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## RESEARCH ARTICLE

### SOCIOECOLOGICAL INFLUENCE OF DRAGON BOAT RACES IN WUXI BASIN

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#### ABSTRACT

The historical evolution of dragon boat racing in the Wuxi Basin is testament to its adaptability and resilience. Over centuries, this cultural phenomenon has undergone transformations, aligning itself with the changing contexts of society. Integral to the preservation of traditional Chinese culture, dragon boat racing champions the rich legacy of this ancient sport. Amidst the challenges posed by globalization and modernization, the sport's role in cultural heritage preservation is undeniable. The dragon boat's symbolism and rituals, spanning from its making process to pre-race ceremonies, showcase its cultural richness and ethnic identity. This preservation extends to its capacity to integrate with the contemporary pursuit of national fitness. As a revered component of Chinese tradition, the sport aligns with modern health consciousness, contributing to the larger goal of cultivating a healthier society. Moreover, dragon boat racing serves as a bridge for harmonious social development. Fostering connections across diverse demographics, the race creates an inclusive space that transcends societal barriers. Its inherently cooperative nature promotes teamwork, shared goals, and unity. Through this cultural vehicle, individuals find common ground, breaking down divides and promoting social cohesion. This inclusivity extends to individuals' psychological needs, fostering pride and a sense of belonging among participants and observers alike. This research provides a comprehensive exploration of dragon boat racing's impact within the socioecological system of the Wuxi Basin. From its historical roots to its contemporary significance, the sport emerges as a dynamic force that shapes and is shaped by its environment. Through its diverse impacts, the dragon boat race becomes a conduit for economic growth, cultural preservation, social cohesion, and enhanced well-being. It also underscores the intricate interplay between traditional cultural practices, societal dynamics, and ecological contexts, shedding light on the broader implications of sport within the fabric of society.

## INTRODUCTION

Folk sports, traditional sports, and national sports collectively form a significant aspect of human sports culture. Among these, folk sports represent a shared, ingrained, traditional, and lifestyle-oriented sporting pursuit developed, cherished, and interwoven with the customs and routines of everyday life, such as festivals and rituals (Chuanfei, 2007). Chinese folk sports, notably Chinese dragon boat racing, hold particular importance as a driving force for rural revitalization, contributing to the prosperity of rural sports culture, the growth of the rural sports industry, and the enhancement of rural inhabitants' well-being. The Wuxi River Basin, named after the streams originating in the Yuan River's upper reaches and a common location of Chinese dragon boat races, stretches across more than 50 counties and cities in the border areas of Hunan, Guizhou, Chongqing, and Hubei. With its diverse topography of mountains, rivers, and valleys, the basin is surrounded by natural boundaries, fostering a rich and varied landscape. The inhabitants, collectively referred to as "Wuxi Man," comprise numerous ethnic minorities, including Miao, Ba, Feng, and others, making it a significant hub of ethnic diversity in Southwest China.

Historically rooted in Chuwu culture, the Wuxi Basin's unique cultural blend, nurtured by its mountainous geography, has given rise to the deeply cultural dragon boat racing tradition. The dragon boat races in the Wuxi Basin, with their intricate rituals and processes, have evolved over time to encompass multifaceted meanings. Rooted in the custom of seeking ancestral spirits, the dragon boat races involve a complex interplay of religious, social, and regional dynamics. Remarkably, the tradition of "stealing materials" before the races, a symbolic practice, infuses the event with deeper significance. This practice embodies the Wuxi people's enduring spirit of resilience, industry, and unity in the face of adversities and struggles against both natural and human challenges. As a vital cultural and social gathering, the dragon boat races serve as a repository of historical, social, and economic narratives, intertwined with regional traditions, beliefs, and societal structures. Today, dragon boat racing continues to wield a substantial and profound influence on the ethnic minority communities in the Wuxi River Basin. By exploring the intricate cultural fabric and the social and ecological aspects of this traditional event, this research aims to contribute to a comprehensive understanding of its role in rural revitalization and broader societal development.

**Background of the study:** The preservation and advancement of China's esteemed traditional culture and the comprehensive revitalization of rural areas have progressively evolved into a national strategy. Throughout history, Chinese dragon boat culture has held deep significance, evident in historical references such as "Yangchun White Snow" or "Xialiba people," which underscore the prominence of dragon boat culture and racing.

Despite the overall narrowing of the urban-rural divide, the disparity in public cultural service investment between urban and rural areas remains substantial. The inadequacies in the "rural public cultural and sports facilities network and service operation mechanism" inhibit the expansion of public cultural activities like diversified rural traditions, traditional sports, festivals, and folk customs. The development of cultural activities like the Wuxi dragon boat race not only contributes to the overall promotion of rural revitalization but also plays a role in the integrated development of urban and rural areas. Given the current social, political, and economic backdrop, the foremost challenge for the sustainable progression of the Wuxi dragon boat race is to foster its prosperity and growth while achieving equilibrium between regional economic advancement, social and ecological equilibrium, and orderly cultural inheritance.

The enduring viability of the Wuxi Basin Dragon Boat Race can be attributed to its local social ecology, serving as an exemplary model for the innovative transformation of traditional rural sports activities. The tangible and intangible cultural heritage perpetuated through the Wuxi Basin Dragon Boat Race is a result of generations adapting to the natural ecological milieu over extended historical epochs. The evolution of dragon boat construction materials, techniques, racing methods, and ceremonial practices across different historical periods underscores the race's culture of harmonious coexistence among people, nature, and objects. This encapsulates the villagers' wisdom and adaptation strategies for survival. Examining the social ecology, the survival and development of traditional dragon boat racing in the Wuxi River Basin hinge on specific socioecological prerequisites and foundations. As a subsystem of social ecology, the growth of dragon boat racing is influenced by the broader social-ecological environment, historical conditions, internal elements, and relationships with external contexts and circumstances. The enduring legacy of traditional dragon boat racing in the Wuxi River Basin has transcended generations, constituting an ongoing process of continuous cultural adaptation to the natural, social, and cultural ecological environments.

Nevertheless, the dynamic impact of social transformation and modern cultural paradigms has ushered significant changes to the social and ecological conditions that underpin the traditional dragon boat race in the Wuxi Basin. The eroding wisdom and local culture of adapting to the natural ecological setting, dwindling social bonds among acquaintances, the weakening of rural society's self-organizational capacity, and the gradual marginalization of traditional culture within daily life have unfolded due to the impact of social change. Presently, amid the vigorous promotion of Chinese traditional culture and the flourishing of rural cultural endeavors, understanding the sustained social and ecological influence of the traditional dragon boat racing in the Wuxi River Basin not only sheds light on the ecological wisdom of harmonious human-land interaction but also offers a profound insight into the multifaceted richness of traditional cultural development. Furthermore, it holds the potential to alleviate the social and ecological pressures confronting the preservation and sustainable advancement of traditional culture.

**Statement of the purpose:** This paper sought to answer the question, "What are the essence and attributes of the social ecology inherent in traditional dragon boat racing within the Wuxi River Basin?" It does by acknowledging that this social ecology is not static and that it evolves over time due to external influences and internal adjustments. Subsequently, the research sought to answer the question, "What insights can be gleaned from local knowledge interviews and pertinent literature? This sub-question acknowledged social change as

an external factor intertwined throughout the journey of traditional dragon boat racing's development in the Wuxi River Basin.

Finally, the study sought to investigate the means by which elements within the social ecology of traditional dragon boat racing in the Wuxi River Basin adapt. This adaptation is seen as a consequence of the intricate interplay between the natural ecological environment, societal and cultural milieu, and the political and economic sphere.

**Significance of the study:** The beneficiaries of this study encompass a diverse array of stakeholders, each poised to derive significant value from the insights garnered through the exploration of traditional dragon boat racing's social ecology in the Wuxi Basin. The study's significance resonates deeply with these beneficiaries, addressing their specific needs and aspirations:

**Local communities and dragon boat practitioners:** Traditional dragon boat racing is an integral part of local culture and identity. This study offers local communities and practitioners an opportunity to gain a comprehensive understanding of the evolution of dragon boat racing and its adaptive mechanisms in response to social and cultural changes. The insights derived from this research can assist them in preserving, promoting, and revitalizing their cultural heritage.

**Policy makers and local governments:** Local governments and policy makers stand to benefit by gaining insights into how traditional cultural practices, like dragon boat racing, can be harnessed as drivers of rural revitalization. Understanding the adaptive strategies employed within the social ecology of dragon boat racing can inform the development of policies that support cultural preservation, tourism promotion, and sustainable development in rural areas.

**Cultural heritage organizations:** By analyzing the evolutionary patterns within the social ecology of traditional dragon boat racing, these organizations can create educational programs, exhibitions, and initiatives that highlight the deep connections between cultural practices, social dynamics, and ecological contexts.

**Researchers and academics:** Scholars interested in the fields of anthropology, sociology, cultural studies, and rural development will find this study valuable for its theoretical insights and empirical findings. These can serve as a foundation for further research on the interplay between cultural traditions, social change, and environmental factors.

**Tourism industry and economic development:** By understanding how traditional cultural events like dragon boat racing can attract tourists, enhance city branding, and stimulate economic activities, stakeholders in these sectors can strategize ways to leverage such practices for sustainable economic growth.

**Educational institutions:** Educational institutions at various levels can integrate the findings of this study into their curriculum. These can serve as a case study to illustrate the complex relationships between culture, society, and the environment.

**Scope and delimitation:** This paper sought to provide an in-depth exploration of traditional dragon boat racing in the Wuxi Basin, focusing on its socioecological development, evolution, and impact. However, it is important to acknowledge the limitations inherent in this study, which manifest in the following three key aspects:

Firstly, while the examination of the socioecological impact of traditional dragon boat racing in the Wuxi Basin offers valuable insights into the broader understanding of social ecology within traditional culture development, it is essential to recognize that different regions and cultures possess their own distinct characteristics. The traditional dragon boat racing in the Wuxi Basin may not fully encapsulate the diverse dynamics of dragon boat culture development as a whole. Secondly, being a qualitative study, the goal is to holistically comprehend the socioecological impact of traditional dragon boat racing in the Wuxi Basin through the lens of the specific

case study. This approach intends to capture the dynamic growth of social ecology within traditional culture and its effects. However, due to the comprehensive nature of this endeavor, certain aspects of sustainable cultural development may not be fully encompassed, necessitating trade-offs in research rigor and systematization. Lastly, the influence of the COVID-19 pandemic over the past three years has significantly disrupted traditional dragon boat racing events in the Wuxi River Basin. This disruption has hindered on-site participatory observation, forcing the researcher to rely largely on interviewee recollections and perspectives gathered post-event.

**Theoretical framework:** The inception of social-ecosystem theory dates back to the 2020s within the Chicago School of Social Ecology. However, its focus was predominantly confined to humans and society, regarding the natural world merely as a collection of indicators impacting societal structure (Berkes/Fikret, 2003). Only in the past two decades has this concept been employed as a framework for methodical exploration into human-land systems, extending its influence across environmental science, sociology, economics, and other disciplines (Erickson, Adam, 2015).

The socioecological system theory offers a dynamic and forward-looking approach to comprehending and addressing the interdependence between humans and the environment. Recognizing that the patterns, processes, interactions, and feedback within this vast system hold great significance for the overall system's growth and development. It was initially employed in the realm of resource management and its sustainable utilization, subsequently evolving into a framework for research into socioecological system adaptations, thereby offering a novel perspective for tackling urban environmental challenges. Given that cities epitomize significant socioecological systems in reality, urban ecosystems are profoundly interwoven with societal functioning, generating reciprocal impacts on social operations. Understanding this interconnected and continuously evolving system necessitates surpassing traditional deterministic views and instead recognizing that human actions can shape, restore, or adapt the environment through scientific innovation zones. Within the socioecological system framework, urban resilience is defined as the urban system's capacity to respond to internal and external changes through mitigation, adaptation, and transformation. Social ecology underscores the equilibrium and ongoing alteration within a system, emphasizing the coevolution and symbiosis of both internal and external changing environments to ultimately achieve sustainable development (Welsh, Marc., 2014). Complex systems seldom maintain a stable state for extended periods; when disturbances attempt to alter the system's state, resilience strives to retain it within the stable range.

Within the socioecological system (SES) framework, some scholars have introduced the concept of social-ecological resilience (S.T.A. Pickett; M.L. Cadenasso; J.M. Grove, 2004). From this perspective, resilience signifies the ability to provide natural resources for human advancement, endure environmental changes and human-induced pressures, and balance human requirements with the natural carrying capacity over the short and long term. Socioecological resilience hinges on the mutual sufficiency of coupled social and ecosystem elements, flexibly adapting to change via a blend of social and ecological mechanisms. Specifically, socioecological resilience encompasses the capacity of systems to absorb and adjust to disruptions, along with system rejuvenation and transformative development (Carl Folke, 2006). Given the intertwined and mutually constraining nature of the socioecological system, achieving resilience necessitates responses not only within the social dimension but also within the ecological dimension. Singularly focusing on the adaptability and organizational capacity of the social dimension while treating the ecological dimension as a "black box" risks entangling the overall system's functioning. A similar imbalance exists when concentrating solely on the ecological dimension, leading to narrow and misguided decisions (Barry Smit; Johanna Wandel, 2006). It is crucial to highlight that socioecological resilience underscores renewal, repair, and self-organization over returning to equilibrium.

Hence, resilience, from this perspective, embodies a capacity for change, representing a positive shift towards sustainable development (Brian Walker *et al.*, 2009).

## METHODOLOGY

This chapter outlines the study's design, the subjects, the research instrument, the data collection process, and the statistical data analysis that will be used.

**Research locale:** In this study, the traditional dragon boat race in the Wuxi Basin was selected as the subject of investigation, encompassing the region traversed by the Wuxi River. Positioned between the Wuling Mountains and the Xuefeng Mountains, the Wuxi area spanned across the surrounding territories of five provinces (cities, and districts): Xiang, Qian, Chongqing, Hubei, and Gui. This region held historical significance and an aura of enchantment. The term "Wuxi" referred to the five major tributaries upstream of the Yuanshui River. According to the "Water Classic, Yuanshui Note" from the Northern Wei Dynasty Daoyuan, these tributaries were named Xiongxi (Wushui), Nanxi (canal water), Youxi (Youshui), Waxi (irrigated water), and Chenxi (Jinshui).

Throughout history, Wuxi culture gained global renown. Given its subtropical location and mild climate, the Wuxi Basin fostered diverse plant and animal life. This region displayed a noticeable vertical climate variation. Its primary climate characteristics encompassed warmth and humidity, diverse heat distribution, brief cold periods, short intervals of summer heat, elongated frost-free periods, ample rainfall concentrated in spring and summer, reduced rain during autumn and winter, diminished sunlight in both summer and winter, notable monsoon patterns, and four distinct seasons. This climate epitomized a quintessential central subtropical monsoon humid mountain climate.

**Sample and sampling technique:** The "theory saturation principle" constituted a fundamental aspect of the grounded theory sampling approach (Morse & Richards, 2002). According to grounded theory methodology, the analysis of an in-depth interview study and the interview process were intricately interconnected. Information acquired from interviews necessitated immediate organization and analysis, leading to the formulation of theoretical hypotheses grounded in interview analysis.

Subsequent sample interviews were then conducted based on these theoretical hypotheses to validate and refine them. This iterative process continued until researchers observed repetition of information in terms of defining concepts, establishing categories, and developing theories. At this point, researchers could confidently conclude that theoretical saturation had been achieved, rendering further interviews unnecessary. In this study, three distinct methods of theoretical sampling, as introduced by Strauss, were employed to ensure the acquisition of relevant and reliable data:

- **Open sampling:** This approach involved the selection of individuals who held significant insights into the socioecological impact of dragon boat races in the Wuxi Basin, aligned with the research objective. This method aimed to comprehensively cover all facets of the research phenomenon and identify the pertinent concepts and categories required for theory construction.
- **Relational and differential sampling:** Experts specializing in socioecological concerns were carefully identified from the theoretical concepts and categories that emerged from the interview materials. This method sought to provide a nuanced understanding of the impact of dragonboat races.
- **Discriminative sampling:** The researcher developed theoretical hypotheses through continuous induction and analysis of interview data. As the volume of interview and literary data increased, survey subjects were strategically chosen to facilitate ongoing modification and enhancement of the theory during interviews.

By implementing these theoretical sampling methods, the study ensured the collection of relevant and dependable data to facilitate a comprehensive exploration of the socioecological dynamics of dragon boat races in the Wuxi Basin. This approach contributed to the rigor and credibility of the research findings, promoting a holistic understanding of the subject matter.

**Data gathering procedure:** The data collection procedure for the grounded theory study investigating the socioecological influence of dragon boat races was carefully designed to ensure comprehensive and meaningful insights. In this study, the primary method of data collection was in-depth interviews, chosen for their capacity to delve deeply into participants' perspectives and experiences. A diverse and purposive sampling approach was employed to select participants who possessed substantial knowledge and involvement in dragon boat races within the Wuxi Basin. Open-ended questions formed an integral part of the interview guide, encouraging participants to share their thoughts, perceptions, and narratives surrounding the socioecological impact of these races.

To facilitate accurate transcription and data verification, participants were asked for their consent to record the interviews on video. This recorded material was subsequently utilized to aid in coding, organizing, and analyzing the data. The utmost care was taken to ensure participants' privacy and confidentiality, and their consent for both participation and recording was explicitly obtained. Throughout the study, the researcher maintained an adaptive approach to data collection. In instances where participants displayed hesitation or reluctance in discussing their experiences, various techniques were employed to establish rapport and encourage open communication. This allowed for the collection of rich and nuanced data, contributing to a comprehensive exploration of the socioecological aspects of dragon boat races. As the study adhered to the "theoretical saturation principle," the data collection process was extended until a point of information redundancy or saturation was reached. This ensured that a thorough understanding of the socioecological influence of dragon boat races was achieved and that no new information or themes emerged from the data. By following this rigorous data collection procedure, the study aimed to contribute valuable insights into the dynamic interplay between dragon boat races and the socioecological context within the Wuxi Basin.

**Statistical analysis:** The operation procedure of grounded theory was followed, and Nvivo12.0 software was used to encode and analyze the collected data until the theory was saturated, resulting in the emergence of the final theory from the data. The analysis process began with open coding. During this stage, the transcribed interview data was thoroughly examined, and smaller units of meaning known as codes were identified. These initial codes involved labeling and categorizing data fragments related to various aspects of the socioecological influence of dragon boat races. Open coding allowed patterns, themes, and emerging concepts to surface, contributing to a preliminary understanding of the data.

After open coding, axial coding was employed to establish connections between the initial codes and their subcategories. The goal was to create a more structured framework for comprehending the data. By identifying relationships between codes, broader categories were developed, encapsulating related concepts. Axial coding facilitated a deeper exploration of interrelationships, shedding light on underlying mechanisms and interactions. As the analysis proceeded, selective coding refined and consolidated the emerging theory. During this phase, the focus was on identifying core categories and themes that encapsulated the essence of the socioecological influence of dragon boat races. Concepts from both the open and axial coding stages were integrated and refined through selective coding, resulting in a coherent theoretical framework. This framework encompassed multifaceted dimensions of socioecological influence, providing a comprehensive understanding of how dragon boat races impacted the social and ecological aspects within the Wuxi Basin.

Throughout the coding process, constant comparison was utilized to compare newly coded data with existing categories and concepts, ensuring the consistency and accuracy of the emerging theory. Memos were generated to document the researcher's thoughts, insights, and reflections during coding, contributing to a transparent and traceable analytical process. By systematically applying open, axial, and selective coding, this research unveiled the intricate dynamics of the socioecological influence of dragon boat races, offering a nuanced and in-depth comprehension of their impact within the context of the Wuxi Basin.

## RESULTS

This chapter introduces the personal situation of the in-depth interview participants, the topic of the interview, the expression related to the phenomenon, the condensation and interpretation of the theme, and the analysis of the social and ecological impact of the dragon boat race in the Wuxi Basin. The fundamental process of applying the grounded theory research method revolves around coding the original interview data, which is pivotal in condensing the elements required for theory construction. This coding process involves three fundamental schemes: open coding, master coding, and selective coding.

**Open coding:** The research involved conducting in-depth interviews with eight respondents. The collected interview material was meticulously analyzed using NVivo12.0 software. This analysis entailed a careful and repeated comparison and consideration of each word, sentence, and paragraph within the interview material. The initial phase of data organization consisted of open coding, which aimed to establish categories and concepts. In this step, the original data was examined sentence by sentence. Any unclear content was removed, and the original sentences were organized. Subsequently, a comprehensive analysis of the statements was conducted, leading to the identification and annotation of relevant concepts. During this process, certain grammatical modifications were applied to enhance clarity. Building upon the processing and organization of the original sentences, a total of 42 concepts and 9 categories were identified. This was achieved by eliminating concepts that were vague, overlapping, or contradictory, ensuring a refined and coherent dataset (as illustrated in Table 2).

**Selective coding:** Through the continuous investigation of interview data, concepts and categories, especially the in-depth analysis of the two main categories of "dragon boat race" and "socioecological impact," combined with the retrospective comparison of interview data, this study believes that the core category of "the impact of dragon boat race on the socioecological impact of dragon boat race in the Wuxi Basin is the key to the sustainable development of dragon boat race" can guide all the interview data. Its impact on the social ecology is determined by the essential attributes of rural revitalization. The dragon boat race in the Wuxi Basin is formed on the basis of local culture and local characteristics, on a certain social ecological basis, and forms a symbiotic relationship with the natural persons in the area, that is, the village rules, customs and social ethics of the dragon boat race in the Wuxi Basin. People inherit, develop and spread this culture in turn, make effective use of the opportunity of rural revitalization, carry out dragon boat race activities in the Wuxi Basin, promote the innovative development of dragon boat race, cultivate the cultural identity and ethnic identity of rural residents, promote the development of village and village sports, implement the national fitness program, and finally realize the revitalization of rural culture in the Wuxi Basin.

**Theoretical saturation test:** The process of testing theoretical saturation serves as a pivotal component within grounded theory research. This involves employing targeted sampling to explore the development of concepts and categories. If the newly collected data fails to yield fresh theoretical insights, it signifies successful theoretical saturation, as outlined by Casey and Camez (2014). In this context, the present study refines and analyzes the interview data garnered from 8 participants.

**Table 1. Dragon Boat Inheritors in the Wuxi Basin**

Names	Gender	Age	Rank (title)	Class
Z. J.	Male	49	Provincial	Return home to start a dragon Boat team (individual)
X. G.	Male	62	Municipal	Dragon boat production enterprise (private) Company chairman
Z. X.	Male	62	Municipal	Dragon boat producers and operators (individual)
J. S.	Male	77	Provincial	Dragon boat race coach

**Table 2. Results of Open Coding Using NVivo12.0**

Categories	Dimensions	Index
Dragon Boat Race	A1 Tectonic system	a1 hull, a2 dragon head, a3 dragon tail, a4 gong and drum, a5 flag
	A2 Competition Ceremony	a6 Ancestral Hall, a7 Sacrifice, a8 ancestor worship, a9 family tradition, a10 family legacy,
	A3 Competition Form	a11 Competitive type, a12 Show type, a13 Fun type
	A4 Technical System	a14 physical fitness, a15 competition unity, a16 hands and feet flexible, a17 body, a18 strong will, a19 Shangde accomplishment, a20 blood spirit
Social Ecology	A5 Politics	a21 Social stability, a22 social harmony, a23 open exchanges
	A6 Economy	A24 Industrial economy, a25 Industrial Tourism, a26 Employment Opportunities
	A7 Culture	a27 spread the morning forward, a28 national fitness, a29 psychological needs
Rural Revitalization	A8 Policy support	a30 Intangible cultural heritage protection, a31 Rural revitalization Strategy, a32 Traditional culture inheritance project, a33 National Fitness, a34 Healthy China Strategy
	A9 Revitalizing the field	A35 Rural economy, a36 Rural education, a37 Rural tourism, a38 rural sports, a39 Good Life, a40 traditional culture, a41 moral construction, a42 family style construction

The outcome reveals that no novel data contributes to the establishment of new concepts or categories. With an increased number of participants, data homogeneity arises, indicating successful completion of the theoretical saturation test. Evidently, the three overarching categories elucidated in this paper—"dragon boat race," "social ecology," and "rural revitalization"—encompass a comprehensive spectrum of facets encompassing the socioecological impact of dragon boat races within the context of the Wuxi Basin's rural revitalization initiative. The three-tier theoretical model presented in this paper (Figure 2) serves as an intuitive depiction of the three distinct coding stages underlying the foundational theory. Through an exploration of the historical progression of dragon boat races within the Wuxi Basin, the research delves into the ramifications of these races on the area's social ecology, subsequently outlining the rationale behind the role of dragon boat races in the region's rural revitalization initiative. The third stage of the model examines the interplay between influencing factors (the theoretical and technical systems of dragon boat races), participation behavior (social-ecological impact), and the feedback mechanism (rural revitalization).

### Category 1: Historical evolution

Dragon boat sport entails multiple rowers propelling a boat with a single oar, utilizing muscle power to advance the vessel. Known as "dragon boat racing" or "dragon-boat rowing," this traditional folk activity holds a significant historical legacy within China. The scope of dragon boat racing encompasses both its historical origins and its contemporary practice. As a quintessential folk sport, dragon boat racing has navigated through various vicissitudes across societal transformations. Its evolutionary journey spans over a millennium, from its inception to its modern manifestation amid accelerated social changes. This trajectory encapsulates the intricate evolution of dragon boat racing.

### Category 2: Connotations and characteristics

Drawing upon the principles of social ecology, the concept of a village, community, or school can be likened to a self-contained social ecosystem. Focusing the investigation of dragon boat racing on villages aims to unravel the dynamics of this integrated ecosystem. The research goes beyond the village boundaries, aiming to understand the village within a broader context. By centering on the village while also transcending its limitations, the study investigates dragon boat racing through the lens of a comprehensive social ecosystem.

This approach seeks to uncover the intricate interplay between the dragon boat race and the overall social ecology within the Wuxi Basin.

### Category 3: Societal impact

The duration of the Wuxi Dragon Boat Race is limited, but its impact and significance on the host region are far greater than the race itself. Before the host of dragon boat race bids or prepares for the race, the basic characteristics of some regional Spaces are often manifested as self-circulation, self-circulation, and ultra-stability. At this time, the host place of the dragon boat race is less affected by other external forces, and the social environment is in a relatively balanced state. When the host place of Wuxi River Basin prepares to hold dragon boat races, especially large-scale and level races, excessive people, logistics and information flows will inevitably converge in one area at the same time. Under the influence of various external "flows," the relatively balanced social environment system of the host area of the dragon boat race will be broken, and then a positive social impact will be produced.

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