, martial arts transmission has long relied on the master-apprentice system and offline teaching, failing to effectively respond to the needs of young people in the digital age through extensive multimedia dissemination. Secondly, the external perception of the international image of martial arts still remains in the "kung fu films" era of the last century, unable to construct a new narrative that reflects the contemporary Chinese spirit, and thus unable to adapt to the current trends of cultural consumption and dissemination.

4. Dilemma Generation Mechanism: Interactive Analysis based on Ecosystem Theory

The interconnected nature of challenges indicates that difficulties across different systems do not exist in isolation^[10]. The various challenges in the international dissemination of martial arts culture are interconnected. The following section will employ an ecological model for interactive analysis to explore the mechanisms generating these challenges.

4.1. Pressure Transmission from Top to Bottom

The macro system exerts a "top-down" pressure transmission effect on the international dissemination of martial arts, meaning its rigid narrative directly influences the dissemination path and the audience's perception.

International mainstream media often depict martial arts as mysterious or violent, which leads to the outer communication institutions (such as cultural institutions, commercial platforms) being more inclined to disseminate shallow content that conforms to the market's rigid stereotypes, resulting in an imbalance in resource allocation and neglecting the in-depth exploration of cultural connotations. Eventually, such distorted content reaches the micro audience, shaping their preconceived cognitive biases. Learners are more eager to see "kung fu performances" rather than understand the philosophical ideas behind it, thereby further exacerbating the difficulties in subsequent physical practice and cultural integration.

4.2. Feedback Interruption from Bottom to Top

In addition to the top-down pressure transmission, the downward feedback blockage is also one of the reasons for the obstruction of the international dissemination of martial arts culture. The most important of these is the disappearance of the microsystem experience during the transmission process. When the audience of the microsystem encounters difficulties in integrating physical and mental practice during their practice, or when there is confusion about the meaning due to cultural barriers, they should have formed effective feedback signals. However, the surfaceization of teaching interactions in the mesosystem and the absence of community activities prevent these individuals' confusion from being fully discussed, explained and aggregated among teachers, peers, etc. Thus, the feedback is weakened at the first stage.

These weakened signals, when transmitted to the exosystem, lack specialized and effective channels to upload them to decision-makers due to the fragmentation of the communication subjects and the gap in the talent pipeline. Eventually, the real difficulties at the microsystem cannot trigger policy adjustments at the outer and macro systems, resulting in a serious disconnection between the dissemination content and methods and the actual needs of the audience. The entire cultural dissemination system loses its "self-correction ability".

4.3. Disconnection between Different Systems

Apart from the aforementioned aspects, the most fundamental mechanism that hinders the international dissemination of martial arts lies in the disconnection of goals at different systems. This leads to the inefficiency of the entire dissemination system. Due to the lack of unified goal coordination, the goals and actions at each system are highly inconsistent, such as when the macro system begins to attach importance to cultural dissemination, the assessment of the outer system may lean towards short-term traffic, the teachers at the mesosystem are dedicated to cultural interpretation, while the students at the microsystem may only aim for rapid skill acquisition. This inconsistency in goals and incoherence in actions leads to a significant consumption of dissemination energy within the system, ultimately causing the entire international dissemination of martial arts culture to be hindered and making it difficult to achieve a qualitative breakthrough. For instance, a university martial arts teacher (mesosystem) expends great effort in class to explain the "Yin-Yang philosophy contained in Tai Chi", but an international student (microsystem) accidentally saw a short social media video (exosystem) after class that claimed "Tai Chi is the slow-paced gymnastics of the elderly", this more persuasive and impactful one-sided information can instantly undermine the teaching effect meticulously created by the teacher, resulting in a situation where cultural dissemination yields less than its efforts.

5. Future Strategies

5.1. Macrosystem

Guiding learners to actively develop a passion for and deeply understand the martial arts culture is the core objective of the macrosystem. To achieve this goal, we must prioritize the learners' initial experiences and help them establish an identity with the martial arts culture throughout the process. Course developers should focus on designing "culture-tradition" integrated courses, integrating modern scientific principles and traditional cultural wisdom into the teaching. Taking the "cloud hands" movement in Tai Chi as an example, the instructor can first use biomechanical analysis to explain the energy generation trajectory of "waist driving arm", helping students grasp the scientific basis of this movement. Subsequently, introduce the philosophical concept of "yin-yang circulation", comparing the opening and closing of the arm to the interaction of cosmic energy, guiding learners to understand the profound meaning of "endless circulation and eternal renewal". This teaching method not only constructs a scientific cognitive framework but also enables learners to understand the profound wisdom of "harmony between heaven and man" in Chinese culture through each movement. At the same time, educational institutions can set phased goals during the teaching process to promote the continuous progress of learners. These measures not only stimulate lasting internal motivation but also encourage learners to truly internalize the cultural value of martial arts as physical memory and spiritual identity.

5.2. Mesosystem

The mesosystem serves as a pivotal bridge connecting macrosystem strategy with microsystem experience, with its core pathway centered on activating connections between "people" and "relationships." First, educational institutions should prioritize cultivating versatile martial arts

instructors. Through systematic martial arts cultural education, they should facilitate the transformation of these instructors from solely “technical coaches” into “cultural communicators” capable of deeply interpreting the cultural logic behind movements. Simultaneously, schools and related organizations must consciously cultivate a practical club system. It is recommended that universities or specialized institutions lead the establishment of integrated online-offline “International Martial Arts Clubs.” By regularly organizing cultural exchange activities, competitions, and performances, these clubs foster a strong sense of cultural belonging and cohesion. This club-based operational model provides learners with sustained social support resources, effectively breaking down peer cultural barriers and addressing the lack of after-school support.

5.3. Exosystem

The core mission of the exosystem is to overcome the current challenge of “fragmentation” in the dissemination of martial arts culture, enhancing overall communication effectiveness through optimized resource allocation and consistent action. At the operational level, relevant authorities should spearhead the establishment of a strategic coordination network, driving the International Wushu Federation (IWUF) to effectively integrate resources and strengths from official institutions, universities, sports associations, and commercial entities, while formulating a unified action plan. Furthermore, we must shift the focus of support from short-term, showcase-oriented “performance” projects to funding foundational initiatives with lasting impact, such as curriculum development, standardized teaching materials, and club operations and maintenance. Furthermore, education authorities should systematically introduce courses on “Wushu Culture” and “International Dissemination of Wushu” within university wushu programs. Through specialized training mechanisms, this will cultivate a cohort of versatile professionals proficient in both wushu skills and foreign language application, while also versed in cross-cultural communication theory. This approach will fundamentally address the current gap in talent succession

5.4. Macrosystem

At the macrosystem, relevant media must commit to breaking away from the current singular, passive model of cultural exportation. They should shift toward constructing diverse narrative content, proactively challenging the long-standing Western media stereotypes of “mystification” and “violence.” Instead, they should present martial arts to the international community as a comprehensive cultural system with rich connotations and contemporary value, exploring it through multidimensional perspectives such as “life skills,” “body philosophy,” and “athletic aesthetics.” Building upon this foundation, cultural organizations and educational institutions should actively establish cross-cultural exchange platforms, encouraging the collection of grassroots, personal life experiences related to martial arts. Authentic and vivid life experiences will enhance the appeal and resonance of martial arts culture. More importantly, all narratives and dialogues should consciously distill and highlight the “universal human values” inherent in martial arts—such as the pursuit of mind-body harmony, the transcendence of personal potential, and the wisdom of coexisting with nature. Through this resonance of values, martial arts culture can transcend geopolitical divides and establish its unique yet universal cultural positioning within dialogues with mainstream values like the Olympic sports system.

5.5. Chronosystem

From the perspective of a chronosystem, we should examine the international dissemination of martial arts culture with a dynamic and developmental outlook, actively integrating its content with globally relevant contemporary issues. For instance, communicators can link core concepts from martial arts philosophy—such as “unity of body and mind” and “harmony between heaven and humanity”—to contemporary societal demands for physical and mental wellness,

stress management, and sustainable development. This repositioning frames martial arts as a “mind-body practice” that serves modern individuals' pursuit of high-quality living. Relevant institutions can also leverage digital technologies (such as AR/VR) to innovate dissemination methods, making the learning process of martial arts culture more aligned with contemporary habits. Simultaneously, stakeholders can utilize short-video platforms and cross-industry collaborations with fashion and art sectors to integrate martial arts culture with contemporary trends and artistic expressions. This approach presents a new, vibrant image of martial arts to the world, fundamentally renewing its appeal to the younger generation.

6. Conclusion

This study employs the framework of ecosystem theory to systematically analyze the multidimensional practical challenges and underlying causes confronting the international dissemination of martial arts culture, while constructing a corresponding pathway system. The research demonstrates that the international transmission of martial arts culture is not a linear process confined to a single dimension, but rather a complex ecosystem deeply interconnected by various elements. This ecosystem comprises micro, meso, outer, macro, and temporal systems. At the microsystem, learners confront challenges including cultural cognitive biases, difficulties integrating physical and mental practices, and weak intrinsic motivation. The mesosystem faces issues such as superficial teacher-student interactions, peer cultural barriers, and a lack of club and community activities. The exosystem manifests as organizational coordination failures, imbalanced resource allocation, and a talent pipeline gap. The macrosystem is constrained by the competitive restructuring of international sports systems and local economic-cultural conditions. The temporal dimension highlights insufficient intergenerational innovation and delayed adaptation to global cultural trends.

The specific causes of low transmission efficacy are “pressure transmission from top to bottom,” “feedback interruption from bottom to top,” and “disconnection between different systems.”

Therefore, by revealing the interconnected mechanisms of these challenges, this paper proposes feasible pathways to enhance the international dissemination of martial arts culture. These include: optimizing experiential learning at the microsystem, reforming curriculum formats; cultivating versatile instructors and developing communities at the mesosystem; integrating resources and developing specialized curricula at the exosystem; and reconstructing narratives at the macrosystem while driving innovation through temporal systems. Only through such an approach can dispersed communicative energies be consolidated into a cohesive force, advancing toward a synergistic communication ecosystem that fundamentally overcomes current structural bottlenecks.

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