

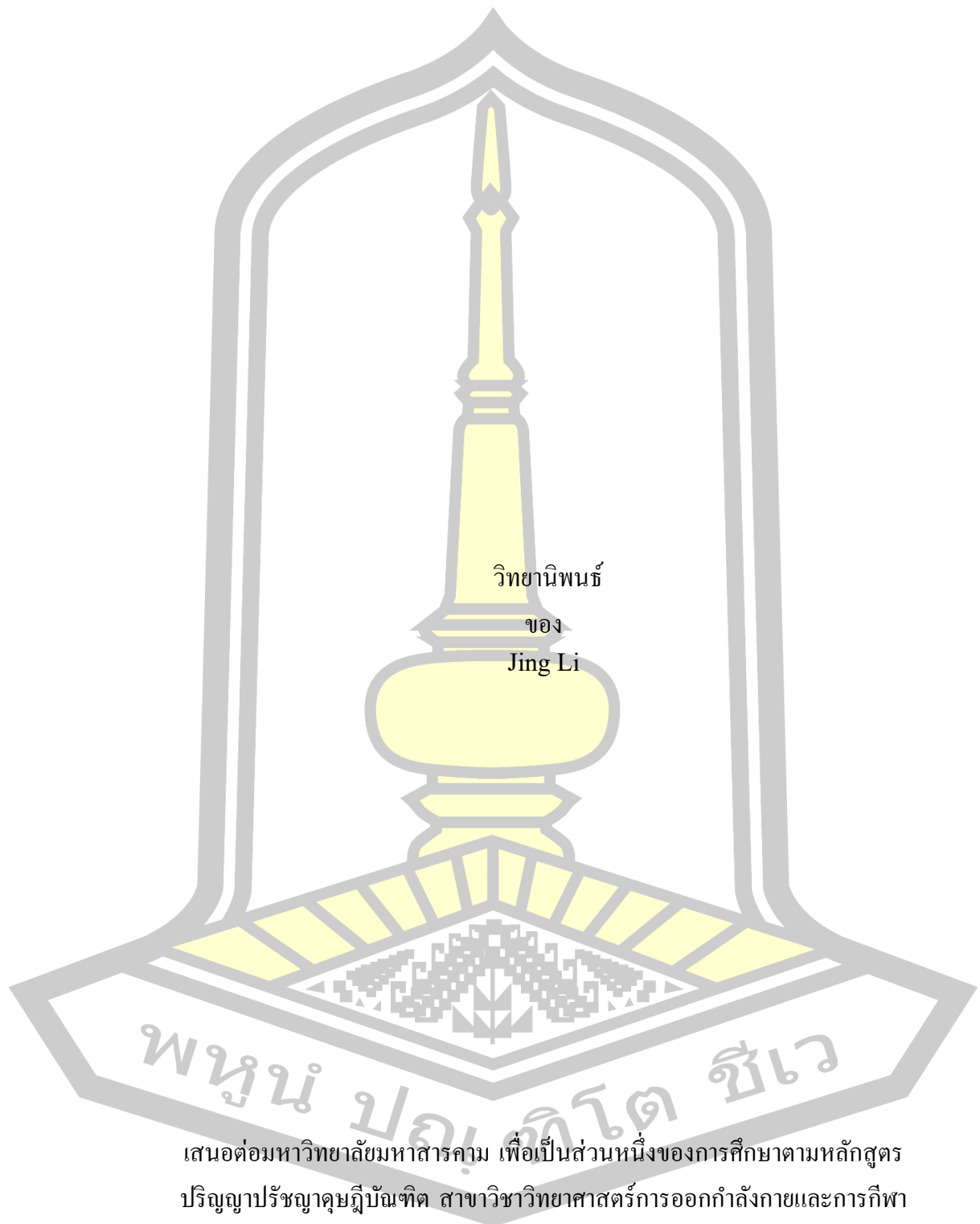
Development of a Market Evaluation Index of Sports Characteristics for Towns in
China

Jing Li

A Thesis Submitted in Partial Fulfillment of Requirements for
degree of Doctor of Philosophy in Exercise and Sport Science
May 2024

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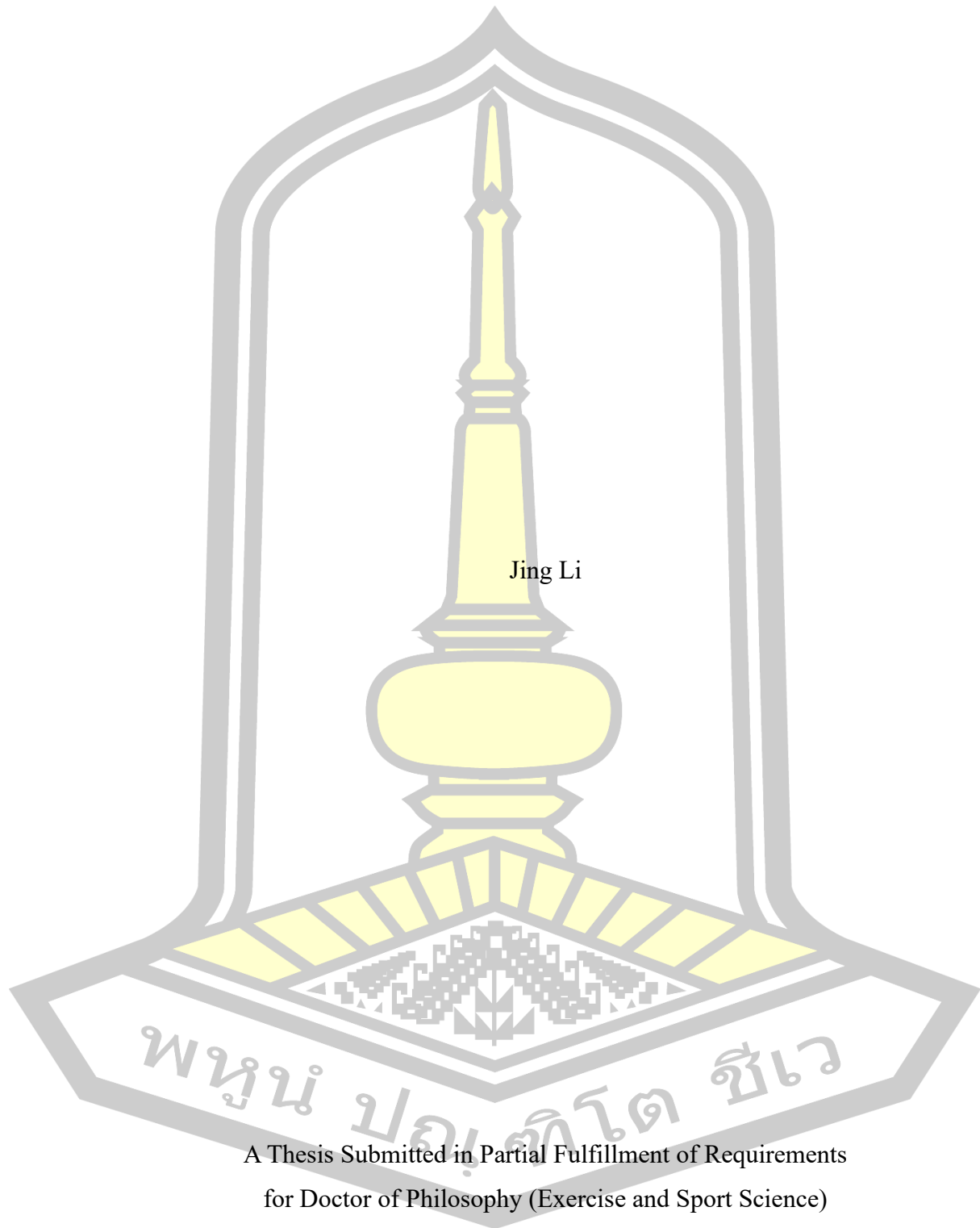


เสนอต่อมหาวิทยาลัยมหาสารคาม เพื่อเป็นส่วนหนึ่งของการศึกษาตามหลักสูตร
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A Thesis Submitted in Partial Fulfillment of Requirements
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May 2024

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ABSTRACT

The objective of this research was to investigate consumer demand and consumer behavior in sports towns, analyze the factors that affect consumer demand and consumer behavior in sports towns and develop the evaluation index for sports characteristic town market, to test the effect of sports characteristic town market evaluation index.

The mixed research methodology (Mixed Methods Research) was used by conducting quantitative and qualitative research. Questionnaires and interviews were used as study tools. The validity test was evaluated using the project-objective agreement index (IOC), with a final IOC mean of 0.936. The questionnaire's confidence factor of the questionnaire were .951, which used a total of 401 samples. Data were analyzed by IBM SPSS Statistics 21.0 on the frequency distribution, Descriptive statistical analysis, factor analysis.

The results of this study were to develop the evaluation index for sports characteristic town market on the basis of STP theory.

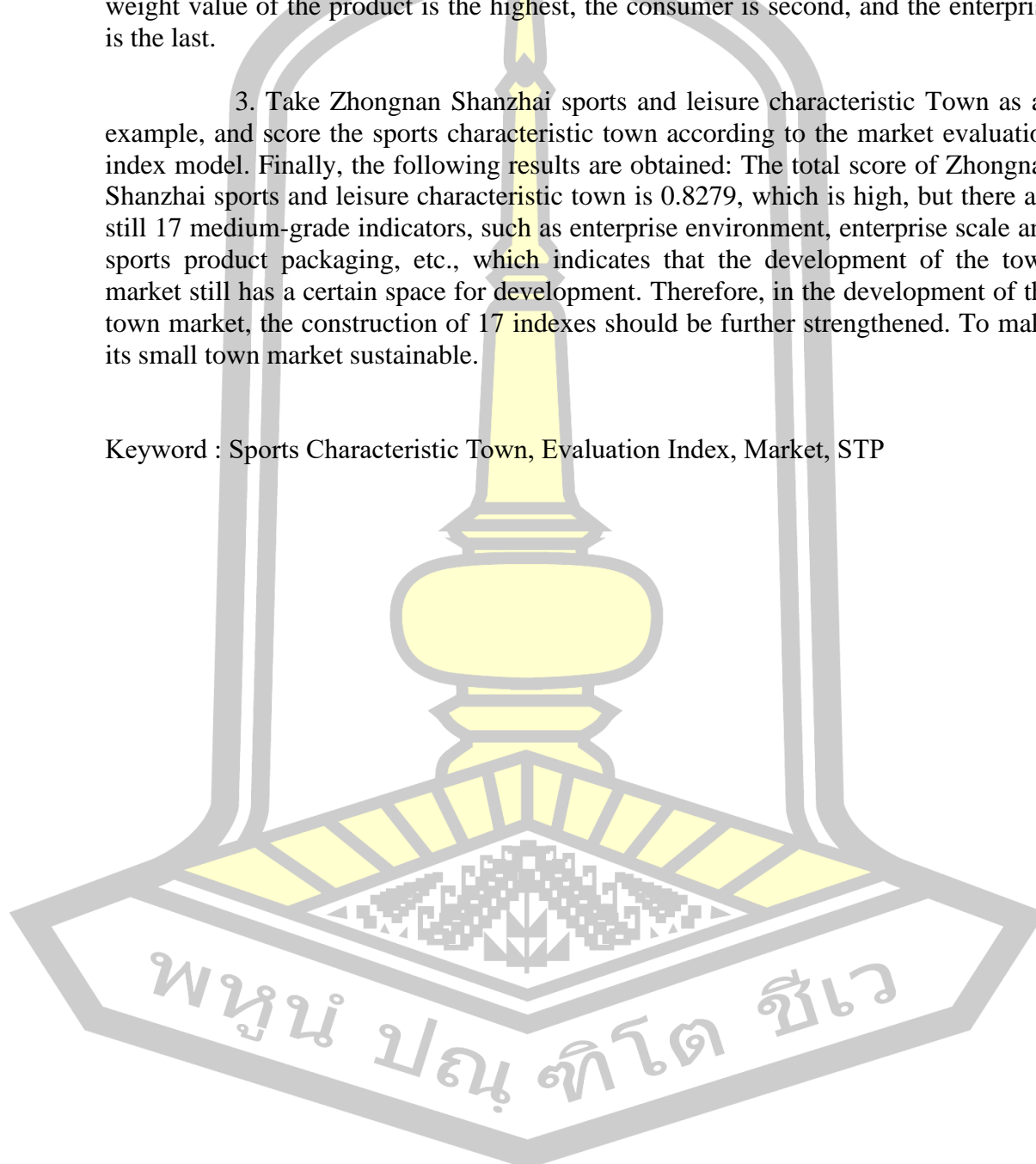
1. According to the questionnaire method, the proportion of male consumers in sports towns is slightly higher than that of female consumers, most of whom are between 26 and 45 years old, whose education level is mainly at the undergraduate level, and the number of civil servants and public institutions is the largest. From the perspective of monthly income, most of the respondents are concentrated between 5,001 yuan and 8,000 yuan, and each time they spend on sports consumption in sports towns with sports characteristics. Most respondents chose 200-500 yuan. From the point of view of the sports involved, fitness walking, cycling, mountaineering, watching sports events, etc., are more popular with consumers. According to the interview method, factors that affect the demand and behavior of consumers in sports towns include interest, time, monthly income, education level, age, popularity, social class, living standard, publicity, participation motivation, sports content, experience, loyalty, town facilities and services, sports prices and so on.

2. Using Delphi method, experts are invited to conduct three rounds of

screening of market evaluation indicators of small towns with sports characteristics. Finally, three first-level indicators (A1 Product, A2 enterprise, A3 consumer) and nine second-level indicators (B1 Product Quality, B2 Input-output Benefit, B3 Product Features, and B4 Product) are obtained Function, B5 Enterprise Image, B6 Employee Competence, B7 Basic Information, B8 Attitude, B9 Purchasing Power), 36 three-level indicators. Using the Analytic Hierarchy Process (AHP), it is calculated that the weight value of the product is the highest, the consumer is second, and the enterprise is the last.

3. Take Zhongnan Shanzhai sports and leisure characteristic Town as an example, and score the sports characteristic town according to the market evaluation index model. Finally, the following results are obtained: The total score of Zhongnan Shanzhai sports and leisure characteristic town is 0.8279, which is high, but there are still 17 medium-grade indicators, such as enterprise environment, enterprise scale and sports product packaging, etc., which indicates that the development of the town market still has a certain space for development. Therefore, in the development of the town market, the construction of 17 indexes should be further strengthened. To make its small town market sustainable.

Keyword : Sports Characteristic Town, Evaluation Index, Market, STP



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Jing Li

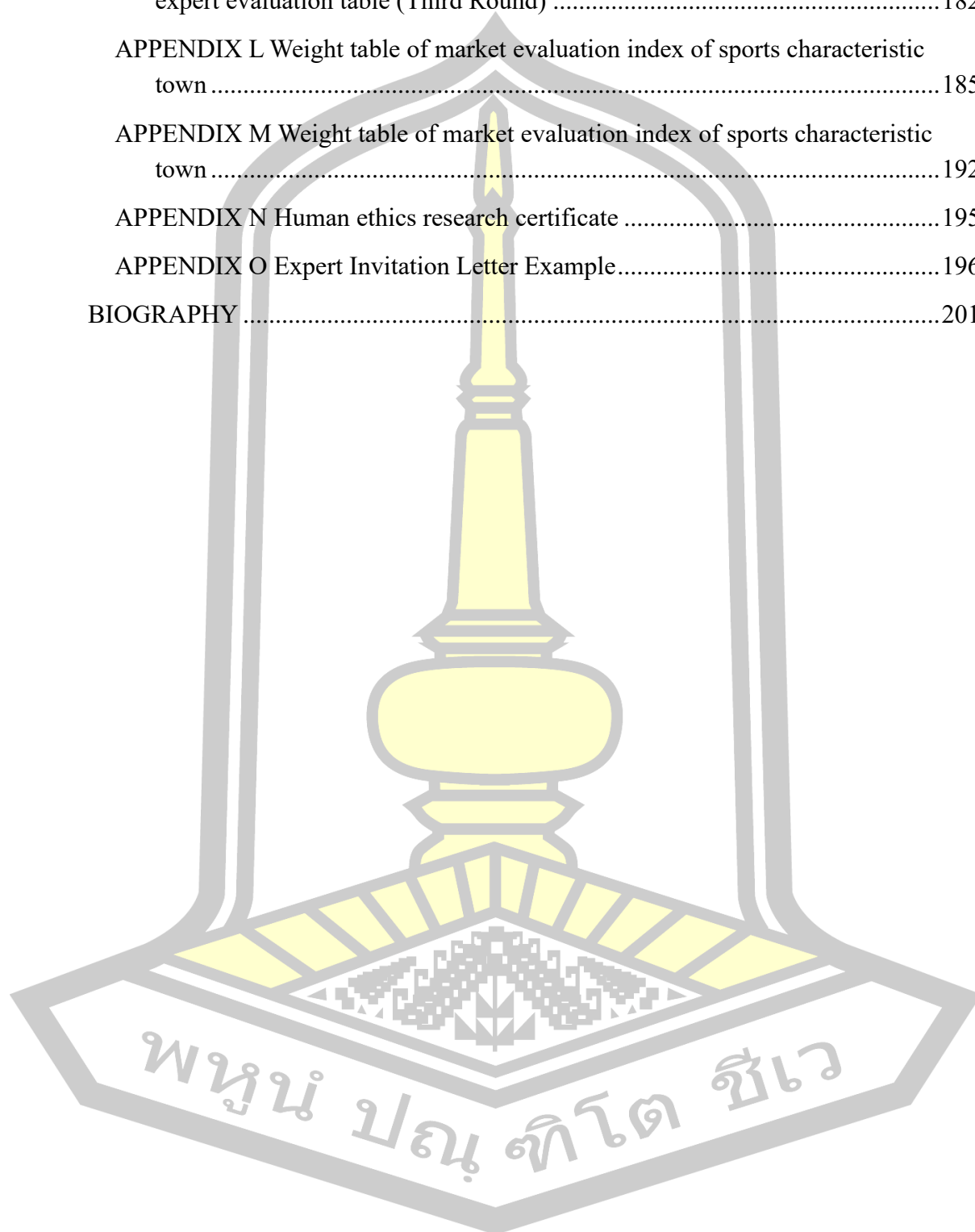
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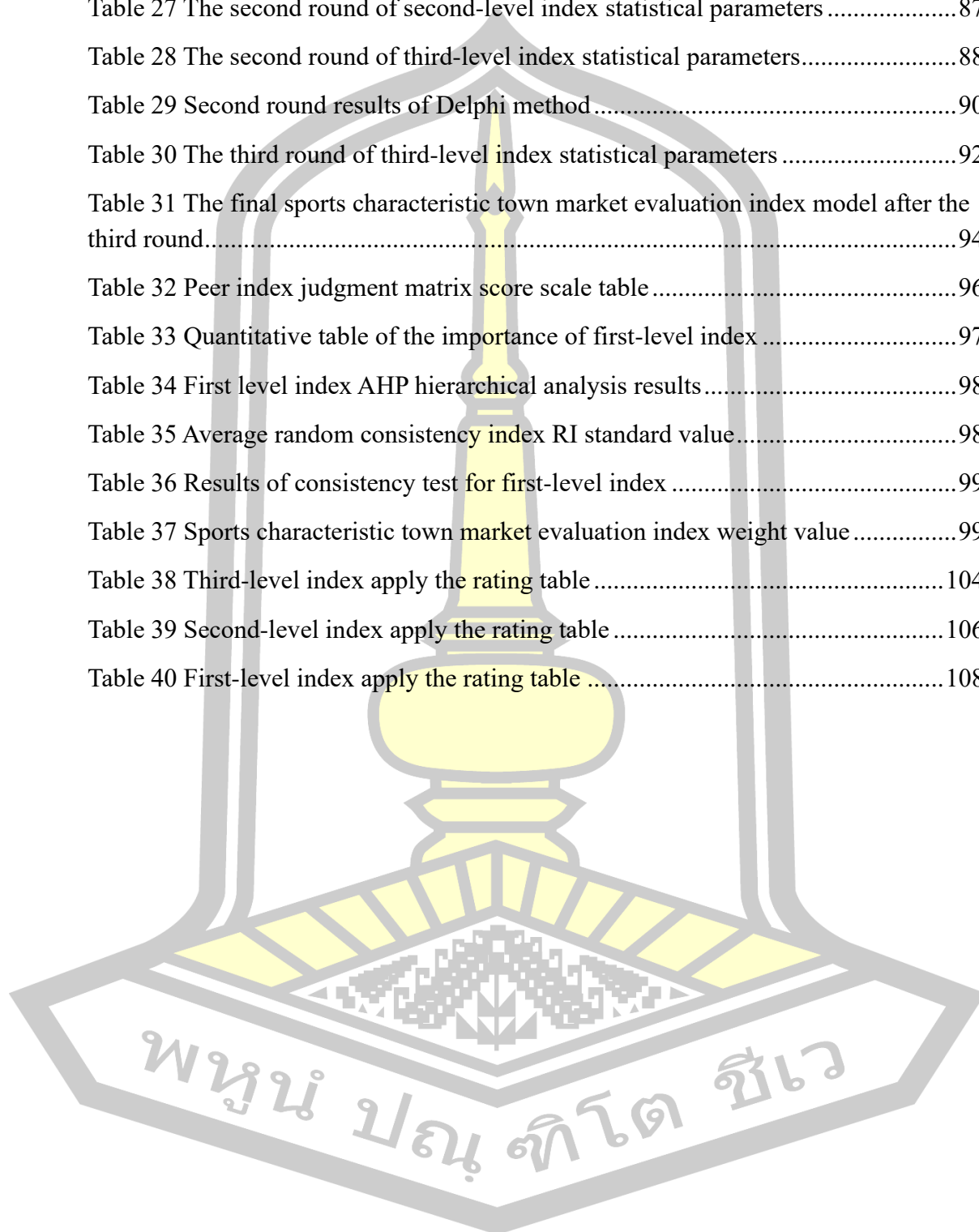
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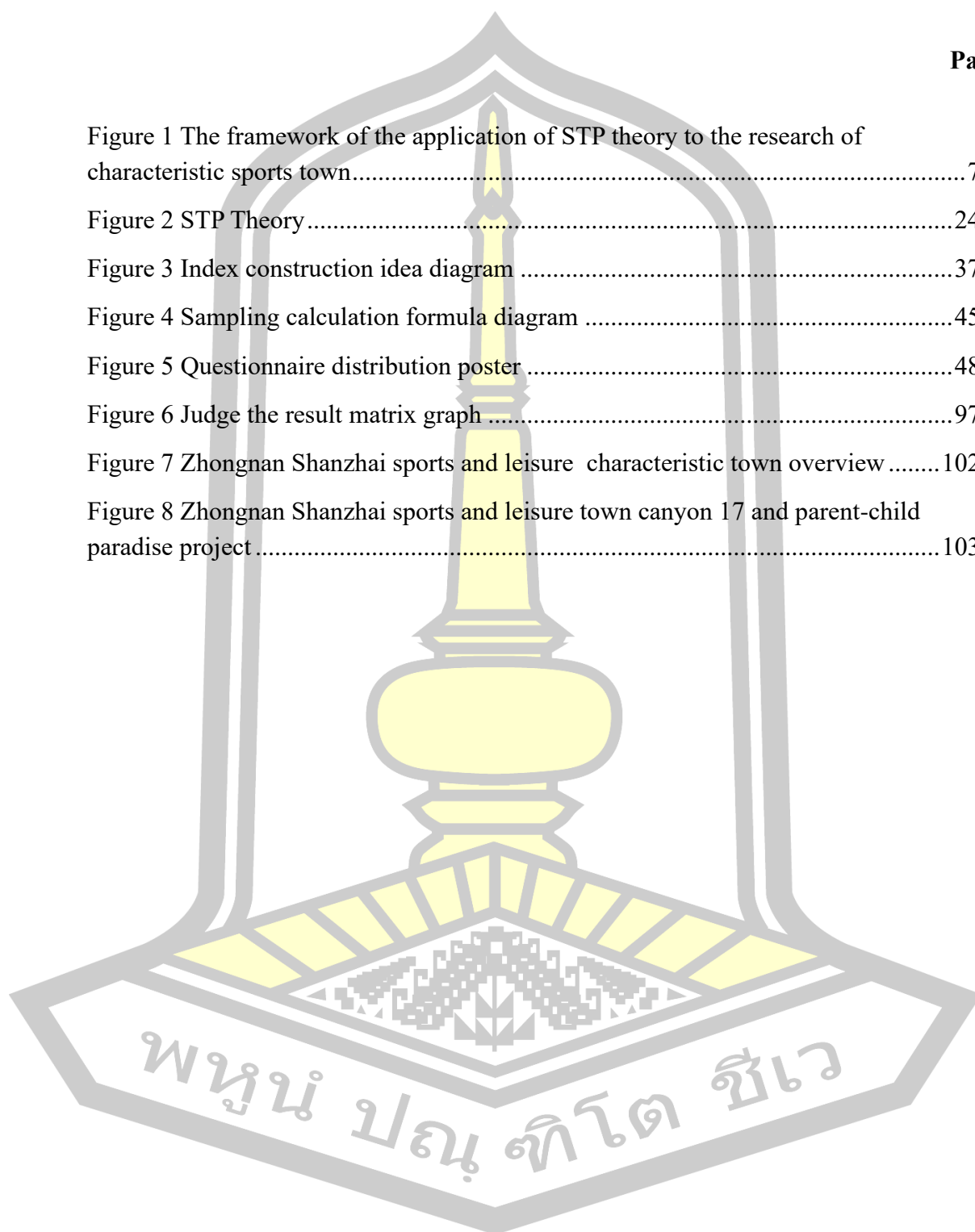
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CHAPTER I

INTRODUCTION

Research Background

Since the reform and opening up, small towns have played an important role in the process of urbanization in China as spatial carriers for the in-situ urbanization of rural surplus labor. (Wu, & Wang, 2012) Especially as China has entered the stage of new urbanization development, the construction of small towns has received national attention as an important strategic measure for regional economic transformation and upgrading and supply-side structural reform. In 2014, the Central Committee of the Communist Party of China and the State Council issued the "National New Urbanization Plan (2014-2020)", which proposed the development path, main goals and strategic tasks of future urbanization, and required small towns with characteristic resources and location advantages to pass the planning Guidance, market operation, and cultivation to become a professional and characteristic town for cultural tourism, business logistics, resource processing, transportation hub, etc. (Wu, & Wang, 2012). Subsequently, the Ministry of Housing and Urban-Rural Development, the Development and Reform Commission, the Ministry of Finance, the Tourism Bureau, the Sports Bureau and other government functional departments have joined the ranks of building characteristic towns and issued a series of policy documents to plan and promote the construction of characteristic towns.

Characteristic towns are a kind of micro-industrial agglomeration area, with distinctive high-end subdivided industrial characteristics, multi-functional characteristics of integration of industry, city and humanities, and intensive and efficient space utilization. It is a new platform for high-quality economic development, relying on small-scale spatial agglomeration and subdividing industries and enterprises, and promoting land use efficiency, productivity layout optimization, and industrial transformation and upgrading; It is a new carrier for new urbanization construction, relieving central urban areas The non-core function is to absorb the agricultural transfer population to work and live in the city, and promote the citizenization and urbanization of the agricultural transfer population; it is a new fulcrum for the integrated development of urban and rural areas, undertakes the

transfer of urban elements, and supports the coordinated development of urban and rural industries (National Development and Reform Commission, 2021). As one of the ways of small town construction and development, sports town is an important measure to promote the construction of modern cities and towns, realize the integrated development of urban and rural areas, and promote the structural reform of the supply side. It is an important measure to develop the national fitness cause under the background of implementing the national fitness and healthy China strategy, an important measure to develop the sports industry under the background of supply-side structural reform, and an important measure to promote sports poverty alleviation under the background of poverty alleviation. In 2014, The State Council defined the development of sports industry as a national strategy for the first time, emphasized the economic function of sports, and proposed to actively expand the supply of sports products and services, promote the sports industry to become an important force in economic transformation and upgrading, promote the all-round development of mass sports and competitive sports, and accelerate the construction of a sports power. Constantly meet the people's growing demand for sports (State Council, 2014). In May 2017, the State General Administration of Sport issued the Notice on Promoting the Construction of Sports and Leisure characteristic Towns, marking the official start of the construction of sports characteristic towns in China and providing theoretical guidance and practical basis for the construction of sports characteristic towns (State General Administration of Sport, 2017). Immediately, the General Office of the General Administration of Sports announced the list of the first batch of sports and leisure characteristic town pilot projects, and a total of 96 projects were identified as the first batch of sports characteristic town pilot projects. In this study, China is divided into southern region, northern region, northwestern region and Qinghai-Tibet region according to geographical location. Taking Rizhao Olympic Water Sports Town in northern region, Fuyang Yinghu Smart Sports Town in southern region, Zhongnan Shanzhai Sports and leisure Town in northwestern region, Longyangxia Sports Town in Qinghai-Tibet region, 4 sports towns with sports characteristics as examples, Research on their markets, because these four sports towns are the first batch of sports towns in China with relatively good development, but there are still unclear consumer segmentation of sports towns, inaccurate market positioning, and no

suitable evaluation indicators to evaluate the market of sports towns with sports characteristics (Tian, & Zhao, 2018, Jing, 2019, Guo, 2019, Si & Chen, 2022, Ji, 2023).

At present, there are many theories about market research, and the most popular theories used by scholars and experts include STP theory, 4P theory, 4C theory, 4R theory, Porter's Five Forces model and so on. Market Segmentation was proposed by American Marketer Wendell Smith in 1956, and then developed and improved by American Marketer Philip Kotler. Finally, a mature Segmentation, Targeting and Positioning theory (STP theory for short) is formed. The fundamental meaning of STP theory is to help enterprises locate market segments and solve the needs of certain groups (Kotler, 1989). The 4P theory is the basic theory that enterprises combine the four factors of product, price, channel and promotion to meet the market demand in marketing planning. 4C theory from the four dimensions of customer, cost, convenience and communication to in-depth focus on consumer needs to improve user experience; 4R theory takes relationship marketing as the center, pays attention to the long-term interaction between enterprises and customers, and focuses on building customer loyalty. Porter's five forces model is based on the five forces of potential entrants, industrial substitutes, competitors, suppliers and buyers to improve the attractiveness of the industry (Zeng & Mao, 2020).

From the above theory, the emphasis of each theory is different, the main role of STP theory is to determine their own target market on the basis of a certain market segmentation, and finally position the product or service in the target market. STP theory is the most suitable for the study of this paper. The purpose of this study is to subdivide the market of sports characteristic towns, understand the needs of consumers, use reasonable evaluation index to evaluate the towns, and finally carry out practical positioning. STP theory contains three elements: Segmentation (S), Targeting (T), Positioning (P). Segmentation (S) refers to the process by which a market for a product or service is divided into a series of market segments according to the differences in customer needs. Segmentation (S) includes geographical segmentation, demographic segmentation, psychological segmentation, and behavioral segmentation. Geographical segmentation includes region, country, city, climate, terrain and other indexes. The demographic segmentation includes indexes

such as gender, age, occupation, education, and income. Psychological segmentation includes lifestyle, Personality, Social stratum and other indexes. Behavioral segmentation includes indexes such as opportunity, benefits, user profile, brand loyalty, and attitude. Targeting (T) refers to a series of target planning aimed at occupying the segmented market and selecting different markets according to different target markets. Positioning (P) refers to positioning its products or services in a certain position in the target market in the process of marketing, that is, determining the competitive position of its products or services in the target market, also known as "competitive positioning". Positioning (P) mainly includes product positioning, enterprise positioning, and consumer positioning. Product positioning includes function, Cost, price, composition, material, quality and other indexes. Enterprise positioning includes brand, advertising, staff capability, knowledge and other indexes. Consumer positioning includes age, need, attitude, preferences, shopping characteristics and other indexes (Kotler, 1989). The application of Segmentation (S), Targeting (T) and Positioning(P) can just complete the purpose of this research. Therefore, STP theory is chosen for this research.

STP theory has been applied to various enterprises. In the field of sports, it is mainly applied to sports goods market research (Wang, 2020), sports tourism market research (Lu, 2021), sports clubs (Xue, 2021), and sports training institutions (Dang, 2021). All of them use market segmentation to divide consumers, combine their realistic background and resource conditions, select the most valuable and promising target market, and on this basis analyze the needs and preferences of the target market, observe the marketing strategies formulated by different market players, and finally complete different market positioning.

From the current research, STP theory has not been applied to the sports characteristic town market related research. The healthy and sustainable development of any industry and industry must establish a standardized evaluation system and certification standards, sports towns are no exception, sports towns healthy and sustainable development, not only need to understand the needs of consumers, but also must evaluate its market. At present, although both the national level and the local government level have listed the assessment and evaluation provisions in relevant policy documents, a few provincial governments have issued corresponding

development level evaluation standards with several market-related indexes, while a complete and specialized index system for the market evaluation of small towns with sports characteristics has not yet been introduced. Therefore, It is imperative to make use of STP theory to subdivide the market of sports characteristic town consumers, understand the needs of consumers, and construct the evaluation index system of sports characteristic town market to make its positioning more accurate. This study intends to analyze the contents of relevant policy documents, clarify the development characteristics of sports towns, learn from the market evaluation experience of other industries, and explore the market evaluation index system of sports towns with sports characteristics, in order to theoretically explore a reasonable framework for the development of sports towns, and provide effective evaluation means and tools for national and local governments.

Research Problems

1. Sports characteristic town consumer segmentation is not clear.
2. Sports characteristic town market positioning is not accurate.
3. There is no suitable evaluation index to evaluate the sports characteristic town market.

Research Questions

- Q1: What are the needs of consumers in sports towns?
- Q2: What are the factors that affect consumers' participation in sports towns?
- Q3: How to construct the market evaluation index of sports characteristic town?
- Q4: How to apply sports characteristic town market evaluation indexes?

Research Objectives

1. To investigate the needs of consumers in small towns with sports characteristics.
2. To analyze the factors that affect consumers' participation in sports towns.
3. To develop sports characteristic town market evaluation index.

4. To test the effect of market evaluation indexes of small towns with sports characteristics.

Research Hypothesis

1. Sports characteristics Consumers in small towns like fitness walking, cycling, mountaineering, watching sports events, marathon sports, camping sports, etc.
2. Factors that affect consumers' participation in sports town include income, education level, interest, time, etc.
3. Market evaluation indicators of sports characteristic towns include function, cost performance, consumer demand, attitude, advertising, etc.
4. The market evaluation index of sports characteristic town can be well applied to the market evaluation of sports characteristic town.

Research Significances

1. The construction of sports towns is an important measure to meet the increasing demand of the masses for sports and leisure, an important starting point to promote the structural reform of sports supply side, accelerate the economic and social development of poor and backward areas, and implement the new urbanization strategy. It is also an important exploration to promote the development of the grassroots national fitness cause, and promote the construction of a well-off and healthy China in an all-round way.
2. Clarify the realistic dilemma, key factors and development rules of sports characteristic towns, so as to provide practical reference for the healthy, sustainable and high-quality development of sports characteristic towns.
3. To evaluate the effect of market development of small towns with sports characteristics, and to provide empirical evidence for formulating policies and strategies to promote the development level of small towns with sports characteristics.

Theoretical Framework

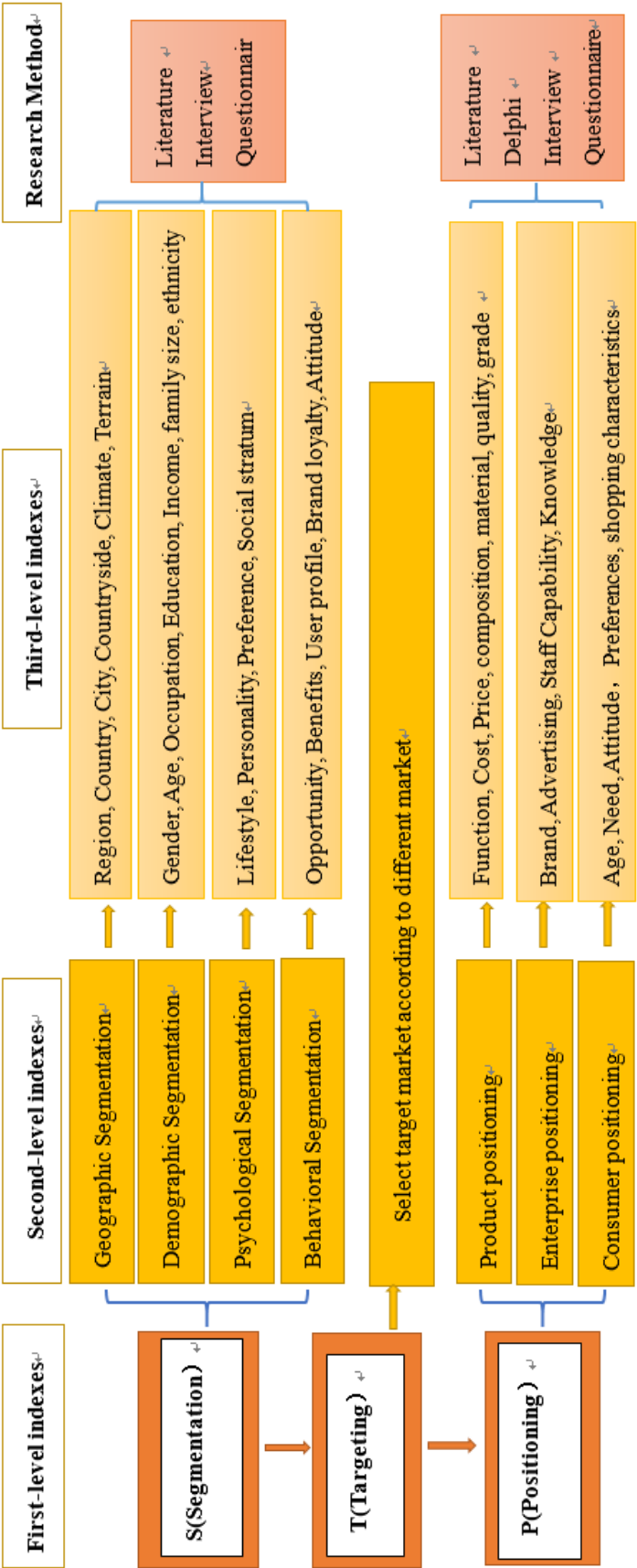


Figure 1 The framework of the application of STP theory to the research of characteristic sports town

Definitions of Terms

1. Characteristic Town

Characteristic towns are a new refined spatial carrier that focuses on characteristic industries and emerging industries, gathers development elements, and promotes industrial aggregation, integration, and innovative development (Development and Reform Commission, 2016).

2. Sports Characteristic Town

Notice of the General Office of the State General Administration of Sport on Promoting the Construction of Sports and Leisure Characteristic Towns defines sports and leisure characteristic towns as: With sports and leisure as the theme, it is a space area, a national fitness development platform and a sports industry base with unique sports cultural connotation, a good sports industry foundation, and multiple functions of sports and leisure, culture, health, tourism, elderly care, education and training in one (General Administration of Sport, 2017).

3. Segmentation Targeting Positioning (STP)

Segmentation, Targeting and Positioning (STP) means that enterprises select target market based on certain market segmentation, conduct market positioning, and then position their products or services in the selected target market (Philip Kotler, 2009).

3.1 Segmentation(S) refers to dividing a market into several different groups of buyers according to the individual products or marketing mix required by buyers, and describing their profiles. Segmentation(S) includes geographical segmentation, demographic segmentation, psychological segmentation, and behavioral segmentation.

Geographical segmentation requires the segmentation of the market into different geographical units, such as countries, regions, cities, or locations.

Demographic segmentation refers to the overall market for different consumer and household demand as the carrier, because of age, gender, occupation, income, education, the difference of religious belief, formed a distinct consumer groups.

Psychological segmentation refers to dividing consumers into different groups according to social stratum, lifestyle or personality.

Behavioral segmentation refers to the classification of buyers into groups according to their opportunity, benefits, attitude, user profile, brand loyalty.

3.2 Targeting (T) refers to one or more enterprises that are ready to enter the market segment on the basis of market segmentation, starting from meeting the needs of actual or potential target customers, and according to their own operating conditions.

3.3 Positioning (P) refers to the establishment and dissemination of the key features and benefits of the product in the market (Philip Kotler, 2009).

Product positioning refers to the clear positioning and naming of the product's position in the target market in order to meet consumer needs, distinguish it from competitors, and establish a unique brand image.

Enterprise positioning refers to the enterprise through its products and brands, based on customer demand, its unique personality, culture and good image, shaped in the minds of consumers, and occupy a certain position.

Consumer positioning refers to the positioning of a product's potential consumer groups.

4. Evaluation Index

The evaluation index refers to an organic whole with an internal structure composed of multiple indexes that characterize the various aspects of the evaluation object and their interrelationships.

Summary

The first chapter mainly introduces the research background of sports characteristic towns, expounds the research purpose and research significance of constructing the market evaluation index of sports characteristic towns, sorts out the research questions, puts forward research hypotheses, and defines related concepts for the future To lay a certain theoretical foundation for the writing of the thesis.

CHAPTER II

LITERATURE REVIEW

The purpose of this study is to explore the evaluation index system of sports characteristic town market with STP theory. Chapter 2 mainly uses Ankang College Library, Mahasarakham University Library and other Internet resources eric.ed.gov, www.cnki.net, www.wanfangdata.com.cn, etc. Search relevant books, academic journals, dissertations, Internet sources, and other sources of information identified as relevant to the field of study. The second chapter systematically combs the relevant research literature, in order to better grasp the theoretical needs and practical direction of the construction of sports characteristic towns, and provides ideas and references for the further theoretical research and development practice of sports characteristic towns.

1. Sports characteristic town

town

- 1.1 Research on the definition and connotation of sports characteristic town
- 1.2 Research on sports characteristic town types
- 1.3 Research on foreign experience and enlightenment
- 1.4 Research on the status quo and path of sports characteristic town

2. Segmentation Targeting Positioning Theory (STP Theory)

- 2.1 Segmentation Targeting Positioning Theory connotation
- 2.2 Segmentation (S)
- 2.3 Targeting (T)
- 2.4 Positioning (P)
- 2.5 Application of STP theory
 - 2.5.1 The application of sporting goods market
 - 2.5.2 The application of sports tourism market
 - 2.5.3 Sports club application
 - 2.5.4 The application of sports training institutions construction

3. Research on evaluation index of sports characteristic towns

4. Summary

Sports characteristic town

With the theme of "sports characteristic Town", the research results are mainly focused on the definition and connotation of sports characteristic town, type study, foreign experience and inspiration study, construction status and path study, etc. Scholars have diversified research perspectives and rich attention content. It is involved in both theoretical research and practical analysis, which lays a foundation for further research. This paper summarizes and reviews the previous studies.

1. Research on the definition and connotation of sports characteristic town

The characteristic town proposed by Zhejiang Provincial government for the first time is based on the needs of supply-side reform and the transformation of old and new driving forces. The main characteristics of the characteristic town are summarized as: the industrial development orientation reflects the advantage of "especially strong", the high superposition of functions presents the trend of "convergence", the design of the form space construction pursues "fine and beautiful", and the arrangement of the system supply reflecting "new and living" (Li, 2016). The clarity of the concept of characteristic towns at the national level comes from the release of the Guiding Opinions of the National Development and Reform Commission on Accelerating the Construction of Beautiful characteristic Small towns (cities) on October 8, 2016, which defines characteristic towns as focusing on characteristic industries and emerging industries and gathering development elements. Different from administrative towns and industrial parks, innovation and entrepreneurship platforms (Development and Reform Commission, 2016).

Some scholars believe that characteristic towns are essentially a new platform for economic innovation and development integrating "production, city, people and culture" (Xu, 2016). Some scholars regard characteristic towns as a durable and innovative form of industrial organization, which can effectively promote the allocation of resource factors, the layout of productivity, the optimization of industrial structure and the practice of supply-side structural reform (Zhang, 2017). Characteristic towns are the most basic spatial units with clear and unique industrial and cultural positioning, good living and ecological environment, and complete urban functions (Wang, 2020). Characteristic town is a new refined space carrier based on

traditional culture, giving full play to the advantages of characteristic industries and resource endowment, and promoting industrial aggregation, integration and innovative development (Lu, 2021).

The definition of sports characteristic town is the logical starting point for the study of sports characteristic town, and the understanding of its connotation is the important basis for the construction of sports characteristic town. Although scholars have different views on the definition and connotation of sports characteristic town, they are basically the same. The National Development and Reform Commission defines characteristic towns as innovation and entrepreneurship platforms that focus on characteristic industries and emerging industries, gather development elements, and are different from administrative towns and industrial parks (Development and Reform Commission, 2016). State General Administration of Sport defines sports and leisure town as a space area, national fitness development platform and sports industry base with unique sports cultural connotation, good sports industry foundation, sports and leisure, culture, health, tourism, elderly care, education and training and other functions integrated with the theme of sports and leisure "(State General Administration of Sport, 2017). The concept defines the theme content, correlation function and geographical location of sports leisure characteristic towns, and guides the application and selection of the first group of sports leisure characteristic towns in practice, which is of important significance to the theoretical research and practice of sports leisure characteristic towns. With the push of national policy, domestic scholars have studied the concept and connotation of sports towns to a certain extent. Sports characteristic town is an important development platform for the national health and sports industry with new modernization, characteristics, science and technology and Internet (Zhang, 2017). It is a characteristic regional space with sports as the carrier, integrating multiple functions such as sports and leisure, culture, health, tourism and elderly care, and combining different groups, enterprises, resources and services into project chain, consumption circle, industrial cluster and comprehensive service (Si & Wang, 2017). At the same time, the town has a clear sports industry positioning, integrating various elements such as culture, health, ecology, science and technology, tourism, and a comprehensive space with certain community functions. It is an organized town with traditional administrative

division units, and it can also be an innovation and entrepreneurship platform with a clear sports industry positioning. Different from sports industrial parks, sports tourism scenic spots and general administrative division units (Shen & Dong, 2018; Song et al., 2018). Sports characteristic town is an industrial base, development platform or space carrier with the characteristics of sports culture industry and the integration and development of sports industry and other industries. Sports and leisure industry and related industries + support platform together constitute a characteristic town (Zhang, 2018). Combined with the Notice of the National Development and Reform Commission on the Establishment of High-quality Development Mechanisms for Characteristic Towns and small Towns released in 2018, sports characteristic towns can be "city towns" existing in cities and "suburban towns" in the suburbs of cities in terms of space. It can be a "town within a town" within an established town, or even an "inter-provincial town" in the context of the Yangtze River Delta and Beijing-Tianjin-Hebei integration. Whether the sports characteristic town must be an established town should not be a tangle in the definition of the concept of sports characteristic town. Sports characteristic town is a comprehensive sports service platform with diversified sports experience projects, hierarchical life service system, leisure characteristic participation mode and integrated industrial development mode constructed by governments at all levels (Liu et al, 2019). Sports characteristic town is a space area, a national fitness development platform and a sports industry base integrating sports and leisure, culture, health, tourism, pension, education and training and other functions (Lu, 2021).

Although scholars have different definitions and connotations of sports characteristic towns, they all point to the same thing and have a lot in common. From the spatial dimension, sports characteristic town is a space or platform; From the perspective of development form, sports town is "small" but "special", which can integrate production, life and ecology through sports or sports projects, and realize the aggregation of resources, industries and services. From the perspective of functional positioning, it is mainly guided by sports elements or functions, and integrates various functions such as industry, fitness and leisure, sports experience, cultural tourism, sports events, and educational display. From the perspective of industrial development, it can build a sports development platform, form a sports characteristic

brand, and increase the supply of sports products and services; From the perspective of industrial correlation effect, it can cultivate the sports market, extend the sports industry and service chain, drive the development of related industries, build industrial clusters and consumption circles, and promote the development of urban economy. In terms of benefits, in addition to industrial economic benefits, it also takes into account social benefits such as national fitness, ecological development and cultural inheritance.

2. Research on sports characteristic town types

Some scholars have made a more accurate division of sports characteristic towns, and according to the development mode, sports characteristic towns are divided into four categories: sports-oriented towns, leisure-oriented towns, holiday-oriented towns and industrial-oriented towns (Zhang et al, 2017). The characteristic town types based on the sports industry itself include: sports leisure tourism town, sports resort tourism town, sports adventure tourism town and sports health tourism town (Lin, 2017). From the perspective of regional characteristics and appropriate sports projects, small towns with sports characteristics are divided into 5 categories: sports leisure tourism towns, sports vacation tourism towns, sports adventure tourism towns, sports health tourism towns, and sports comprehensive tourism towns (Zhang, 2017). According to different industrial positioning and target groups, sports towns are mainly divided into industrial sports towns, leisure sports towns, healthy sports towns, and event sports towns (Song et al, 2018). According to the actual status of the current sports and leisure characteristic town, from the perspective of conducive to the management and operation of the town, select the town's leading characteristic industry as the classification standard. Sports and leisure characteristic towns are divided into six categories: event type sports and leisure characteristic town, training type sports and leisure characteristic town, entertainment type sports and leisure characteristic town, health type sports and leisure characteristic town, intelligent manufacturing type sports and leisure characteristic town, and cultural folklore type sports and leisure characteristic town (Zhang, 2018). Using GIS spatial analysis, this paper analyzes the types and geographical spatial distribution characteristics of the first batch of 96 sports towns built in China. The 96 sports towns are divided into four categories: industry type, experience type, sports event type and health type. From the

overall distribution, the geographical spatial distribution presents the characteristics of quantity agglomeration; According to the distribution of administrative divisions in China, the quantity distribution is unbalanced (Fan et al, 2020). Foreign sports towns are mainly divided into five types: "competition type", "champion type", "leisure type", "health type" and "industry type". (Zhu & Qu, 2018)

To sum up, all kinds of categories are closely related to the characteristics and functional positioning of sports towns, which are concentrated manifestations of their main functions.

3. Research on foreign experience and enlightenment

Scholar Robert Madrigal believes that the construction of characteristic towns led by the government should be based on the will of local residents and be able to meet their needs. The construction of characteristic towns pays attention to environmental construction and always adheres to the principle of green development. There are certain requirements for restrictive government policies and green environmental awareness of town residents (Madrigal, 1995). Carlos Costa tried to build a planning and construction model for characteristic towns, exploring how to efficiently combine town construction planning with other planning needs and how to rationally plan tourism needs (Costa, 2001). In his research on Davos, a tuberculosis treatment center, Esson D.J. pointed out that the beautiful valley is a resort, and the healthy landscape attracts wealthy European tourists to many small towns in the Alps. It is precisely this reason that outdoor sports are brought to Davos and similar towns, thus making the sports town continuously develop into a health town (Esson, 2011). In studying the development of Queenstown, some scholars believe that the government's direct involvement in reducing participation, privatization of state-owned assets created development opportunities for overseas investors, and the implementation of neoliberal policies created conditions for the global market (Cadieux & Hurley, 2011). Salisu Ahmed Kabiru believes that town development needs to consider all aspects and A multi-effect strategy is needed to solve the problem of town development. The author finds that human capital plays an important role in town development through the study of various theories (Kabiru & Arshad, 2017). Some scholars believe that in the development process of small towns, regions

with high industrial clusters have better economic development than single-industry regions (Fowler & Kleit, 2014).

Many Chinese scholars have studied the development experience of sports towns in foreign countries to seek inspiration and reference from the construction of sports towns in China.

Yin Hongzhen believes that the success of Lihuigu town, an Italian resort, lies in its unique natural scenery, complete skiing facilities and attractive cultural attractions, making it a famous tourist attraction. The research highlights the long history of the development of small-town sports in foreign countries, the development of small towns has cultural elements, profound cultural heritage, and sound sports equipment (Yin, 2013).

Ye Xiaoyu et al. analyzed the alpine outdoor sports town of Samunoy in France, Shannon Golf Town in Ireland, Davos Ice and Snow sports town and Evian town in France one by one, and summarized the construction experience of sports and leisure characteristic towns in foreign countries: core projects detonated, diversified experiences expanded; Promotion of quality events, professional service guarantee; Leisure tourism facilities, pay attention to environmental protection; Establish market-oriented operation mode and expand the profit space of the town; Respect the town sports tradition, dig the town culture soul. (Ye & Xie, 2017)

Zhang Baolei and other scholars explored the successful experience of famous foreign sports towns such as Whistler town in the sports and tourism complex in Canada and Montebelluna Town in the sports goods cluster through the research methods of literature and case analysis, and obtained inspiration for the construction of sports towns with characteristics in China: seize the characteristics and clear positioning; Government support and market operation; Talent strategy and training innovation; Pay attention to experience and cultural reconstruction, and explore a road to the construction of sports towns with Chinese characteristics in line with national conditions and people's feelings (Zhang et al, 2018).

Dong Qinqin explained the background and reasons for the emergence of small town culture in Western countries, taking Chamonix sports and leisure town in France as an example. Chamonix, France, the birthplace of modern mountaineering and the site of the first Winter Olympics in 1924, is renowned worldwide for its sports

tourism services and facilities, including cable cars, mountain rescue and mountain guides. The town's mountaineering related training is also very developed, here is the world's ski instructor training center, there is the world's first mountain guide school - the French National Ski Mountaineering School (ENSA), there are also national ski and alpine police training center, alpine military school, alpine medical Institute and other related alpine institutions. Scholars analyzed its development process and operation mode, and summarized the construction characteristics and development experience of Chamonix town from three aspects: location characteristics, industrial characteristics and governance characteristics. The enlightenment to the construction of sports and leisure towns in China is put forward: planning with operational thinking, improving infrastructure and supporting services; Deepen the cultivation of industrial driving forces to achieve industrial integration and linkage; Create a unique cultural IP, improve the added value of the industry; Use consumption-driven to enhance tourism radiation and town externality; Create attractive life, create new life space; Based on the future of ecological protection, improve the relevant policy mechanism (Dong & Shen, 2018).

Li Lehu through the study of foreign sports towns, believe that the construction of sports towns in China should pay attention to endowments, respect history, sports industry needs to adopt the leading industry + diversification model, and sports product design should meet the actual needs of Chinese people." This study advocates focusing on the development of sports products and accessories on the basis of respecting history, focusing on the development of leading industries, and driving the development of diversified industries. (Li & Huang, 2018)

By studying foreign sports towns, Zhu Min et al. advocated that China should gradually enrich the ecological chain of sports industry based on local characteristics of human resources and natural resources, and realize the integration and upgrading of sports resources and characteristic industries around core projects. This paper argues that local resources should be used to develop core projects and realize the innovation and integration of resources and industries (Zhu & Qu, 2018).

The construction of sports towns in western developed countries has already accumulated a large number of practical cases and rich experience, and has a complete and mature construction system and development mode. The theoretical

origin and cognitive basis of sports towns can be re-understood from the perspectives of "garden city theory", "urban regional core theory" and "urban cultural capital theory", and their value re-cognition should be carried out from such dimensions as industrial transformation and cultural reconstruction, social integration and community construction, spatial convergence of regional productivity, and construction of new ways of town citizen life. The generative thread follows the dual value orientation of economy and culture, rather than the single capital orientation and policy drive. On this basis, scholars place sports towns in a long period of history from the perspective of comparison between China and foreign countries to conduct in-depth investigations, analyze the background differences and development motivations of the formation of Chinese and western sports towns, especially the differences in system and culture, and truly identify the "internal genes" of the growth of sports towns. The development of sports towns takes industry as the core, life as the main line, emphasizes the agglomeration of characteristic industries, and forms a closed complete industrial chain. At the same time, efforts should be made in community construction and citizens' cultural identity to create the psychological sense of belonging of "small town like home", so as to plan and build a complete community life system with self-recycling function (Wang, 2020).

Previous studies on foreign towns mainly focus on the town's site selection, natural geographical environment, leading leisure industry, human resource value, government support and other aspects, and specific feasible measures need to be constantly improved. We comprehensively summarize and refine foreign experience. Collect first-hand information and data, and carry out in-depth analysis of classic cases at home and abroad to lay a certain foundation for future research.

4. Research on the status quo and path of sports characteristic town construction

Some experts and scholars have studied the construction of sports towns from different perspectives, such as rural revitalization, sports tourism, "Internet +", sports economy, sports industry and management mode. It is suggested that we must pay attention to building characteristic brand, forming sports industry circle, driving the economic development of the town, optimizing the construction path of sports characteristic town.

Ni Zhen et al. believe that the essence of characteristic town construction is to promote rural revitalization to achieve regional spatial reconstruction, and it is a new deployment to solve the problem of "three rural areas". Characteristic town construction should be based on resource endowment, clear functional type positioning, industrial correlation and technological innovation as the driving force, "deep industry, multi-function, fine layout, new mechanism", maintain "cultural characteristics" to promote the integration of traditional culture and sports and leisure culture. Closely combined with the historical background of rural revitalization, scientific planning, around the four core elements of "land", "culture", "industry" and "people", to build a sports and leisure town characteristic brand; Adhering to the ecological bottom line, optimizing the institutional environment, gathering industrial elements, strengthening the development momentum and promoting the scientific and sustainable development of sports and leisure characteristic towns are the path choices for the construction of sports and leisure characteristic towns under the background of rural revitalization (Ni & Liu, 2018). Liu Wei et al. believe that the sustainable development of sports towns needs to be combined with national strategies such as "three rural issues" and "rural revitalization", based on cultural regional characteristics, focusing on social market demand, rooted in traditional cultural blood, and seeking a new direction of development with the participation of the government, market, enterprises and society. (Liu & Peng, 2022)

Yang Yiran et al. believe that sports characteristic towns are a combination of tourist attractions, sports industry gathering areas and new urbanization development areas. The development of sports towns can promote the cross-border integration of sports industry, reduce the cost of government expenditure on poverty alleviation, and promote the equalization of basic public sports services. To give full play to the role of sports towns in helping sports poverty alleviation, it is necessary to strengthen government support and management, highlight the sports characteristics of small town development, form an industrial chain and service circle, implement the mechanism of sports poverty alleviation and development, attach importance to ecological construction, and deeply develop small town tourism resources (Yang & Shen, 2018). Ye Xiaoyu et al. believe that the following problems should be paid attention to in the construction of sports and leisure characteristic towns in China: the

theme of concise towns with distinctive characteristics; Highlight the town theme facilities construction and supporting project construction; Establish market-oriented profit model and complete industrial ecosystem; Create the town sports space and cultural atmosphere; Establish sports safety and rescue system; Continue to pay attention to the ecological protection and people's livelihood of the town. (Ye & Xie, 2017).

Zhang Xiaoxiao believes that sports characteristic towns should be combined with the Internet to build Internet + sports towns. Its mechanism is to provide a publicity platform for promoting the content of sports characteristic towns, provide a scientific analysis for identifying the characteristics of sports towns, provide an effective absorption channel for the town to obtain commercial capital investment, and provide technical support for the comprehensive operation of sports towns. To build a sports and leisure town, it is necessary to make more use of mobile networking, we-media and other public word-of-mouth publicity platforms, build an Internet + sports town in a three-dimensional manner, realize the characteristic positioning of a sports town through data analysis, attract capital through the network, use big data and cloud computing to assist town construction, and avoid the operation risks of a sports town through data prediction and analysis. Improve the service level of small towns (Zhang, 2017).

Yang Bo believes that sports characteristic towns are a new form of development of China's sports industry and an important starting point to promote the supply-side structural reform of the sports industry. Based on the perspective of supply-side structural reform of the sports industry, this paper analyzes the problems existing in sports characteristic towns, proposes to clarify the leading industry positioning, reduce ineffective and low-end supply, explore diversified construction paths, build characteristic industrial clusters, transform regional resource advantages, and strengthen inter-regional exchanges and cooperation (Yang, 2018). Guo Qin believes that the development of sports characteristic town, in the development orientation, the concept of humanism runs through the whole process of planning and construction; In the industrial layout, adhere to the feature-oriented development of sports industry; In terms of dynamic mechanism, establish and improve the guarantee system for the construction of sports and leisure characteristic towns (Guo, 2018). Fan

Bin believes that, first of all, from the perspective of cultural characteristics and historical connotation, the concept of humanism into the construction of characteristic towns; Second, with characteristic industries as the main body to promote the cross-boundary integration of sports industry under the background of supply-side structural reform; Third, it is necessary to highlight innovation-driven, mass will planning, effective governance and top-level design, and finally, it is necessary to highlight the development framework of "double industry", "three engines" and "three architectures" (Fan, 2018). Nie Chunli believe that the development trend of sports characteristic towns is good, but the industrial brand effect is not strong; The resource endowment is sufficient, but the cultural connotation function is weak; The integration mode is diverse, but the core competitiveness is insufficient; Economic benefits are emerging, but professional talent resources are scarce. In order to develop sports characteristic towns with high quality, we must: strengthen industrial linkage and integration, enhance brand effect; Excavate the characteristic cultural connotation, expand the cultural influence; Enabling regional sports characteristics and strengthening core competitiveness; We will bring together talent and intelligence and activate new driving forces for development. (Nie & Deng, 2022)

Che Wen believes that in the regions with weak regional conditions, the support and guidance of the government should be strengthened, and the industrial chain should be deeply cultivated with cultural identity as the link. In regions with strong and weak regional conditions, we should promote the flow of factor resources to complement each other, and prevent the hidden danger of insufficient connectivity of industrial chains. In areas with good regional conditions, the network embedding mechanism should be innovated with the connection layout of "sports +X" and "X+ sports" to broaden the physical space, cultural space and psychological space, so as to realize the sharing, mutual integration and symbiosis between towns and cities (Che et al., 2020). Si Liang believe that the development orientation of sports characteristic towns is deviated from the direction, the management mode is not standardized enough, the characteristics of the sports industry are not obvious, and the investment and financing operation is improper, which has potential risk crisis. We should build a security path supported by a political governance system with clear responsibilities, a dynamic adjustment management model of "perception - change - adaptation", a

standardized "internal model" industrial coordination system, an information chain shared by multiple entities, and a dual mechanism of bottom-line early warning and risk management. (Si & Chen, 2022)

Wang Dongbo et al. interpreted the relevant policies of sports characteristic towns on the basis of public policies, and analyzed the integrated development characteristics and path selection of sports characteristic towns by using theories such as industrial economy, regional planning and public management. They believe that: based on the guidance of national macro-level policies, regional mesolevel policies first, and small town micro-level policies closely, the development of sports towns in the new era presents the characteristics of cross-border integration such as pioneering, comprehensive, gathering and driving. From the perspective of optimization path analysis, the development of small towns with sports characteristics should be gradually promoted in accordance with the exploration and demonstration of highlighting characteristic innovation and positioning town types, the brewing planning of selecting industrial subjects, creating financing platforms, and the promotion and implementation of expanding communication channels and inheriting town culture, so as to become a new highlight of regional industrial economic development and sports public service system. (Wang et al., 2023)

This series of research has laid a good theoretical foundation for this subject. From the above research, it can be seen that in recent years, domestic scholars have conducted multidimensional theoretical analysis and practical research on the construction of sports towns from different research perspectives in combination with the development of The Times. The basic theoretical research on sports towns with sports characteristics has been systematic to a certain extent, and certain consensus has been reached. Most scholars agree that the construction of sports towns with sports characteristics should be combined with the cultural background of towns. Find out commonalities, develop characteristics, and promote local industry and economic development.

Segmentation Targeting Positioning Theory (STP Theory)

1. Segmentation Targeting Positioning Theory connotation

From the beginning of the 20th century in the United States, marketing has gone through three stages: traditional marketing stage, modern marketing stage and modern marketing development stage. In the modern marketing stage, some theories have emerged successively, such as the "marketing mix" theory proposed by Neil Bowton in 1950, the "market segmentation" theory proposed by Wendell Smith in 1956, and the famous 4PS combination proposed by McCarthy in 1957 (Li & Li, 2019).

STP theory appeared in the modern marketing stage. It was first proposed by American marketing scientist Wendell Smith in 1956 in Product Differentiation and Market Segmentation in Marketing Strategy. The concept of market segmentation was proposed, which laid the theoretical foundation of target marketing. Thus, marketing has entered a new stage from mass marketing and multi-variety marketing - target marketing (Kotler, 1989). "STP", that is, segmentation, targeting and positioning, is applied to the development of marketing strategies to enable enterprises to achieve ecological advantages in the target business environment (Kotler, 1989; Moutinho, 2010; Kotler & Armstrong, 2018). As a traditional marketing framework, "STP" is a key element in the development of marketing strategies. (Breneman et al, 2005) ; The procedure of segmentation, targeting and positioning (STP) is basic to successful key advertising . The process of segmentation, targeting, and targeting (STP) is fundamental to successful advertising (Tanford & Malek, 2015). Morton describe marketing as "identifying, anticipating, and satisfying the market." (Morton, Anable & Nelson, 2017) The segmental-goal-targeting (STP) process is a core principle of marketing. (McDougal et al., 2021)

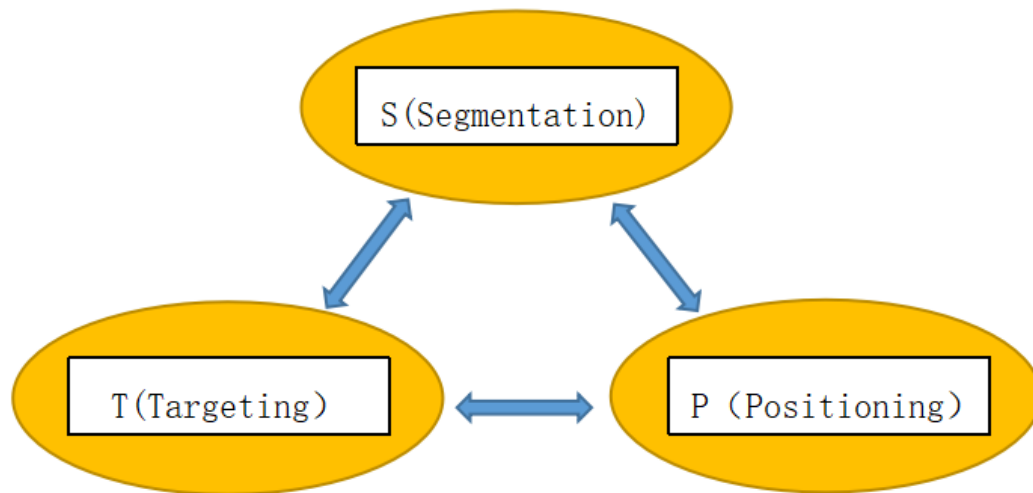


Figure 2 STP Theory

2. Segmentation (S)

Market segmentation refers to the segmentation of the market by marketers through careful market research, combined with geographical, demographic, psychological and other factors, according to the differences in consumer demand, desire and consumption habits, which helps enterprises to discover new markets. Markets are heterogeneous and are segmented in order to better understand the behavior of target customers (Cahill, 1997; Kotler, 2015); Segment marketers divide customers in heterogeneous markets into distinct groups with homogeneous characteristics and similar needs (Weinstein, 2014); Segmentation is often regarded as the most basic and dominant concept in marketing (Dibb et al., 2012); Some scholars believe that we should first judge the different needs of consumers, and multiple sub-markets with different characteristics will appear after market segmentation (Kotler, 2015). Market segmentation generally refers to the process of segmenting heterogeneous markets into homogeneous unique segments or customer subsets with similar needs, needs, and similar buying patterns (Brenngman et al., 2005); Inappropriate segmentation and targeting approaches can affect the effectiveness of strategic decision making and planning (Shapiro & Varian, 1999; Dibb & Simkin, 2008; Dibb & Simkin, 2016). The theoretical basis and implementation method of market segmentation are derived from the theoretical study of consumer behavior patterns, and the most important application of consumer

behavior theory research is market segmentation decision in marketing practice (Luo, 2003).

Some scholars divide the research of market segmentation into two major schools. One is the consumer-oriented segmentation. Their research focuses on the classification of consumers' needs and behavioral characteristics, and the classification of consumers is mainly based on the overall characteristics of customers, including individual psychology, social and cultural environment and behavioral decision-making process (Wind, 1978). The other is product-oriented market segmentation, which is mainly used by marketing decision makers, who segment consumers according to different marketing decision goals (product positioning, pricing, advertising targeting, etc.) around the specific consumption context of a product or brand. Segmentation variables include product/brand usage rate, consumption attitude, interests sought, etc. The purpose is to understand consumers' psychological needs and differences in consumption behavior for a product or brand, so as to select the most favorable target customer group and appropriate marketing strategy (Luo, 2003).

From the perspective of behavioral science, Wilkie et al. divided the subdivision variables into five different levels: overall characteristic description indexes (such as gender, age, occupation, income, etc.), psychological schema, desired value, brand perception, and purchasing behavior (Wilkie & JCohen, 1977). Schiffman divided the subdivision criteria and subdivision variables currently selected by Western scholars into eight types: Geographic segmentation, demographic segmentation, psychological segmentation, sociocultural segmentation, use segmentation, use context segmentation, interest segmentation, and mixed segmentation (Schffman & Kanuk, 1997). These segmentation standards reflect different theoretical assumptions of Western scholars on consumer behavior patterns. It is not difficult to find that they actually belong to three types of segmentation models - environmental segmentation (including geography, population, and social culture), psychological segmentation, and behavioral segmentation (including use case segmentation, use situation segmentation, and interest segmentation). Ma Zhu subdivided the market into four subdivision dimensions, namely, population and geographical characteristics, psychological characteristics and lifestyle, product

attitude and interest pursuit characteristics, consumer behavior and value (Ma et al., 2007). Qu Yunbo believes that the variables of consumer market segmentation mainly include geographical variables, population variables, psychological variables and behavioral variables. Market segmentation based on these variables produces four basic forms of market segmentation, namely geographical segmentation, demographic segmentation, psychological segmentation and behavioral segmentation (Qu, 2010). Usually, companies segment their market by using demographic, geographic, psychographic, behavioral and product-related variables. The chosen segments ought to be measurable, accessible, substantial and actionable (Andaleeb, 2016).

3. Targeting (T)

Objectives, including assessing the attractiveness of each department to ensure that each meets the needs of the company's goals and strategies to assist in its resource allocation decisions (Taaffe, Geunes & Romeijn, 2008). Target market, which is also the most valuable market for the enterprise (Kotler, 1989; Dwyer & Forsyth, 2008); Target market selection is the process of "evaluating the attractiveness of each market segment and selecting one or more segments to enter" (Kotler, 2016; Kotler & Armstrong, 2018); Target market selection involves selecting which segments to target the market based on market attractiveness and the unique capabilities of the firm, that is, the strategic ability to meet the needs of the segment (Moschis, Lee & Mathur, 1997). Each customer group has specific expectations, and retail marketers must develop retail brands and concepts that meet the needs of the target market segment. After determining the target market segment, the retailer positions its brand according to the image that the target customer identifies with (Dibb & Simkin, 1991). Target market is one of the key factors that affect the effectiveness of marketing strategy. It is necessary to correctly understand the characteristics of target to ensure accuracy (Sally & Lyndon, 1998; Pradiptarini, 2011). Once the market segmentation has been completed, the company should be aware of the needs and wants of its selected segments. There are three market coverage alternatives which can be applied; undifferentiated marketing; differentiated marketing and concentrated marketing. Businesses should consider the most appropriate market coverage strategy according to their resources, the type of service to be offered and the diversities within the market. (Andaleeb, 2016)

4. Positioning (P)

Different scholars have different views on positioning. The concept of positioning was first proposed by Ries, A. and Trout, J in A paper published in the journal of Industrial Marketing in 1969 (Ries & Trout, 1969), and rapidly became popular in the American corporate world in the early 1970s. They regard positioning as the creative practice of existing products, creating A product with distinct personality that is different from competitors' products, so that the product can determine its proper position in the target market (Ries & Trout, 2012). Positioning, where marketers decide how to position a product or service to best communicate and appeal to target consumers, is often referred to as "creating a value proposition" (Armstrong & Kotler, 2012). Market positioning is competitive positioning, aiming at the different needs of different market segments, formulating product marketing strategy mix, expanding market share, and determining their competitive position in the target market (Kotler, 1989; Kotler, 2015; Kotler, 2016). Positioning strategy refers to the stage of distinguishing the product range and comparing it with competitors' products to meet the needs of customers (Kotler, 2015); Positioning strategy is the "marketing mix strategy used to describe the desired positioning target market", that is, the most appropriate product/service, price, distribution channel and promotion strategy designed to meet the needs of the target market (Cravens & Piercy, 2009). Effective product positions have four important characteristics. Firstly, they are built around benefits for prospective customers. Secondly, they differentiate the specific firms' products or service from those of key competitors. Thirdly, the respective firms need to possess relevant skills, resources, and the credibility to deliver on their implied statements and promises. Finally, an effective position is defensible, which means that an aggressive competitor cannot act quickly to neutralize or preempt another positioning strategy (Andaleeb, 2016).

Segmentation, targeting and positioning (STP) are the three pillars of modern marketing strategies. Market segmentation gives the marketer a clear picture of the business he caters to or may attract, the target is used to select the optimal segment to achieve maximum benefit, and the positioning will clarify the image and differentiate the advertiser after marketing. Therefore, these three concepts go hand in

hand as basic marketing concepts that are essential to the marketing of any business. (Jan & Victor, 2019)

5. Application of STP theory

STP theory has been widely used in all walks of life in China, and has also played a positive role in the field of sports. It has been applied to the sporting goods market (Wang & Wang, 2011; Zheng & Xu, 2013; Du, 2020; Wang, 2020), Sports Tourism Market (Huang, Hu & Chen, 2015; Lu, 2021), Sports Club (Fu, 2012; Tang, 2017; Ma, 2019; Xue, 2021), Sports Training Institution (Zuo, 2018; Dang, 2021) and so on.

5.1 The application of sporting goods market

Wang Jianliang introduced the basic connotation of STP model and its significance and requirements for the marketing innovation of sporting goods, analyzed the current status and existing problems of the marketing innovation of sporting goods under STP model. It is pointed out that the sports goods marketing innovation under STP mode lacks the understanding and consideration of strategic level, the outline of the sports goods market segment boundary is blurred, the target market selection strategy of sports products is simple, and the product positioning lacks the consideration of its own strength and resources matching. Finally, combined with relevant theories and practices, this paper puts forward some suggestions and countermeasures for the marketing innovation of physical goods under STP model (Wang & Wang, 2011). Zheng Zhidan et al. studied STP and marketing strategies of 11 Quanzhou sports goods listed companies. Research shows: Quanzhou sports goods listed company products positioned in the middle market, the target consumer group positioned in the 18-25 years old young people and sports enthusiasts, and strive to establish a "professional, fashion, quality" product identity in the hearts of target consumers, formed a good marketing model, Quanzhou sports goods listed companies carried out common, differentiated and integrated marketing strategy (Zheng & Xu, 2013). Du Chunbin conducted research based on the marketing status of fitness equipment brands. He summarized the existing problems in the marketing of fitness equipment brands. Through STP analysis of fitness equipment brand marketing, he proposed the marketing strategy of fitness equipment brand market expansion under STP theory, and realized brand market segmentation and selection on the existing

basis. In the follow-up development, the product types of fitness equipment should be broadened, the tiered pricing of fitness equipment should be formulated, the marketing channels of fitness equipment brands should be expanded, and the means of promotion and promotion of fitness equipment brands should be enriched (Du, 2020). Wang Hu believes that sports brand marketing fails to fully consider the special attributes of the main body of sports brands, ignores the boundary definition and market recognition after market segmentation, and lacks comparative consideration of its own resources and competitors' resources, etc. Sports brands need to define the target market model and select the target marketing strategy based on STP strategy (Wang, 2020).

5.2 The application of sports tourism market

Huang Zheng conducted market research on the consumption level, consumption habits, personal preferences and other factors of sports tourism consumers, made an in-depth analysis of the problems existing in the current development, clarified the applicability of STP strategy theory in the marketing strategy of sports tourism companies, and exploratively proposed the scientific strategy of market research, the diversified strategy of product development, and the accurate positioning. Branding strategy and publicity effectiveness strategy (Huang, Hu & Chen, 2015). Oak Lan Park analyzed the marketing mix of sports resorts, identified its segmentation, positioning and positioning strategies, and finally proposed an effective approach to STP (Oak-Lan, Won-Jae & Seung-JIn, 2018). Based on STP marketing theory, Lu Siyu subdivides the consumer market of Beidahu Ski tourism and leisure resort, and then selects the most valuable and promising target market in combination with its realistic background and resource conditions. On this basis, he analyzes the demand and preference of the target market, and observed its marketing strategies formulated according to different market players. Finally complete the market positioning (Lu, 2021).

5.3 Sports club application

Based on STP strategy theory, this paper comprehensively uses Porter's five forces competition model, SWOT matrix and other basic analytical methods, and combines three variables of income, education and age to segment the health club market. It adopts low-cost and undifferentiated marketing strategy to carry out

positioning innovation in fitness products, services, brands and store scale. Put forward creative suggestions (Yang, 2008). Fu Ming believes that the application of STP theory in health clubs must be guided by the apparent needs and potential needs of customers participating in sports fitness activities, and through in-depth and detailed market research and analysis, fully grasp the characteristics and development trend of the industry, master the competitive strategies of major competitors, and implement strategies such as market segmentation, target market selection and product positioning. Point out the direction for the smooth implementation of fitness club marketing mix (Fu, 2012). Tang Shi carried out STP theory analysis on Liuzhou commercial taekwondo club market, and segmented the market faced by Liuzhou commercial Taekwondo club through geographical factors, demographic factors, gender characteristics, age structure and consumption motivation. Then, combined with the selection criteria of target market, the actual situation of the commercial Taekwondo club was analyzed and the target market was selected. Positioning the market of commercial taekwondo clubs in Liuzhou City by combining the advantages of clubs (Tang, 2017). Ma Yawen divided the market of Wuhan Amateur table tennis Club into market segments, then selected its market target, and finally formulated marketing strategies suitable for the development of Wuhan Amateur table Tennis Club from the aspects of product, price, channel and promotion by using relevant marketing knowledge (Ma, 2019). Xue Tingting believes that Hanwu Taekwondo market segmentation variables are insufficient, segmentation products are wide and not fine; Lack of consideration of target marketing objects and improper selection of target market strategies; Market positioning considerations are insufficient, ignoring industry competitors. To solve the above problems, we should comprehensively apply the key variables of market segmentation and pay attention to the creation of fine segmentation products. Follow the target market selection criteria and scientifically select the target market strategy; Adjust their market positioning, pay attention to the positioning of competitors. Finally, it is suggested to ensure the smooth and effective implementation of the optimized STP strategy to the greatest extent from the aspects of club organization structure, venue facilities, service mechanism and funding sources (Xue, 2021).

5.4 The application of sports training institutions

Zuo Maji takes the social demand as the starting point to carry out STP strategy research on the wushu training market. He believes that martial arts amateur training market segmentation awareness is insufficient, market positioning and social demand there is a contradiction between supply and demand, the difference of target market strategy is the inevitable choice of martial arts training market, market positioning is not clear, lack of brand awareness and other problems, martial arts market segmentation should be guided by social demand, for the target market to develop a personalized service system, clear market positioning (Zuo, 2018). Based on STP theory, this paper analyzes the market segmentation, target market selection and market positioning of private badminton training institutions in Changsha City. Market segmentation is mainly analyzed from demographic variable segmentation, geographical variable segmentation, psychological variable segmentation and consumption motivation variable segmentation. The selection of target market is mainly analyzed from the aspects of development scale and potential, market segment structure attraction, training market target and ability. Market positioning is mainly analyzed from the aspects of competitive advantage, curriculum innovation and information dissemination channels. Finally, the product marketing strategy is mainly to strengthen the comprehensive ability of coaches, enhance the enthusiasm of students, create special courses of training institutions, and improve value-added services of peripheral products. Price marketing strategy mainly adopts differential pricing. Marketing channel strategy mainly adopts online promotion strategy and corporate sponsorship cooperation strategy. Marketing promotion strategies include festival promotion, advertising promotion and experience promotion strategies (Dai, 2020). Dang Qicheng divided the market of basketball training institutions in Hangzhou Bay New Area into market segments, market target selection and market positioning, and then divided the market segments of basketball training institutions in Hangzhou Bay New Area. Finally, he adopted marketing knowledge to formulate marketing strategies suitable for the development of basketball training institutions in Hangzhou Bay New Area from the aspects of products, prices, promotions and channels. (Dang, 2021)

Through STP marketing strategy theory, experts and scholars have carried out a certain research and analysis on the sports market, conducted a market survey, had an in-depth understanding of the overall characteristics of the sports market and the direction of development, and understood the consumption habits, consumption levels, personal preferences of different consumers, indicating the correct road for the development of China's sports market. However, for the study of sports characteristic towns that have just developed in China, no scholars have used STP theory to study them, which will be the innovation point of this paper.

Research on evaluation index of sports characteristic towns

The effect of sports characteristic town construction needs a scientific evaluation index system. At present, some scholars have conducted research on the evaluation indicators of the development level of small towns with sports characteristics, but the theoretical basis of the research is not enough, the relevant indicators are too broad, the system is not specialized enough, and there is no appropriate index to evaluate the market. Although there are market-related indicators, some researches are only conducted for individual cases. Now the sports characteristic town evaluation index research is summarized.

Some scholars and practitioners categorize characteristic town construction into four elements: production (distinctive industrial form), city (spatial carrier or project collection of integrated development of multiple business forms), people (human-centered) and literature (unique cultural connotation), which are mainly aimed at characteristic industry, characteristic environment, characteristic culture and characteristic talent (Xu, 2016).

In 2017, Jiangsu Provincial Sports Bureau commissioned Jiangsu Provincial Sports Industry Research Institute to compile the "Evaluation and Certification Standards for Sports Health Characteristic Towns in Jiangsu Province" (Jiangsu Provincial Sports Bureau, 2017).

In 2018, Zhejiang Provincial Institute of Development and Reform and Zhejiang Provincial Institute of Standardization jointly drafted the "Standard for Evaluation of Characteristic Towns", which proposed the evaluation index system of characteristic towns "1+8", composed of common indexes and characteristic indexes:

On the basis of clarifying the common requirements of characteristic towns with "converging" functions, "small and beautiful" forms, and "new and alive" systems, third-level characteristic indexes are set respectively for the industrial characteristics of 8 characteristic towns, including information economy, environmental protection, health, fashion, tourism, finance, high-end equipment manufacturing and historical classics, fully respecting the unique personality of different characteristic towns. Make it form the characteristic town construction and development mode with relatively general guiding significance. The publication and implementation of the Standards for the Evaluation of Characteristic Towns provide scientific, standardized and operable index requirements for the evaluation of characteristic towns in Zhejiang Province, and provide effective guidance and main basis for the establishment and acceptance of characteristic towns. In order to form a long-term mechanism for standardized assessment and evaluation and continuously improve the effectiveness of characteristic town construction, Optimizing the layout of Zhejiang productivity in the new era provides a strong support (Zhejiang Quality Supervision Bureau, 2018).

Shi Congmei and Jiang Yazhou were evaluated from the four aspects of economic development, cultural status, natural ecology and public service of characteristic towns (Shi & Jiang, 2018). Zhou Kai et al. set nine indexes under the attractiveness evaluation index and competitiveness index to evaluate the development of various industries in characteristic towns in Hemen Samsung Town, Nantong City, Jiangsu Province (Zhou & Han, 2018). Taking new-type urbanization development, sports poverty alleviation and supply-side reform of sports industry as breakthrough points, Tian Xueli et al. studied the development level evaluation index system of small towns with sports characteristics. The principles of feasibility, ease of operation, comparability and ease of evaluation should be followed in the process of index design. After two rounds of index screening by experts, a characteristic town development level evaluation index system covering four dimensions, namely basic information of sports characteristic towns, sports characteristic industries, sports characteristic resources and sports public services, was finally constructed (Tian & Zhao, 2018). Jiang Ting constructed the tourism function evaluation system of characteristic towns in Zhejiang Province by setting 17 indexes at four levels: ecological value, ornamental value, social value and economic value (Jiang, 2019).

Based on the actual development of characteristic towns in Zhejiang Province, Wu Zeming constructed a comprehensive competitiveness evaluation index containing 7 second-level indexes and 46 tertiary indexes from three dimensions of core competitiveness, internal competitiveness and external competitiveness (Wu, 2019). Hou Kai studied the first five sports characteristic towns in Shandong Province and explored their development level evaluation index system. It mainly consists of 6 criteria level indexes, including basic information dimension of sports town, characteristic industry development dimension, sports resource element supporting dimension, sports tourism service dimension, ecological environment dimension, sports characteristic creativity dimension, and 42 specific indexes, such as industrial concentration degree and market share. Among them, the weight value of the development dimension of sports characteristic industry is the highest, followed by the basic information dimension of sports characteristic town, confirming that the two are the cornerstone and backbone of the sustainable growth of sports characteristic town (Hou, 2020). Based on the coupling logic relationship between the construction of sports-featured towns and new-type urbanization, Zhou Wenjing et al. constructed a coupling measurement system from the four dimensions of space, ecology, function and humanity, and used model methods such as structural entropy weight, coupling degree and coupling coordination degree to empirically measure the coupling coordination level between sports-featured towns and new-type urbanization (Zhou & Zhang, 2022). Wang Ronghui et al. used the niche theory to construct the competitiveness evaluation index system from the four dimensions of resource endowment, industrial development, market location and basic support, and carried out an empirical analysis on the competitiveness evaluation of 7 small towns with sports characteristics in Shandong Province. The research results showed that: There is an obvious gap in the comprehensive competitiveness of each town, and the strong competitive town occupies an absolute advantage in every dimension. The medium competitive town is in the leading level in a certain dimension, the gap between dimensions is large, the development is not balanced; However, low competitiveness is at an obvious disadvantage in all dimensions of competition. Based on the analysis of practical problems, this paper puts forward the strategies of niche separation,

expansion, generalization and specialization, coordination and symbiosis, aiming at promoting the sustainable development of sports towns (Wang & Gao, 2023).

The specific indicators involved in the evaluation index system proposed by various scholars are shown in the following table.

Table 1 Summary table of indicators studied by scholars

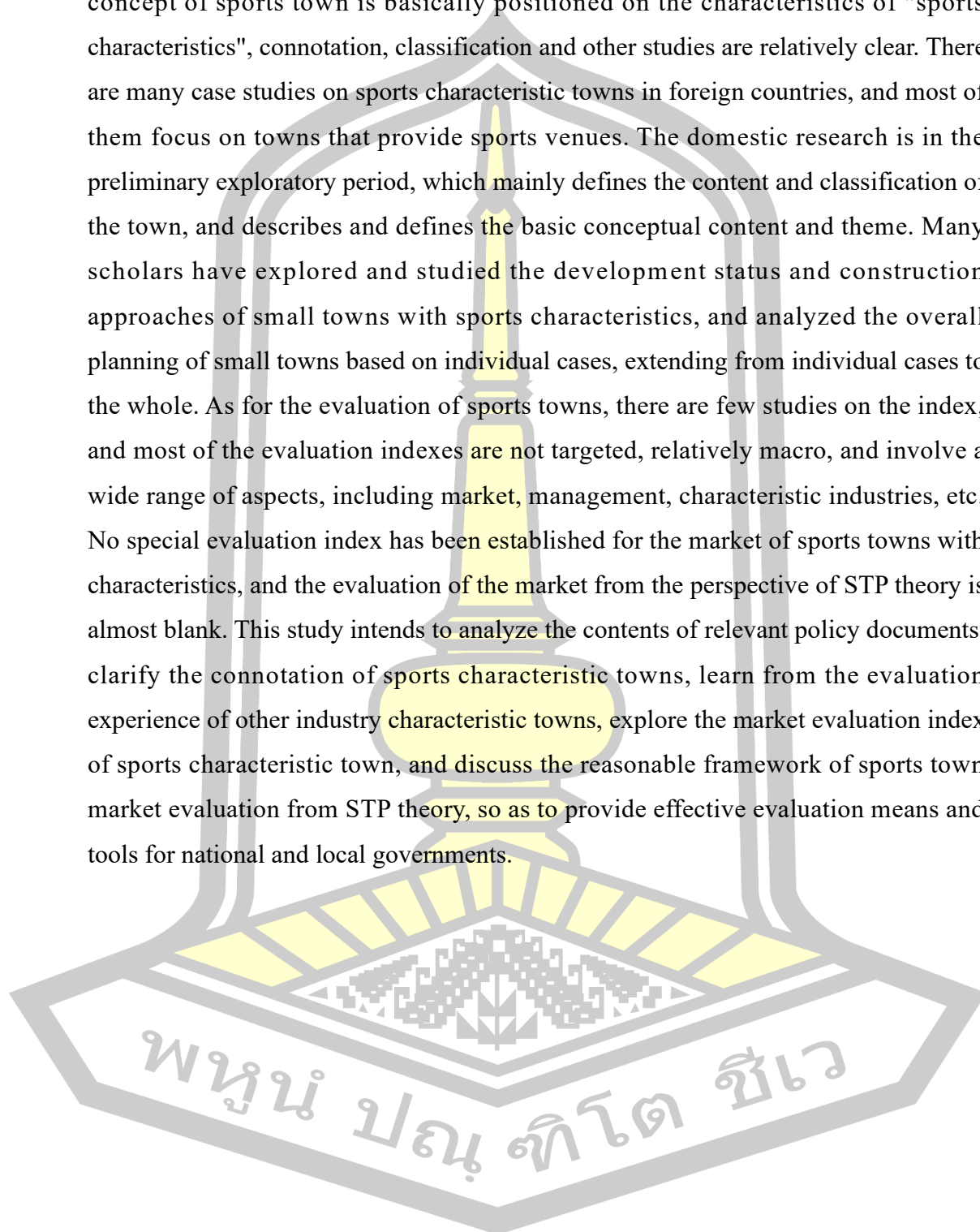
Author	Function	Cost	Price	Composition	Material	Quality	Grade	Brand	Advertising	Staff Capability	Knowledge	Age	Need	Attitude	Preferences	Shopping characteristics
Shi C.M.&Jiang Y.ZH. 2018	√	√	√	√		√										
Tian X.L. & Zhao X.H. 2018	√	√		√		√		√	√							
Wu Z.M.2019	√	√	√			√		√		√	√		√	√		√
Liu H.CH.2019	√						√	√		√			√			
Zhao F.2019		√	√			√	√	√			√		√			√
Song X.2020		√	√			√	√		√				√	√	√	
Hou K.2020	√	√			√			√	√	√			√	√	√	√
Wang Y.Y.2020	√	√				√		√			√			√		√
Chen X.H.2020	√	√	√	√	√			√	√	√				√		√
Lu ZH.Q.2021	√	√				√	√						√			
Xiao Y.2021	√	√	√	√		√		√		√	√					
Wang L.2022	√	√		√	√	√		√	√	√	√					
Chen J.X.2022	√		√			√		√					√		√	√
Zhou W.J.&Zhang R.L.2022	√			√		√		√	√	√	√		√	√	√	√
Wang R.H.&Gao X.T.2023	√	√				√		√		√						
TOTAL		13	12	7	6	3	12	4	12	6	8	6	2	9	5	4

The healthy and orderly development of sports towns not only needs to be strictly controlled at the source of construction, but also needs to evaluate its market. At present, although relevant government policy documents list assessment and other provisions, many scholars have built an evaluation for the development level of individual sports towns, which is mainly reflected in the aspects of basic information, characteristic industries, resources, environment and market. However, there are few market evaluation indexes, and a complete and comprehensive market evaluation standard has not yet been introduced. Therefore, it is imperative to construct the evaluation index of sports characteristic town market.

Summary

The second chapter is a summary of scholars' research on sports towns, which mainly focuses on the definition and connotation of sports towns, the type of sports towns, foreign experience and inspiration, construction status and path

research, and index evaluation research. Comprehensive research status, the basic concept of sports town is basically positioned on the characteristics of "sports characteristics", connotation, classification and other studies are relatively clear. There are many case studies on sports characteristic towns in foreign countries, and most of them focus on towns that provide sports venues. The domestic research is in the preliminary exploratory period, which mainly defines the content and classification of the town, and describes and defines the basic conceptual content and theme. Many scholars have explored and studied the development status and construction approaches of small towns with sports characteristics, and analyzed the overall planning of small towns based on individual cases, extending from individual cases to the whole. As for the evaluation of sports towns, there are few studies on the index, and most of the evaluation indexes are not targeted, relatively macro, and involve a wide range of aspects, including market, management, characteristic industries, etc. No special evaluation index has been established for the market of sports towns with characteristics, and the evaluation of the market from the perspective of STP theory is almost blank. This study intends to analyze the contents of relevant policy documents, clarify the connotation of sports characteristic towns, learn from the evaluation experience of other industry characteristic towns, explore the market evaluation index of sports characteristic town, and discuss the reasonable framework of sports town market evaluation from STP theory, so as to provide effective evaluation means and tools for national and local governments.



CHAPTER III RESEARCH METHODS

Research Design

This study adopts a mixed research method, using a combination of qualitative and quantitative methods. The main purpose of this study is to conduct market segmentation according to the consumer demand and consumer behavior characteristics of sports towns, development a market evaluation index model of sports towns, and test the effect of the index evaluation model through application. This is based on Philip Kotler's STP theory (Segmentation, Targeting and Positioning) (Kotler, 2009) investigating sports character towns.

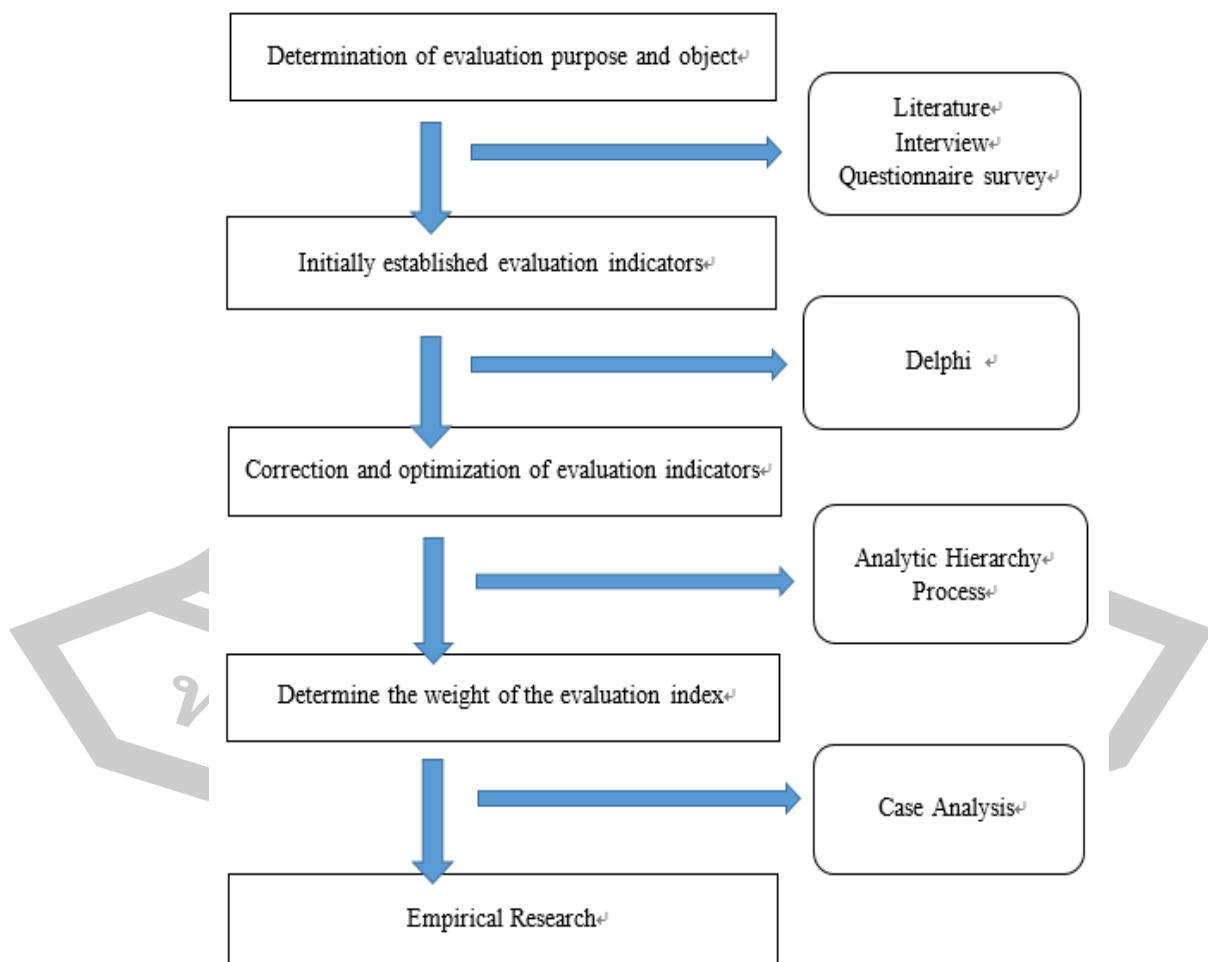


Figure 3 Index construction idea diagram

This study is divided into three phases. The phase 1 is to conduct a semi-structured interview about sports towns with government department managers and sports town managers. The questionnaire survey method is adopted to investigate the consumers in sports towns, mainly to discuss the factors that affect the demand and behavior of consumers in sports towns, and to clarify the market development status of sports towns. The phase 2 is to use the Delphi method, through experts to screen the sports characteristic town market evaluation index, using the analytic hierarchy process to calculate the weight of each index, the establishment of sports characteristic town market evaluation index model. The phase 3 is to use case analysis, select a sports characteristic town to carry on the applied research of market evaluation index. The contents of each phase are described in detail in the following sections.

Prior to the official data collection, permission was obtained from the Ethics Committee of Mahasarakham University on November 30, 2023 (Appendix N). The phase 1 of the study is from December 1 to December 15, 2023, the phase 2 is from December 25, 2023 to February 5, 2024, and the phase 3 is from February 10, 2024 to March 5, 2024.

Population

The research population of this study includes government administrators, sports characteristic town managers and consumers of the first 96 national sports characteristic towns in China.

The government management personnel mainly include the managers of the two departments of the Sports Bureau and the Development and Reform Commission. The Sports Bureau is the first to promote the development of sports towns in China. The National Development and Reform Commission has carried on the overall planning of the sports characteristic town, and put forward the construction plan and objectives. The two government departments of sports Bureau and National Development and Reform Commission are the builders and planners of sports characteristic towns, and they play a decisive role in the development direction of sports characteristic towns. Therefore, the managers of government departments are the research group of this study.

In 2017, the National Sports Bureau listed 96 projects as the first batch of sports and leisure characteristic town pilot projects for the first time. Since 2017, sports town has entered the market for several years, with a certain market potential, their managers have a certain understanding of consumers, they are more clear consumer need, understand consumers' choice of exercise items, know the factors that affect consumer consumption. Therefore, the managers of sports characteristic towns are also the research population of this study.

As the practitioners of sports characteristic towns, consumers' consumption choice is the driving force to promote the development of small town market.

Phase 1

Research Questions

Q1: What are the needs of consumers in sports towns?

Q2: What are the factors that affect consumers' participation in sports towns?

Research Objectives

1. To investigate the needs of consumers in small towns with sports characteristics.

2. To analyze the factors that affect consumers' participation in sports towns.

Subject

The phase 1 is mainly to interview managers of government departments and managers of sports towns, and questionnaire survey consumers in sports towns. There are two government departments involved in the management of sports towns, namely, the Sports Bureau and the National Development and Reform Commission. As the document formulation units of sports towns, they are the builders and promoters of sports towns, and play a steering role in the market planning of sports towns. Therefore, interviews with them can ensure the accurate direction of research on sports towns. As managers of small town market operation, they have a clearer understanding of the actual situation of small town with sports characteristics, and interviews with them can obtain relevant data more directly and clearly. As the participants of sports activities in small towns, consumers' demand and consumption

behavior determine the market prospects of small towns with sports characteristics, so they are the most direct investigation objects.

Instrument

The phase 1 is to investigate the needs of consumers in sports towns and discuss the factors that affect the participation of consumers in sports towns. The research tools used were questionnaires and interview Outlines.

Questionnaire:

In order to better investigate the market demand and consumer behavior of sports characteristic town consumers, questionnaire survey method is adopted to survey consumers. In order to correctly and accurately design the questionnaire, researchers follow a number of guidelines to assess the adequacy of some of the authors' questions and recommendations (Jennings, 2010; Malhotra, 2008). The questionnaire of this study comes from the market segmentation theory and is designed according to the research purpose of this study. The questionnaire design is divided into three parts. The first part is the general information of the respondents, including 8 questions such as region, gender, age, education, occupation, monthly income, money input and sports participation. The second part is about the scale of consumer market demand and behavior, a total of 65 questions, including geographical segmentation, population segmentation, psychological segmentation and behavioral segmentation 4 dimensions. the third part is an open-ended questionnaire, "Please give suggestions to the market development of sports characteristic town." For respondents to express their opinions (Appendix A).

Questions 9-73 were scored using a five-point Likert scale with the following criteria: The weight of the evaluation was 5 levels, 5 = strongly agree, 4 = agree, 3 = uncertain, 2 = disagree, 1 = strongly disagree.

The questionnaire was translated before data collection, and the language used was Chinese due to the location of the survey in China. The theoretical basis of this study is STP theory. Although it is in English, it is widely quoted in China. Considering the accuracy of language expression, an expert in English translation first translated the questionnaire into both English and Chinese. Moreover, it was later translated from Chinese to English by another translator. In this way, the

meaning of the questions can be compared to ensure the accuracy of the questionnaire.

Before issuing the questionnaire, the validity of the questionnaire should be tested. The validity tests were evaluated using the project-objective Agreement index (IOC). According to the principle of consistency of purpose, 5 experts were invited to evaluate the interview outline and questionnaire and make suggestions from different perspectives. On the assessment form, "-1" means the problem is inconsistent with the purpose, "0" means uncertain, and a score of "1" means certain. Scored by five experts, the project is calculated to be valid when the IOC value is greater than or equal to 0.5 (≥ 0.5) (Turner & Carlson, 2003). The list of experts is as follows (Table 2) :

Table 2 List of validity assessment experts

Name	Country	School	Professional Title	Research direction
Dr. Yang	China	Baoshan University	Prof.	Sports Management
Dr.Lu	China	Ankang University	Assoc.Prof.	Sports Training
Dr.Shi	China	Shaanxi Normal University	Prof.	Sports Management
Dr.Zhou	China	Guangzhou Sport University	Prof.	Sports Sociology
Dr.Zhang	China	Zhaoqing University	Assoc.Prof.	Sports Leisure

Expert qualification criteria include:

1. Associate professor or above;
2. Engaged in sports science research for more than 10 years, with strong scientific research ability and certain achievements;
3. Have a certain understanding of sports towns.

A total of 2 rounds of research tool evaluation were conducted in this stage.

In the first round, questionnaires were sent to 5 evaluation experts, and the content validity of the questionnaires was evaluated by IOC. Specific results are shown in the following table. All questions in the questionnaire are higher than 0.5, which proves that all questions are valid. The values of Q9, Q14, Q22, Q27, Q37, Q50 and Q55 are 0.6, and the other values are equal to or greater than 0.8. The average value of IOC is 0.892, which can be used for trial (Appendix C).

Pilot Test (TRY OUT)

The study conducted a pilot test before normal data collection. The purpose of the trial was to ensure the validity and reliability of the questionnaire, modify and adjust the questions in the research tool (Bernard, 2000) to better screen the recovered data. This study distributed 57 pilot test questionnaires through the online website. They were all consumers of sports towns with sports characteristics and had participated in sports in sports towns, which met the research requirements of this study. Since questionnaires are issued and collected using an online questionnaire program, each question must be answered in the questionnaire program, so there are no blank questionnaires and blank rates. In this study, questionnaires with the same score of more than 90% such as "1" for each of the 9 to 73 questions or "5" for all of them were selected. After the ineffective questionnaires were screened out, 47 valid questionnaires were obtained, and the effective recovery rate was 82.46%. SPSS Statistics 21.0 software was used to input and analyze the survey data.

An attempt was made to test the reliability of 47 non-sample questionnaires by using the internal consistency of the scale. SPSS was used to analyze Cronbach's α value, and the reliability of the survey tool was tested. Cronbach's α is often used to reflect the consistency and stability of a measurement (Field, 2005). The acceptable lower limit of Cronbach's α is usually 0.7. In some exploratory analyses, it may be reduced to 0.6, but a good reliability coefficient should reach 0.9, and 0.8 is considered a good coefficient (Hair et al, 2006). The quality and reliability of the tool are analyzed by calculating Cronbach's α coefficient.

The reliability coefficient of the questionnaire in this study is 0.958 (Appendix D), which is greater than 0.9, indicating that the reliability of the research data is of high quality and can be used for further analysis. As for "CITC value", the CITC values of Q9, Q12, Q14, Q20, Q22, Q25, Q26 and Q29 are all less than 0.3,

indicating a weak correlation between them and the other analysis items. If all these 8 questions are deleted, only 57 items remain, and the reliability coefficient will rise to 0.963 (Table 3).

Table 3 Cronbach reliability analysis comparison table before and after deleting indexes

Number of terms	Sample size	Cronbach α coefficient
65	47	0.958
57	47	0.963

To solve these problems, the results of the first round of IOC and the reliability coefficient of the test were re-sent to the same experts of the first round, and they were invited to do the second round of IOC to ensure the reliability quality of the questionnaire. The second round of IOC evaluation method is the same as the first round. According to the opinions of experts, after two rounds of IOC evaluation, the final results are summarized as follows.

After two rounds of IOC, the questionnaire was finally determined to be three parts, the first part and the third part remained unchanged, the second part was adjusted from 65 questions to 60 questions, and Q9, Q14, Q20, Q22 and Q29 were deleted because their values were 0.4, lower than 0.5. According to the opinions of experts, Q12, Q25 and Q26 were modified, and the final IOC average was 0.936, the target was the same, and it could be used (Appendix E).

Interview:

The interview outline is derived from STP theory and designed according to the research purpose of this study. The interview outline consists of two parts, one is basic information, the other is interview questions. Semi-structured interviews are mainly conducted for government managers and sports town managers. This form of data collection enables researchers to translate organizational ideas into categories and topics (McCracken, 1988). Semi-structured interviews, which allow for new questions that may arise in the conversation, provide an opportunity for

participants to bring up important insights in the interview, while previously prepared questions provide the focus (Myers, 2009).

Interview questions 1-3 are designed to interview the current market status of small towns with sports characteristics. Design interview questions 4-6, mainly based on the market positioning theory, the basis of sports characteristics town market segmentation interviews. Interview questions 7-8 are designed, mainly to interview the status of consumers in sports towns and discuss the factors affecting consumer demand and behavior. Design interview questions 9-10, mainly visit sports characteristic town market assessment basis and specific indexes. Design interview question 11 is an open question about suggestions for promoting the market development of small towns with sports characteristics (Appendix B).

The effectiveness of the interview syllabus was assessed by a panel of five experts using the project-Objective Consistency Index (IOC). The five experts were consistent with the experts assessed by the questionnaire, and the criteria were consistent with the questionnaire. In the first round of evaluation, the interview outline of government department managers scored 0.2 in Q2 and 0.4 in Q9, which did not meet the requirements of project validity. Q1, Q3 and Q8 scores were all higher than 0.5, but experts still proposed revisions. For the interview outline about the town manager with sports characteristics, the scores of Q2 and Q9 were 0.2, which did not meet the requirements of project validity. The scores of Q1, Q3, Q7 and Q8 were all higher than 0.5, but the experts still proposed revisions, and the order of Q7 and Q8 also needed to be moved forward to ensure the accuracy of the questions. According to the recommendations of the expert group, the interview outline and questionnaire were redesigned and revised. After the revision, the interview outline and questionnaire were reviewed in the second round. The results of the second round of evaluation are as follows (Appendix F).

In the second round of IOC evaluation, the IOC value of each project is greater than or equal to 0.8 (≥ 0.8), indicating that the project content validity is reasonable (Turner & Carlson, 2003).

Sampling

The questionnaire survey of consumers adopts convenient sampling method. This technique means that the basis for sample selection is convenient and

easy to access participants. Convenient samples may not guarantee a representative and unbiased sample. Nevertheless, it remains the most commonly used method in the social and behavioral sciences (Gravetter & Forzano, 2011). This method has been recommended by many scholars as a suitable, fast and economical way to obtain a large number of questionnaires.

Some experts recommend that the sample size should be at least five times the size of the item, and more appropriately ten times the size of the item (Hair et al., 2006). Some experts also suggest that the stability of the model needs to be considered, and the minimum sample size should be greater than 200 (Kline, Kline & Kline, 2011) to reduce overfitting problems caused by too small sample size (Anderson & Gerbing, 1988). At the same time, according to the 95% confidence level, the sample size should be at least greater than 384 (Chang-ying & Ming-min, (2006). The specific calculation formula is as follows (Figure 4):

Confidence level Sampling error	95%	99%
10%	96	166
5%	384	666
3%	1067	1849

Calculation formula:
$$n = \frac{Z^2 \cdot p(1-p)}{e^2}$$

Figure 4 Sampling calculation formula diagram

Based on the characteristics of geographical location, physical geography and human geography, China is divided into four geographical regions, namely the north region, the South region, the northwest region and the Qinghai-Tibet region. At this stage, 1 town in each region was selected for investigation. According to the development of characteristic towns and preliminary data survey, four characteristic towns were selected: Rizhao Olympic water sports Town in the north, Fuyang Yinhu

Smart Sports Town in the south, Zhongnan Shanzhai Sports and leisure town in Yingpan of Shangluo City in the northwest, Longyangxia Sports Town in Gonghe County of Qinghai Province in the Qinghai-Tibet region. Because these four sports characteristic towns are relatively well developed among the first batch of sports characteristic towns in China, Convenience sampling was used to sample 440 consumers.

The selection criteria for volunteers must include the following four aspects:

1. Volunteers must be at least 18 years old;
2. Volunteers must be sports consumers in sports towns;
3. Volunteers must know something about the sports town;
4. Volunteers are willing to participate in the survey and can clearly understand the purpose of the survey.

There are also specific criteria for the exclusion of volunteers, mainly including:

1. Volunteer under 18 years old;
2. The volunteer has not been to the sports town;
3. Volunteers are not sports consumers in sports towns;
4. Sports town volunteers do not have the ability to consume sports;
5. Volunteers were reluctant to take part in the survey.

Before answering the questionnaire, the respondents should be screened first. Choice 1 means that they have been to sports characteristic towns, choice 2 means that they have not been to sports characteristic towns. The questionnaire marked as "2" was deleted using excel, 80% of the questionnaires with the same score were deleted. After excluding invaquestionnaires, there were 98 valid questionnaires in South China, 99 in North China, 109 in Northwest China and 95 in Qinghai-Tibet. A total of 39 questionnaires were deleted, leaving 401 valid questionnaires, with an effective recovery rate of 91.14%.

During the interview, a purposeful random sampling method was used to identify a government department manager for interview. For the purpose of sampling, Mr. Zhao from the State General Administration of Sport was selected to participate. The snowball technique is then used during the interview to identify other

potential participants. A total of 4 government workers and 4 management personnel of sports towns were selected. The specific list is shown below. (Table 4)

Table 4 List of interviewees

Name	Unit	Position
Mr. Zhao	General Administration of Sport of China	Manager
Mr. He	Shaanxi Sports Bureau	Manager
Ms. Sun	Shaanxi Provincial Development and Reform Commission	Manager
Mr. Du	Zhejiang Development and Reform Commission	Manager
Mr. Wang	Zhongnan shanzhai sports health leisure characteristic town	Manager
Mr. Sun	Rizhao Olympic water sports town	Manager
Mr. Yang	Fuyang Yinhu smart sports town	Manager
Mr. Dan	Longyangxia sports town	Manager

Data Collection Procedure

The online self-management survey collects sample data using a self-selected convenient sampling method. In this study, Questionnaire Star software was used for data collection (Figure 5). Data were collected from the population with available data via an online questionnaire (Saunders & Thornhill, 2009). Online questionnaires can effectively communicate with the target population (Garton, Haythornthwaite, & Wellman, 1999). Secondly, online survey reduces the cost of data collection and improves the time efficiency of the data collection process (Bachmann, Elfrink, & Vazzana, 1996).



Figure 5 Questionnaire distribution poster

The questionnaire first explains the study so that respondents better understand the intent of the study, and respondents are also informed that when they fill out and submit the questionnaire, they are considered to have consented to the survey, they can withdraw at any time, and their information will be kept confidential for the purpose of this study only. Considering the accuracy of the target population, before answering the questionnaire, you should first answer: "Have you ever been to a sports town?" If the answer is: "No." It is regarded as invalid questionnaire. The distribution and retrieval of the questionnaires were completed between December 1 - 15, 2023.

There are two ways to conduct the interview. One is to go to the city where the interviewee lives and choose a relatively quiet environment for face-to-face interview. During the interview process, each interview is recorded and manually recorded, each interview is transcribed verbatim, and then analyzed at the completion of each stage of data collection and the interviewee is asked to determine whether the interview results are true. The interviews were carefully read by the lead researcher before the data was analyzed. Subsequently, these records are refined and integrated. Through the interview process with the participants, field records and other data will be collected from the interviews to discuss and recommend answers to the research questions. One is to conduct online interviews by phone or Wechat video. Before each interview, we must contact the interviewees in advance to determine the appropriate time and method with them. The researcher must introduce the purpose of the interview to the interviewee before the interview. The interviews were 60 to 90

minutes long and included data and other important information gathered through one-on-one interviews with researchers and participants. Each interview will be an audio recording, auditory cues and a live transcript made by the researcher. Through the interview process with the participants, field records and other data will be collected from the interviews to discuss and recommend answers to the research questions.

Data Analysis

In order to analyze the questionnaire data collected in this study, IBM SPSS Statistics 21.0 will be used for data analysis, such as reliability test of questionnaire data, frequency analysis of questionnaire data, descriptive statistical analysis, factor analysis of factors, etc.

According to the characteristics of qualitative research, data analysis should run through the whole process of data collection (Patton, 1990). The interview mainly adopts text analysis method. After each interview, the content of the interview was transcribed and conceptualized. According to the theoretical basis of this study, the data is coded and analyzed. Through sorting out the interview content, the data was decomposed into manageable fragments, and the data was encoded by naming different fragments, presenting four dimensions and eight questions. The details will be explained in Chapter 4.

Summary

Through the first phase of research, variable data that affect consumer demand and consumer behavior in sports towns have been obtained, consumer needs have been clarified, and the status quo of development of sports towns has been understood to establish the second phase. Evaluation index provide a reference basis.

Phase 2

Research Question

Q1: How to construct the market evaluation index of sports characteristic town?

Research Objective

To develop sports characteristic town market evaluation index.

Subject

The purpose of the phase 2 is to discuss the market evaluation index of sports towns with special characteristics. Therefore, a consultation expert group of 13 people is selected who have the title of professor or have a doctorate degree, are engaged in sports and related fields, have high enthusiasm, are familiar with the field of sports towns with special characteristics, have certain working time, work energy and good cooperation. This paper optimizes and modifies the market evaluation index of the newly built sports characteristic town, and carries out three rounds of screening on the first, second and third level index respectively, establishes the indexes, forms the evaluation index model, and calculates the weight value of the indexes.

Instrument

The phase 2 is to establish the sports characteristic town market evaluation index model. The research tool of this stage is questionnaire, and 13 experts are invited to screen the market evaluation index of small towns with sports characteristics. The questionnaire design is divided into three parts. The first part introduces the questionnaire and STP theory, the second part is the general information of experts, and the third part compiled the evaluation index at all levels into a Likert-5 subscale, and assigned scores of 5, 4, 3, 2 and 1 respectively according to "very important", "important", "general", "not important" and "very unimportant". The first round of indexes of the research tool is derived from STP theory, interview conclusions and literature, and consists of 4 first-level index, 12 second-level index and 53 third-level index (Appendix H).

Before issuing the questionnaire, the validity of the questionnaire should be tested. The validity tests were evaluated using the project-objective Agreement index (IOC). According to the principle of consistency of purpose, 5 experts (like consumer questionnaire experts) were invited to evaluate the interview outline and questionnaire and make recommendations from different perspectives. On the assessment form, "-1" means the problem is inconsistent with the purpose, "0" means uncertain, and a score of "1" means certain. According to the evaluation results (Appendix I), all indexes have an IOC value greater than 0.5, indicating that all indexes are valid.

Sampling

The number of experts selected is also one of the conditions that must be considered in the application of Delphi method, which plays a decisive role in formulating the effect of the index system. Under normal circumstances, an expert group of 4-16 people can achieve better results. This study selected 13 experts and scholars in the field of sports who are familiar with sports characteristic towns as the consulting expert group (Table 5), and planned to conduct three rounds of expert questionnaire survey.

The list of invited experts is as follows.

Table 5 List of experts in index screening

Name	Country	School	Professional title	Research direction
Dr.Xing	China	Zhejiang University	Prof.	Sports Training
Dr.Wan	China	Shaanxi Normal University	Prof.	Sports Training
Dr.Zhou	China	Xi'an Sport University	Prof.	Sports Training
Dr.Xie	China	Shangdong University	Prof.	Sports Management
Dr.Bai	China	Qinghai University	Prof.	Sports Management
Dr.Zhou	China	Guangzhou Sport University	Prof.	Sports Management
Dr.Liu	China	Huzhou Normal University	Assoc. Prof.	Sports Management
Dr.Feng	China	Ankang University	Prof.	Sports Leisure
Dr.Zhong	China	Shangdong Sport University	Prof.	Sports Leisure
Dr.Yang	China	Xi'an Sport University	Prof.	Sports Leisure
Dr.Ni	China	Guangzhou Sport University	Prof.	Sports Sociology
Dr.Li	China	Tianjin University of Sport	Prof.	Sports Sociology
Dr.Li	China	Xi'an Shiyu University	Prof.	Sports Sociology

The 13 experts selected must have the following four conditions:

- 1) The professional title is professor or has a doctor's degree
- 2) Engaged in sports and related fields, and have a high enthusiasm
- 3) Familiar with sports characteristic town field

4) Have a certain amount of working time and work energy, good coordination of the four standards of personnel.

The 13 selected experts include experts from China. The professional field is divided into four directions: sports management, sports training, sports leisure and sports sociology. There are four experts in the field of sports management research, and three experts in each of the other fields. The experts mainly come from four major regions in China.

Data Collection Procedure

This phase is completed through four steps: the selection of expert group members, the selection of evaluation index, the revision of evaluation index, and the empowerment of evaluation index. The calculation of weighting by means of index score mean value and coefficient of variation and hierarchical method ensure scientificity.

In this phase, the Delphi method was adopted to distribute and recover the market evaluation index of small towns with sports characteristics through Wechat, and the first round of expert consultation was conducted. According to the feedback of the first round of experts, the first round of indexes were modified accordingly. The unreasonable indexes are eliminated, the opinions of experts are recombined, and the second round of expert consultation is conducted on the basis of collecting, sorting and integrating the feedback of the first round of Delphi experts to form the second round of index, and re-issue questionnaires for screening (Appendix J). In this way, the third round of index screening also adopts the second round of methods, and re-issues questionnaires for screening (Appendix K), and finally obtains the third round of index. After the indexes at all levels have basically reached an agreement, the weight value of the market evaluation index of small towns with sports characteristics is established.

Data Analysis

SPSS21.0 was used to analyze the mean value, standard deviation and coefficient of variation of the expert rating table retrieved. According to the feedback of 13 experts, three rounds of screening were conducted for the index. In this study, when experts investigated the screening index, the main basis was: (1) the coefficient of variation of the index was less than 0.25; (2) The average score of the selected

index is above 4 points (Yu, 2007). In special cases, index are selected according to research needs and expert opinions. Finally, an effective index is determined and a perfect evaluation index model is formed.

In this study, the analytic hierarchy process is used to evaluate the weights of indexes at all levels of the evaluation index system. The analytic hierarchy process (AHP), proposed by the American operations research scientist Saaty, is a kind of decision analysis based on the combination of qualitative and quantitative analysis. Which is conducive to in-depth analysis of the nature of complex problems, understanding of its influencing factors, etc., and is conducive to using a small amount of quantitative information to make the decision process mathematical and quantitative (Han et al., 2004). The analytic hierarchy process (AHP) is a weighting method by which experts directly determine the weight coefficient of the factors at each level of the evaluated index system according to their importance, experience and relevant professional knowledge. The analytic hierarchy process (AHP) is used to calculate the weights of index, and the relative importance of each factor in each level is judged by different experts. Through hierarchical structure, all expert evaluations are transformed into several factors, and their importance is compared on a scale of 1-5. In this study, experts participating in the Delphi method are still used to assign weights to each index, and the weight scores of each level of index are finally determined through the collation and analysis of the survey data of experts and the use of analytic hierarchy process.

The judgment matrix can be obtained after pair-based comparison of grade, secondary and tertiary indexes of sports characteristic towns with SPSS. The maximum Eigen root λ_{\max} and the corresponding maximum eigenvector W of the judgment matrix can be calculated, CI value can be calculated, RI standard value can be searched, CR value can be calculated, and the consistency of the results can be tested.

Summary

The phase 2 mainly adopts the Delphi method to discuss the market evaluation index of small towns with sports characteristics. 13 experts conduct three rounds of screening of the index, finally establish the index, calculate the weights of

each index, and form a complete market evaluation index model of small towns with sports characteristics. The model is applied to the verification of the third stage.

Phase 3

Research Question

Q1: How to apply sports characteristic town market evaluation indexes?

Research Objective

To test the effect of market evaluation indexes of small towns with sports characteristics.

Subject

The phase 3 is mainly to apply the sports characteristic town market evaluation index model. This phase is mainly for managers and staff with experience in managing sports characteristic towns. They score the sports characteristic towns under their jurisdiction according to the market evaluation index model and get the results.

Instrument

The phase 3 is to apply the established market evaluation index of small towns with sports characteristics. This stage mainly adopts questionnaire survey and designs the market evaluation questionnaire of small towns with sports characteristics according to the evaluation index model. The questionnaire adopts a five-level scale scoring method, and the scores are divided into 5, 4, 3, 2, 1. 5 means very good, 4 means relatively good, 3 means average, 2 means bad, and 1 means very bad. According to the actual situation of the town, the managers and staff of the town with sports characteristics scored the questionnaire to test the application effect of the evaluation index of the town with sports characteristics.

Sampling

Five managers and five staff members of Zhongnan Shanzhai sports and leisure characteristic town in Yingpan, Shangluo City in Northwest China were selected as the samples of the third stage. The northwest region is a moderately developed region, which can represent the development level of most regions in China. As the first pilot sports towns with sports characteristics in the country, Zhongnan Shanzhai sports and leisure characteristic town in the Northwest of

Shangluo City has been developing for 6 years, and its facilities and publicity in all aspects are also improving day by day, and its managers and staff are relatively experienced. They can represent the management and service level of most sports towns in the country. Therefore, in the third stage, it is scientific to choose the managers and staff of Zhongnan Shanzhai sports and leisure characteristic town as samples.

In the third stage, snowball technology is used. In this study, a manager of Shanzhai sports and leisure characteristic town in Yingpan, Shangluo City, is selected as a sample. Then, through his introduction, we use snowball technology to investigate the remaining 4 managers and 5 staff members, a total of 10 investigators are listed in the table (Table 6).

Table 6 Sports characteristic town market index model application rating list

Name	Country	Department	Responsibility	Workig years
Mr.Wang	China	Zhongnanshanzhai sports health leisure characteristic town	Manager	6
Ms.Ning	China	Zhongnanshanzhai sports health leisure characteristic town	Manager	6
Mr.Zhou	China	Zhongnanshanzhai sports health leisure characteristic town	Manager	6
Ms.Xu	China	Zhongnanshanzhai sports health leisure characteristic town	Manager	5
Mr.Li	China	Zhongnanshanzhai sports health leisure characteristic town	Manager	5
Mr.Zhou	China	Zhongnanshanzhai sports health leisure characteristic town	Staff	6
Ms.Li	China	Zhongnanshanzhai sports health leisure characteristic town	Staff	6
Mr.Liu	China	Zhongnanshanzhai sports health leisure characteristic town	Staff	6
Mr.Zhong	China	Zhongnanshanzhai sports health leisure characteristic town	Staff	5
Mr.Chen	China	Zhongnanshanzhai sports health leisure characteristic town	Staff	6

Data Collection Procedure

In this phase, according to the market index model of sports characteristic town, the questionnaire was issued by electronic questionnaire, and a manager was selected to score the sports characteristic town by the snowball technique. Then, through the introduction of this manager, find the second manager and let him score the sports characteristic town. By analogy, 5 managers and 5 staff were found to evaluate the market of Zhongnan Shanzhai sports and leisure characteristic town, so as to collect and analyze its data.

Data Analysis

This study refers to the classification method of the evaluation level of the evaluation object by referring to the relevant doctoral dissertations, and divides the first-level index of the sports characteristic town and its corresponding second-level sub-indicators into three levels, namely high, medium and low. Among them, a score above 0.8 is high, 0.6 to 0.8 is medium, and below 0.6 is low. (Liu et al., 2019, Wang, 2020) The scoring method of the evaluation index system of sports characteristic towns is as follows. The score value of each third-level index is multiplied by the weight ratio of the index to obtain the final score of the third-level index, and then the final score of all the third-level indexes belonging to the same second-level index is added to obtain the evaluation grade score of the second-level index. After the score of each second-level index is calculated, the evaluation score of each second-level index is also multiplied by its corresponding weight coefficient ratio, and the final score of the First-level index belonging to the second-level index is summed again.

In the process of investigation, the score of each index is a five-level system, that is, the highest score is 5 points, the lowest score is 1 points, so the score value is the average $\times 0.2$, and the corresponding score is obtained.

Summary

The third chapter mainly introduces the research methods and concrete steps of this study. This study is divided into three steps. The first step is to study the market demand and consumer behavior of sports characteristic towns by using interview and questionnaire survey. The second step uses Delphi method to establish the evaluation index model of sports characteristic town market, and uses analytic

hierarchy process to calculate the weights of each index; The third step is to use case analysis to extract Zhongnan Shanzhai sports and leisure characteristic towns for the application of indexes. The research in this chapter guides the direction of the research in the following chapters.

Conducting research ethics

The researcher has requested ethics for human research regarding the Development of a Market Evaluation Index of Sports Characteristics for Towns in China to the Human Research Ethics Committee of Mahasarakham University as follows:

1. Create a project to consider the ethics of human research. According to the form of Mahasarakham University Human Research Ethics Committee.
2. Prepare a memorandum to propose research projects that are subject to expedited review. To request consideration of ethics in human research through the thesis advisor Passed the approval of the Dean of the Faculty of Education.
3. Present to the Human Research Ethics Committee of Mahasarakham University, which Mahasarakham University Human Research Ethics Committee.
4. Mahasarakham University Human Research Ethics Committee Consider Certification Intensive research project.
5. Mahasarakham University Human Research Ethics Committee Consider certification

Intensive research project on Development of a Market Evaluation Index of Sports Characteristics for Towns in China From 30 November 2023 to 29 November 2024, certification number : 498-497/2023 (Appendix N) .

6. The researcher collects research data based on the research project received by the committee and consider research projects.

Chapter IV

Results

This chapter expounds the need status of consumers in sports towns, analyzes the factors that affect consumers' participation in sports towns, constructs the market evaluation index model of sports towns, and conducts application tests on these indicators.

Phase 1: Investigates the needs and basic situation of consumers in sports characteristic towns, and explores the variable factors that affect consumers' participation in sports characteristic towns. This study conducted a questionnaire survey on 440 consumers in small towns with sports characteristics. 440 questionnaires were sent out, 440 were recovered, 39 invalid questionnaires were excluded, and 401 questionnaires were left after screening, with an effective recovery rate of 91.14%. Four managers of government departments and four managers of small towns with sports characteristics were interviewed.

Phase 2: A market evaluation index model of small towns with sports characteristics was constructed, and the whole process of index construction was described. The Delphi method was adopted, 13 experts were invited to conduct three rounds of screening for the first, second and third level indexes, the five-point Likert scale was used to evaluate the indexes, and the weight value of each index was calculated by analytic hierarchy process.

Phase 3: Zhongnan Shanzhai sports and leisure characteristic town was selected for model application research.

Results of this study

The researchers divided the findings into three parts. The phase 1 shows the needs and basic situation of consumers in sports towns, and shows the factors and variables that affect the participation of consumers in sports towns. The phase 2 shows the process of constructing the evaluation index of sports characteristic town market; The phase 3 verifies the rationality of the market evaluation index of sports characteristic town. Detailed results are as follows:

Phase 1

Sports characteristic town consumer' need and participation influencing factors

The first phase is divided into two steps. In the first step, investigated 401 valid questionnaires and analyzed the needs and basic situation of consumers in small towns with sports characteristics. The sample of the second step is 8 respondents, including 4 government workers and 4 managers of sports towns, to explore the factors that affect the demand and behavior of consumers in sports towns.

Step 1: Questionnaire survey

The results of this step consist of two parts. The first part is demographic characteristics. The second part is the data analysis of four dimensions of consumer market segmentation in sports characteristic towns.

Demographic characteristics

A total of 401 valid questionnaires are reserved for this questionnaire. Due to the limitation of preconditions, only the screening question "Have you ever been to a town with sports features?" The answer is "yes". It's withheld. For consumers who were not in sports towns, 80% of the answers with the same options were excluded.

Table 7 Sports Town Consumer Region

Sports Town Consumer Region		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Efficient	Southern Region	98	24.4	24.4	24.4
	Northern Region	99	24.7	24.7	49.1
	Northwest Region	109	27.2	27.2	76.3
	Qinghai-tibet region	95	23.7	23.7	100.0
	Total	401	100.0	100.0	

Regionally, there were 98 valid questionnaires in the south, accounting for 24.4%; There were 99 valid questionnaires in the northern region, accounting for 24.7%; There were 109 valid questionnaires in Northwest China, accounting for

27.2%; There were 95 valid questionnaires in Qinghai-Tibet region, accounting for 23.7% (Table 7). In terms of the number proportion, the number of valid questionnaires in the four regions is relatively balanced, which meets the requirements of the study.

Table 8 Sports Town Consumer Gender

Sports Town Consumer Gender	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Male	212	52.9	52.9	52.9
Efficient Female	189	47.1	47.1	100.0
Total	401	100.0	100.0	

From the perspective of gender, there were 212 men, accounting for 52.9%, and 189 women, accounting for 47.1%, with the proportion of men slightly higher than that of women (Table 8).

Table 9 Sports Town Consumer Age

Sports Town Consumer Age	Frequency	Percentage	Valid Percentage	Cumulative Percentage
18-25 years old	101	25.2	25.2	25.2
26-45 years old	240	59.9	59.9	85.0
Efficient 46-60 years old	58	14.5	14.5	99.5
>60 years old	2	.5	.5	100.0
Total	401	100.0	100.0	

From the perspective of age, there were no respondents under 18 years old, and 101 respondents aged 18-25 years old, accounting for 25.2%; There were 240 respondents aged 26-45, accounting for 59.8%; There were 58 respondents aged 46 to 60, accounting for 14.5%; There were 2 respondents over 60 years old (Table 9). This shows that most of the interviewees who participate in sports towns are middle-aged

and young people. They have a good interest in sports, and are willing to accept new things and join sports towns with sports characteristics.

Table 10 Sports Town Consumer Education

Sports Town Consumer Education	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Junior high School or below	19	4.7	4.7	4.7
Senior high School or technical secondary school	35	8.7	8.7	13.5
Diploma	37	9.2	9.2	22.7
Bachelor	231	57.6	57.6	80.3
Master or higher	79	19.7	19.7	100.0
Total	401	100.0	100.0	

From the perspective of education level, it is mainly concentrated in the undergraduate level, with 231 undergraduates, accounting for 57.6%, followed by Master or higher, Diploma, Senior high School or technical secondary school. At the bottom of the list was Junior high School or below (Table 10). It shows that the education level of consumers in sports towns belongs to the middle and high level.

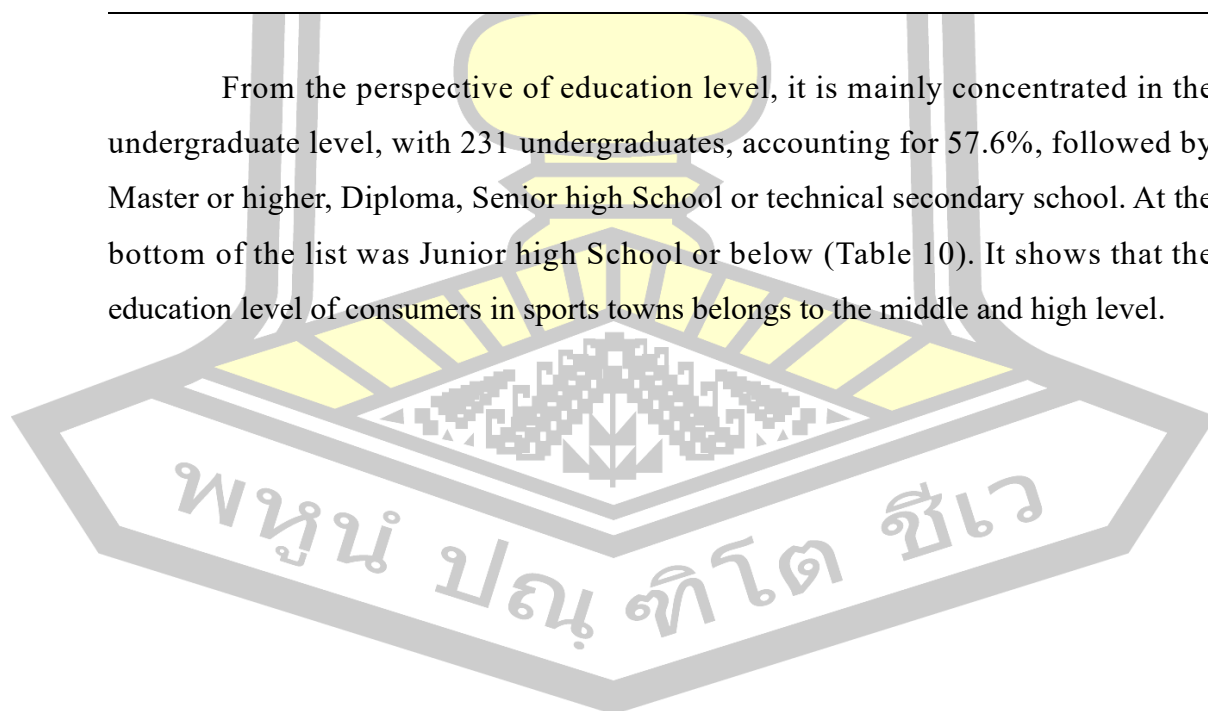


Table 11 Sports Town Consumer Occupation

Sports Town Consumer Occupation		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Efficient	Civil Servants or Personnel of Public Institutions	180	44.9	44.9	44.9
	Personnel of Enterprises	85	21.2	21.2	66.1
	Self-employed	59	14.7	14.7	80.8
	Student	46	11.5	11.5	92.3
	Retiree	1	.2	.2	92.5
	Farmer	17	4.2	4.2	96.8
	Others	13	3.2	3.2	100.0
	Total	401	100.0	100.0	

In terms of occupation, the number of civil servants and public institutions is the largest, 180 people, accounting for 44.9%, followed by enterprise units and freelance workers, 85 and 59 people, accounting for 21.2% and 14.7%, students, farmers, retirees, etc. (Table 11), the proportion is slightly lower, which is caused by the different values of each occupation for sports.

Table 12 Sports Town Consumer Monthly Income

Sports Town Consumer Monthly Income		Frequency	Percentage	Valid Percentage
Efficient	2500 Yuan and below	47	11.7	11.7
	2501 yuan to 5000 yuan	123	30.7	42.4
	5001 yuan to 8000 yuan	132	32.9	75.3
	8001 yuan to 10000 yuan	59	14.7	90.0
	10001 yuan and above	40	10.0	100.0
	Total	401	100.0	100.0

From the perspective of monthly income, this is related to the occupation of the respondents, most respondents concentrated in 5001 to 8000 yuan, accounting for 32.9%, and some respondents' monthly income between 2501 and 5000 yuan, accounting for 30.7% (Table 12). This means that the salary of most civil servants and public institutions is around 5,000. The second is 8001-10000 yuan, more than 10,000 yuan and less than 2,500 yuan, and the less than 2,500 yuan is mainly concentrated in students, whose economic source is their parents and part-time jobs, but they also like sports, so they have become consumers of sports towns.

Table 13 Sports Town Consumer Cost Amount

Sports Town Consumer Cost Amount	Frequency	Percentage	Valid	Cumulative
			Percentage	Percentage
Less than 200 yuan	143	35.7	35.7	35.7
200 yuan to 500 yuan	161	40.1	40.1	75.8
501 yuan to 800 yuan	56	14.0	14.0	89.8
801 yuan to 1000 yuan	23	5.7	5.7	95.5
1001 yuan or more	18	4.5	4.5	100.0
Total	401	100.0	100.0	

In terms of the cost of sports consumption in sports towns with sports characteristics, 161 respondents chose 200-500 yuan, accounting for 40.1%, 97 people chose 501 yuan or more, accounting for 24.2%, and 35.7% chose less than 200 yuan, which proves that most consumers in sports towns are willing to pay reasonable fees on sports (Table 13).

Table 14 Frequency statistics of participation in sports

	item	multiple responses		Case
		N	percentage	percentage
Sports ^a	Marathon	100	8.1%	24.9%
	Dragon Boat	38	3.1%	9.5%
	Sailing	16	1.3%	4.0%
	Rowing	14	1.1%	3.5%
	Paragliding	16	1.3%	4.0%
	Canoeing	16	1.3%	4.0%
	Motorsport	44	3.6%	11.0%
	Cross Country	45	3.6%	11.2%
	Snow Sports	66	5.3%	16.5%
	Golf	21	1.7%	5.2%
	Fitness Walking	135	10.9%	33.7%
	Cycling	126	10.2%	31.4%
	Camping	89	7.2%	22.2%
	Basic Ball Games	68	5.5%	17.0%
	Fishing	63	5.1%	15.7%
	Mountaineering	115	9.3%	28.7%
	Watching Sporting Events	114	9.2%	28.4%
	Participating In Sporting Festivals	86	7.0%	21.4%
	Others	62	5.0%	15.5%
Total		1234	100.0%	307.7%

For the participation in sports, multiple responses of SPSS were used to calculate their frequency. According to the data analysis, the total frequency was 1234 times, among which the fitness walking and cycling were 135 times and 126 times, accounting for 33.7% and 31.4% respectively. The other items are mountaineering, watching sports events, marathon, camping and participating in sports festivals, which account for more than 20%. The items with less participation are sailing, rowing,

paragliding, canoeing and golf, with about 20 people participating in these items, accounting for a smaller proportion (Table 14). The reason is that these projects have certain technical requirements, the popularity is not very wide, so the number of participants is small.

Sports characteristic town market segmentation

According to the market segmentation theory, the questionnaire in this study is divided into four dimensions: Geographical Segmentation (GS), Demographic Segmentation (DS), Psychological Segmentation (PS) and Behavioral Segmentation (BS). Based on the screening and prediction of the expert IOC, 60 questions were finalized (Appendix C). The geographic segmentation consists of four questions, named GS9, GS10, GS11, and GS12. The demographic breakdown consists of five questions, named DS13, DS14, DS15, DS16, and DS17. The psychological subdivision consists of 15 questions named PS18, PS19, PS20, PS21, PS22, PS23, PS24, PS25, PS26, PS27, PS28, PS29, PS30, PS31, and PS32. The behavioral breakdown includes 36 questions, They are named BS33, BS34, BS35, BS36, BS37, BS38, BS39, BS40, BS41, BS42, BS43, BS44, BS46, BS47, BS48, BS49, BS50, BS51, BS52, BS53, BS54, BS55, BS56, BS57, BS58, BS59, BS60.

Table 15 Questionnaire reliability statistics

Dimensions	Cronbach's Alpha	Cronbach's Alpha based on standardized terms	Number of terms
GS	.730	.733	4
DS	.838	.843	5
PS	.885	.890	15
BS	.930	.947	36
Total	.951	.960	60

The internal consistency of the scale was used for reliability test, and the α value of Cronbach was analyzed by SPSS, and the reliability of the questionnaire was tested. Cronbach's α value cannot be lower than 0.7, 0.8 is considered a good coefficient, Cronbach's α value reaches 0.9, indicating high confidence. Cronbach's

Alpha value was 0.730 for 4 questions of geographical subdivision, 0.838 for 5 questions of population subdivision, and 0.885 for 15 questions of psychological subdivision. The Cronbach's Alpha value for the 36 questions in the behavioral subdivision is 0.930, and the total Cronbach's Alpha value for the four dimensions is 0.951. It indicates that the reliability of the questionnaire is high (Table 15).

In this study, KMO test and Bartlett sphericity test were used to test its four dimensions. The KMO test, or Kaiser-Meyer-Olkin test, is an index used to compare simple and partial correlations between variables. This test statistic takes values between 0 and 1 and is used to evaluate the correlation between variables and the applicability of factor analysis. When the KMO value is close to 1, it indicates that it is suitable for factor analysis, while when the KMO value is close to 0, it indicates that the correlation between variables is weak, and it is not suitable for factor analysis. The Bartlett sphericity test is to see whether the data comes from the population obeying the multivariate normal distribution. If the P value is <0.05 , it just indicates that the data comes from the population with normal distribution, which is suitable for further analysis. If $KMO > 0.7$ and the significance of Bartlett sphericity test < 0.05 , it is suitable for factor analysis.

Table 16 Statistical Table of Mean and SD of Geographical Segmentation

Index	Mean	SD	N
GS9	4.0773	1.02054	401
GS10	4.3641	.86724	401
GS11	4.3042	.91772	401
GS12	4.0000	1.04403	401

In geographical segmentation, the mean and standard deviation of GS9 considering town size are 4.0773 ± 1.02054 , the mean and standard deviation of GS10 climate are 4.3641 ± 0.86724 , and the mean and standard deviation of GS11 traffic are 4.3042 ± 0.91772 . The mean and standard deviation of the GS12 terrain are 4.0 ± 1.04403 (Table 16). The four values were analyzed by factor analysis, and the KMO value of the circumference and Bartlett sphericity test value were calculated.

Finally, the KMO value was equal to 0.665, and KMO value <0.7 , indicating that the correlation between variables was weak, and it was not suitable for factor analysis.

Table 17 Statistical Table of Mean and SD of Demographic Segmentation

Index	Mean	SD	N
DS13	3.1920	1.33061	401
DS14	3.9651	1.05061	401
DS15	3.7481	1.17639	401
DS16	3.6584	1.21881	401
DS17	2.6958	1.40257	401

Table 18 Interterm Correlation Matrix of Demographic Segmentation

Index	DS13	DS14	DS15	DS16	DS17
DS13	1.000	.557	.548	.565	.499
DS14	.557	1.000	.579	.537	.329
DS15	.548	.579	1.000	.707	.382
DS16	.565	.537	.707	1.000	.483
DS17	.499	.329	.382	.483	1.000

In Demographic segmentation, among the five factors, the mean value of DS17 religious factor is 2.6958, which is less than 3, indicating that most respondents believe that this factor has little impact on their participation in sports characteristic town movement. The mean value of DS13 gender factor is 3.192, which is greater than 3 but less than 3.6, indicating that the influence factor is average (Table 17). The most influential factors are income, occupation and education level. The standard deviation values are all between 1 and 2, indicating that the data distribution is relatively concentrated. In the value of the correlation matrix, the closer the value is to

1, the greater the correlation is. DS15 occupation and DS16 education have the largest correlation, with a value of 0.707 (Table 18).

In the factor of demographic segmentation, using the factor analysis of the five values (gender, income, occupation, education, religion) was analyzed, and calculating the circumference of KMO, ultimately, KMO value equal to 0.817, and explain the correlation between variables is strong, The data come from normal distribution population and are suitable for factor analysis.

Table 19 Statistical Table of Mean and SD of Psychological Segmentation

Index	Mean	SD	N
PS18	3.7706	1.15855	401
PS19	3.4838	1.18548	401
PS20	3.9800	.98722	401
PS21	4.1771	.79754	401
PS22	4.0948	.80062	401
PS23	4.1771	.75569	401
PS24	3.9277	.98603	401
PS25	4.1097	.89885	401
PS26	4.1796	.82927	401
PS27	4.4763	.60833	401
PS28	3.8678	.93273	401
PS29	3.8504	.93944	401
PS30	3.5486	1.09236	401
PS31	3.9701	.93760	401
PS32	3.5037	1.11383	401

There are 15 questions in psychological segmentation, and the mean value of each question is more than 3, indicating that most respondents agree with the question. The standard deviation values are all between 1 and 2, indicating that the data distribution is relatively concentrated (Table 19).

Among the factors of psychological Segmentation, the 15 values were analyzed by factor analysis, and the KMO value of the circumference were calculated. Finally, the KMO value was 0.871, indicating that the correlation between variables is strong, and the data is from the normal distribution population. Suitable for factor analysis.

Table 20 Statistical Table of Mean and SD of Behavioral Segmentation

Index	Mean	SD	N
BS33	3.4190	1.24460	401
BS34	4.3042	.73294	401
BS35	4.1322	.83065	401
BS36	4.3491	2.60822	401
BS37	4.1446	.87694	401
BS38	4.3990	.66363	401
BS39	4.4339	.63737	401
BS40	4.2569	.75918	401
BS41	4.0923	.88542	401
BS42	4.2145	.81172	401
BS43	4.1372	.84773	401
BS44	4.1222	.82008	401
BS45	4.0748	.89129	401
BS46	2.7431	1.13858	401
BS47	3.6908	1.18285	401
BS48	3.8329	1.00225	401
BS49	3.9476	1.02944	401
BS50	1.9302	.71422	401
BS51	3.2768	1.28868	401
BS52	4.0274	.88416	401
BS53	3.6708	1.09607	401
BS54	4.0798	.80537	401
BS55	4.1322	.75828	401
BS56	4.0399	.79900	401

Table 20 (Continued)

Index	Mean	SD	N
BS57	4.0349	.82388	401
BS58	3.9551	.88768	401
BS59	3.8678	.93541	401
BS60	3.8803	.90589	401
BS61	4.0349	.85661	401
BS62	3.9401	.90632	401
BS63	4.0599	.80710	401
BS64	3.7905	.99800	401
BS65	4.2170	.77156	401
BS66	4.3741	.67433	401
BS67	4.3017	.72196	401
BS68	4.2020	.78524	401

There are 36 questions in the behavior subdivision. From the statistical table of mean value and standard deviation, except for BS46 and BS50, the mean value of each question exceeds 3 (Table 20), indicating that most respondents agree with the question. The BS46 question is: "I am a first-time user of Sports Town." Most respondents disagree with this view, which proves that most consumers have participated in sports town many times. The BS50 question is: "I will not go to sports town again", and the majority of respondents do not agree with this view, which proves that most consumers are willing to go to sports town again. Except for BS36, the standard deviation values of other problems are between 1 and 2, indicating that the data distribution is relatively concentrated (Table 20). The question of BS36 is: "I will choose to come to sports town in winter and summer vacation", and the standard deviation value is 2.60822, which is more than 2. Indicating that the interviewees have a slightly higher degree of dispersion on this question, which may be related to the occupation of consumers, except for the occupation of teachers, other occupations have no summer vacation, so their travel is limited. The KMO value of the circumference are calculated. Finally, the KMO value is equal to 0.941, indicating that

the correlation between variables is strong, and the data comes from the normal distribution population, which is suitable for factor analysis.

Step 2: Interview

The interview results are divided into the interviews of the managers of government departments and the interviews of the managers of sports towns. Detailed interview transcripts are in the appendix. (Appendix G)

The results of interviews with government departments

The results of interviews with government departments are divided into two parts:

Part 1: Interview results and general information about interviewees

The general information of the four interviewers is 3 men, 1 woman, 2 managers of the Sports Bureau and 2 managers of the National Development and Reform Commission. They clearly understand the market of sports towns and have at least 5 years of work experience.

Part 2: Interview information about market evaluation of sports characteristic town

According to the interview data of the managers of the sports bureau or the Development and Reform Bureau, the researchers summarized the interview results according to the structural interview. The following are the results of 8 questions interviewed by 4 respondents:

Q1: Introduce the basic situation and market development status of sports characteristic town.

According to the interview results of the four interviewees, we can conclude: The first batch of 96 pilot towns with national sports characteristics are mainly distributed in the Yangtze River basin and the lower reaches of the Yellow River, forming the core circle of Shanghai, Zhejiang, Jiangsu and Anhui, the middle and lower reaches of the Yangtze River and the Beijing-Tianjin-Hebei core circle. China attaches great importance to the development of sports towns, provides policy support, and the market development is on the rise.

Q2: Introduce the basic situation of sports characteristic town consumer groups

According to the interview results of the four interviewees, we can conclude: Consumer groups are sports enthusiasts, strong interest, with a certain consumption power, have free time. The health and leisure category is favored by older consumers, challenging sports are favored by young people, and sports competitions are favored by athletes and high-level athletes.

Q3: What factors do you think affect the demand and behavior of consumers in sports towns?

According to the interview results of the four interviewees, we can conclude: Factors include interest, time, monthly income, education level, age, gender, personality, lifestyle, travel mode, transportation, travel time, climate, popularity, social class, living standard, publicity, participation motivation, sports content, experience, loyalty, town facilities and services, sports prices and so on.

Q4: What do you think are the criteria for consumer market segmentation in sports towns? How to break it down?

According to the interview results of the four interviewees, we can conclude: Market segmentation has four dimensions, including geographical segmentation, demographic characteristics, psycho statistical characteristics and behavioral factors. It mainly includes geographical location, natural environment, city size, climate, income level, family demographic structure, participation motivation, preference, timing, interests, brand loyalty, etc., which is divided according to the differences in consumer demand in the overall market, so as to achieve the goal of satisfying different consumers.

Q5: How do you think sports towns should select target markets?

According to the interview results of the four interviewees, we can conclude: Target market selection has no differentiated market strategy, differentiated market strategy and concentrated market strategy. Some sports towns choose a dense single market, some sports towns choose 2 or a few market segments as the target market, the implementation of specialized production and sales, each has its own strengths.

Q6: In your opinion, from what aspects should sports towns be positioned in the market?

According to the interview results of the four interviewees, we can conclude: In the positioning to consider the target customer positioning, target customer's age, attitude, purchasing power and so on. Consider product positioning, product includes function, input, price, quality, etc. Consider business positioning, including advertising, staff competence, knowledge, and so on.

Q7: What do you think are the indexes for the market evaluation of sports towns? What are the most important indexes?

According to the interview results of the four interviewees, we can conclude: There is no specific market evaluation index model. Using the development evaluation model, industry, function, ecology and other indexes appear most frequently, while the market indexes include income, scale, market operation, profit and so on.

Q8: Talk about your views and suggestions on the current development of sports town market in China.

According to the interview results of the four interviewees, we can conclude: Make full use of national policy support, take independent investment as the main, seek subsidies from the government as the supplement, pay attention to the positioning of the main sports industry, strengthen brand building and publicity.

The results of interviews with managers of sports towns

The general information of the four interviewers is four men, all of whom are managers of sports towns with at least 5 years of management experience in sports towns and are familiar with the market operation of sports towns. According to the interview results of the four interviewees, we can conclude:

Q1: Introduce the basic situation and market development status of sports characteristic towns in the area.

This paper introduces the basic situation of Fuyang Yinhu Smart Sports Town, Rizhao Olympic water sports Town, Zhongnan Shanzhai sports and leisure town, Longyangxia Sports town, all of which show good market prospect.

Q2: Introduce the basic situation of consumer groups in sports towns with local characteristics.

Consumers in small towns with sports characteristics are different. Fuyang consumers have a higher social class and income level. Rizhao has high consumer loyalty, and the end of south Shanzhai consumers are extensive, not subject to age and income restrictions, for different consumers to open different projects, most of the consumers in Longyang Gorge are bicycle enthusiasts.

Q3: What factors do you think affect the demand and behavior of consumers in sports towns in your region? Why?

Factors include consumers' income, hobbies, town facilities, town services, satisfaction with the town, time, purchasing power, climate, region, transportation, experience, publicity, participation motivation, consumption awareness, long-term journey, the number of visitors, climate, geographical location and so on.

Q4: What do you think is the standard of consumer market segmentation in sports characteristic towns in your region? How to break it down?

The market segmentation of sports town is guided by sports consumers, and there are all kinds of consumers with different needs in the market. It is necessary to find the difference between the needs of different consumers, and then classify consumers with basically the same needs into one category, including psychological segmentation, population segmentation and behavioral segmentation.

Q5: How do you think sports towns in your region should select target markets?

According to their own main products to determine the basic development direction, give priority to choose their own favorable target market, highlight the sports characteristics, choose differential market or concentrated market.

Q6: Do you think the location of sports towns in your area is accurate? From which aspects should the market be positioned?

The market positioning of the four regions is accurate, and they all play to their greatest advantages, taking full account of local characteristics and consumer needs.

Q7: What do you think are the indexes for the market evaluation of sports towns? What are the most important indexes?

Evaluation index should include the level of industrial competitiveness, scale, market visibility, market demand, sports industry efficiency, infrastructure, overall image, price, product, environment, etc. Service, safety, town employee literacy, consumer purchasing power, destination accessibility, sports tourism value attribute, sports tourism resources, residents' quality of life, economic development, ecological environment, social management, public services, etc.

Q8: Talk about your views and suggestions on the current development of sports town market in China.

Make full use of regional natural environment and other advantages, develop local sports characteristic project industry, increase publicity, improve the economic development of sports town.

In interviews with four managers of small towns with sports characteristics, the managers made analysis from the perspective of the town. The interviewees expressed their views on the main factors affecting consumer demand and behavior, market segmentation, market targeting, market positioning, and evaluation of market indexes, and finally put forward suggestions.

According to the interview research results, the interview summary was sent to the interviewees again. The researcher held a collective online meeting through Tencent Meeting to solicit opinions on the interview summary. The results showed that all interviewees agreed with the interview results.

Phase 2

This stage is divided into two steps. The first step is to use the Delphi method to let 13 experts screen the market evaluation index of sports characteristic towns, and form the final indexes after three rounds. The second step is to use analytic hierarchy process to calculate the weight value of each index.

The first step: Delphi method: index construction

Based on STP theory, a large number of literature review and interviews and other preliminary research, the First-level indexes of market evaluation of sports towns with characteristics are constructed, including 4 first-level index, 12 second-level index and 53 third-level index.

Table 21 Sports characteristic town market evaluation Initial index

A1 Products	B1 Quality	C1 Quality level
		C2 Quality consistency
		C3 Satisfaction
		C4 Sense of experience
	B2 Cost	C5 Government fund support
		C6 Private capital investment
		C7 Total investment in sports products
		C8 Sports product investment ratio
		C9 Potential risk
	B3 Price	C10 Sports product ticket prices
		C11 Total output value of sports products
		C12 Sports product profit ratio
	B4 Features	C13 Sports characteristic town area
		C14 Sports characteristic town style
		C15 Sports characteristic town packaging
		C16 Sports characteristic town attribute
		C17 Sports characteristic town product popularity
		C18 Sports characteristic town product influence
	B5 Function	C19 Functional partition
		C20 Degree of functional innovation
		C21 Functional role
		C22 Functional effect
A2 Enterprises	B6 Enterprise image	C23 Enterprise scale
		C24 enterprise culture
		C25 Enterprise environment
	B7 Employee competence	C26 Culture and knowledge level
		C27 Experience
		C28 Service quality
		C29 Code of conduct
		C30 Communication

Table 21 (Continued)

A3 Competitiveness	B8 Brand core competitiveness	C31 Brand image
		C32 Brand culture
		C33 Brand value
		C34 Brand price
	B9 Management service competitiveness	C35 Management mode
		C36 Service attitude
		C37 Geographical topography
A4 Consumers	B10 Basic information	C38 Age
		C39 Occupation
		C40 Gender
		C41 Social stratum
		C42 Religion
		C43 Education
	B11 Attitude	C44 Participation degree
		C45 Participation motivation
		C46 Recognition degree
		C47 Liking degree
		C48 Loyalty
	B12 Purchasing power	C49 Disposable income
		C50 Monthly income
		C51 Disposable time
		C52 Marketing tools
		C53 Buying desire

According to the market positioning theory, it is divided into four parts, A1 products, A2 enterprises, A3 competitiveness and A4 consumers. A1 products include B1 quality, B2 cost, B3 price, B4 features, B5 function. There were a total of 5 second-level index. It includes C1 quality level, C2 quality consistency, C3 satisfaction, C4 experience, C5 government funding support, C6 private capital investment, C7 total investment in sports products, C8 investment proportion in sports products, C9 potential risks, C10 ticket prices, C11 total output value of sports

products, C12 profit ratio of sports products, and C13 sports characteristic town. There are 22 third-level indexes: volume, C14 sports characteristic town style, C15 sports characteristic town packaging, C16 sports characteristic town attribute, C17 sports characteristic town product popularity, C18 sports characteristic town product influence, C19 function partition, C20 function innovation degree, C21 function and C22 function effect. A2 enterprise includes two second-level indexes: B6 corporate image and B7 employee ability, including C23 enterprise scale, C24 corporate culture, C25 corporate environment, C26 culture and knowledge level, C27 experience, C28 service quality, C29 code of conduct, and C30 communication and exchange. A3 competitiveness includes two second-level indexes: B8 brand core competitiveness and B9 management service competitiveness, including seven tertiary indexes: C31 brand image, C32 brand culture, C33 brand value, C34 brand price, C35 management mode, C36 service attitude and C37 geographical terrain. A4 consumers include B10 basic information, B11 attitude, B12 purchasing power of three second-level indexes, including C38 age, C39 occupation, C40 gender, C41 social class, C42 religion, C43 education, C44 participation, C45 participation motivation, C46 recognition, C47 liking, C48 loyalty, C49 disposable income, C50 monthly income, C51 disposable time, C52 marketing means, C53 purchase desire. 16 Tertiary indexes (Table 21).

The first round of expert consultation results and analysis

Thirteen experts were invited to conduct the first round of expert consultation on the market evaluation index of small towns with sports characteristics using the "Construction of Expert Evaluation Table for market evaluation index of small towns with sports characteristics" (Appendix H). The First-level indexes were scored on a five-level scale: 5 = very important, 4 = relatively important, 3 = generally important, 2 = not important, 1 = very unimportant. According to the feedback from the first round of Delphi survey experts:

Expert opinion and modification of first-level index

From the point of view of statistical quantity, the average values of A1 products, A2 enterprises and A4 consumers are 4.77, 4.69 and 4.61 respectively, and the coefficient of variation is less than 0.25. It can be seen that the experts basically recognize the division of the three first-level indexes of A1 products, A2 enterprises and A4 consumers. The mean value of A3 competitiveness is 3.38, less than 4, and CV is

0.28, greater than 0.25, indicating a large degree of dispersion (Table 22). Some experts pointed out that A3 competitiveness should be reflected in the competitiveness of products, enterprises and consumers, and should not be listed as a single first-level index, suggesting that it should be deleted. According to the data and the opinions of experts, the first-level index A3 competitiveness will be deleted and 3 first-level index will be retained.

Table 22 The first round of first-level index statistical parameters

	N	Mean	SD	Skewness	Kurtosis	CV
A1	13	4.7692	.43853	-1.451	.095	0.09195
A2	13	4.6923	.48038	-.946	-1.339	0.102377
A3	13	3.3846	.96077	.386	-.443	0.283864
A4	13	4.6154	.50637	-.539	-2.056	0.109713

Expert opinions and modifications of second-level index

From the statistical point of view, except for the two second-level indexes of B3 price and B9 management service competitiveness, the average value of the other 10 items is more than 4, and the coefficient of variation of all indexes is less than 0.25 (Table 23), which proves that experts are relatively recognized by these second-level indexes and the degree of dispersion is small. Some experts clearly pointed out that B3 price and B4 cost are combined, and it is suggested to modify the index to "input-output benefit", which can better explain the market problem. Due to the deletion of the A3 first-level index, its two second-level index B8 brand core competitiveness and B9 management service competitiveness, experts pointed out that B8 should be adjusted to the B5 function of the third-level index, while B9 can be deleted. After the first round of screening and modification, 9 second-level index are retained.

Table 23 The first round of second-level index statistical parameters

	N	Mean	SD	Skewness	Kurtosis	CV
B1	13	4.6154	.50637	-.539	-2.056	0.109713
B2	13	4.0000	.57735	.000	1.036	0.144338
B3	13	3.8462	.68874	.203	-.496	0.179072
B4	13	4.7692	.43853	-1.451	.095	0.09195
B5	13	4.6154	.50637	-.539	-2.056	0.109713
B6	13	4.2308	.43853	1.451	.095	0.103652
B7	13	4.5385	.66023	-1.191	.645	0.145473
B8	13	4.4615	.51887	.175	-2.364	0.116299
B9	13	3.9231	.49355	-.262	2.573	0.125806
B10	13	4.0769	.49355	.262	2.573	0.121059
B11	13	4.6923	.48038	-.946	-1.339	0.102377
B12	13	4.6923	.48038	-.946	-1.339	0.102377

Expert opinion and modification of third-level index

From the statistical point of view, the average of C4 experience, C9 potential risk, C16 sports characteristics, C21 function, C29 behavior norms, C31 brand image, C32 brand culture, C37 geographical terrain, C40 gender, C42 religion, C47 likeability, and C52 marketing means are all lower than 4. In addition, the coefficient of variation of C4, C37, C40, C42 and C47 exceeds 0.25, indicating a large degree of dispersion of these five indexes (Table 24). According to the above data, all the 12 second-level index with an average of less than 4 and a coefficient of variation greater than 0.25 are deleted. Some experts pointed out that because the C34 brand price is repeated with the B3 price, it is recommended to delete or combine the B3 third-level index. The C35 management mode should be included in the third-level index of the B6 corporate image. The C36 service attitude should be included in the C28 quality of service, so it is recommended to delete it. The C33 brand value, although the average value is higher than 0.4, must also be deleted with the deletion of the first index and the adjustment of the second-level index. Some experts pointed out that in the third-level indexes of B9 purchasing power should increase the

"purchase frequency" this index, after all adjustments, a total of 15 third-level index are deleted, and 2 "brand core competitiveness" and "purchase frequency" are added, and 53 are screened into 40 third-level index.

Table 24 The first round of third-level index statistical parameters

	N	Mean	SD	Skewness	Kurtosis	CV
C1	13	4.7692	.43853	-1.451	.095	0.0919
C2	13	4.5385	.66023	-1.191	.645	0.1455
C3	13	4.1538	.55470	.143	.901	0.1335
C4	13	3.3846	.96077	.386	-.443	0.2839
C5	13	4.6154	.50637	-.539	-2.056	0.1097
C6	13	4.0000	.57735	.000	1.036	0.1443
C7	13	4.0000	.57735	.000	1.036	0.1443
C8	13	4.6923	.48038	-.946	-1.339	0.1024
C9	13	3.2308	.72501	-.395	-.755	0.2244
C10	13	4.2308	.43853	1.451	.095	0.1037
C11	13	4.5385	.66023	-1.191	.645	0.1455
C12	13	4.0769	.49355	.262	2.573	0.1211
C13	13	4.5385	.66023	-1.191	.645	0.1455
C14	13	4.6923	.48038	-.946	-1.339	0.1024
C15	13	4.7692	.43853	-1.451	.095	0.0919
C16	13	3.3077	.63043	-.307	-.317	0.1906
C17	13	4.6154	.50637	-.539	-2.056	0.1097
C18	13	4.0000	.57735	.000	1.036	0.1443
C19	13	4.6154	.50637	-.539	-2.056	0.1097
C20	13	4.1538	.55470	.143	.901	0.1335
C21	13	3.2308	.72501	-.395	-.755	0.2244
C22	13	4.7692	.43853	-1.451	.095	0.0919
C23	13	4.6154	.50637	-.539	-2.056	0.1097
C24	13	4.2308	.43853	1.451	.095	0.1037
C25	13	4.5385	.66023	-1.191	.645	0.1455

Table 24 (Continued)

	N	Mean	SD	Skewness	Kurtosis	CV
C26	13	4.0769	.49355	.262	2.573	0.1211
C27	13	4.6923	.48038	-.946	-1.339	0.1024
C28	13	4.6923	.48038	-.946	-1.339	0.1024
C29	13	3.3846	.76795	.456	.517	0.2269
C30	13	4.6923	.48038	-.946	-1.339	0.1024
C31	13	3.5385	.77625	1.114	-.155	0.2194
C32	13	3.6154	.76795	.849	-.580	0.2124
C33	13	4.5385	.51887	-.175	-2.364	0.1143
C34	13	4.0000	.57735	.000	1.036	0.1443
C35	13	4.3077	.48038	.946	-1.339	0.1115
C36	13	4.3846	.50637	.539	-2.056	0.1155
C37	13	3.0000	1.00000	-.591	-.618	0.3333
C38	13	4.2308	.43853	1.451	.095	0.1037
C39	13	4.5385	.66023	-1.191	.645	0.1455
C40	13	3.0769	1.18754	-.877	-.808	0.3860
C41	13	4.0000	.40825	.000	6.000	0.1021
C42	13	2.2308	1.23517	.427	-1.464	0.5537
C43	13	4.6923	.48038	-.946	-1.339	0.1024
C44	13	4.7692	.43853	-1.451	.095	0.0919
C45	13	4.6923	.48038	-.946	-1.339	0.1024
C46	13	4.0769	.64051	-.053	.061	0.1571
C47	13	3.3846	.96077	.386	-.443	0.2839
C48	13	4.6154	.50637	-.539	-2.056	0.1097
C49	13	4.2308	.43853	1.451	.095	0.1037
C50	13	4.0000	.57735	.000	1.036	0.1443
C51	13	4.6154	.50637	-.539	-2.056	0.1097
C52	13	3.3077	.63043	-.307	-.317	0.1906
C53	13	4.5385	.66023	-1.191	.645	0.1455

After the results of the first round of screening by the experts, the experts suggested deleting 1 first-level index and retaining 3 first-level indexes. Delete 2 second-level indexes, modify 2 second-level indexes to merge them into one, and retain eight second-level indexes. Delete 15 third-level indexes, modify 1 third-level index, and add 2 third-level indexes. Finally, the results of the first round were determined as 3 first-level indexes, 9 second-level indexes and 40 third-level indexes (Table 25).



Table 25 First round results of Delphi method

First-level index	Result	Second-level index	Result	Third-level index	Result	Suggestion
A1 Products	Keep	B1 Quality	Keep	C1 Quality level	Keep	Increase the "brand core competitiveness", "purchase frequency" 2 third-level indexes
				C2 Quality consistency	Keep	
				C3 Satisfaction	Keep	
				C4 Sense of experience	Delete	
		B2 Cost	Keep	C5 Government fund support	Keep	
				C6 Private capital investment	Keep	
				C7 Total investment in sports products	Keep	
				C8 Sports product investment ratio	Keep	
				C9 Potential risk	Delete	
		B3 Price	Modify	C10 Sports product ticket prices	Keep	
				C11 Total output value of sports products	Keep	
				C12 Sports product profit ratio	Keep	
				C13 Sports characteristic town area	Keep	
		B4 Features	Modify	C14 Sports characteristic town style	Keep	
				C15 Sports characteristic town packaging	Keep	
				C16 Sports characteristic town attribute	Delete	
				C17 Sports characteristic town product popularity	Keep	
				C18 Sports characteristic town product influence	Keep	
A2 Enterprises	Keep	B5 Function	Keep	C19 Functional partition	Keep	
				C20 Degree of functional innovation	Keep	
				C21 Functional role	Delete	
				C22 Functional effect	Keep	
		B6 Enterprise image	Keep	C23 Enterprise scale	Keep	
				C24 Enterprise culture	Keep	
				C25 Enterprise environment	Keep	
				C26 Culture and knowledge level	Keep	
		B7 Employee competence	Keep	C27 Experience	Keep	
				C28 Service quality	Keep	

Table 25 (Continued)

First-level index	Result	Second-level index	Result	Third-level index	Result	Suggestion
A3 Competitiveness	Delete	B8 Brand core competitiveness	Delete	C29 Code of conduct	Delete	
				C30 Communication	Keep	
				C31 Brand image	Delete	
				C32 Brand culture	Delete	
				C33 Brand value	Delete	
	Delete	B9 Management service competitiveness	Delete	C34 Brand price	Delete	
				C35 Management mode	Modify	
				C36 Service attitude	Delete	
				C37 Geographical topography	Delete	
				C38 Age	Keep	
A4 Consumers	Keep	B10 Basic information	Keep	C39 Occupation	Keep	
				C40 Gender	Delete	
				C41 Social stratum	Keep	
				C42 Religion	Delete	
				C43 Education	Keep	
		B11 Attitude	Keep	C44 Participation degree	Keep	
				C45 Participation motivation	Keep	
				C46 Recognition degree	Keep	
				C47 Liking degree	Delete	
				C48 Loyalty	Keep	
	Keep	B12 Purchasing power	Keep	C49 Disposable income	Keep	
				C50 Monthly income	Keep	
				C51 Disposable time	Keep	
				C52 Marketing tools	Delete	
				C53 Buying desire	Keep	

The second round of expert consultation results and analysis

The final indicators derived from the first round of the Delphi method are renamed and re-issued to the experts in the form of a questionnaire (Appendix J), and the conclusions are recovered.

Expert opinion and modification of first-level index

From the point of view of statistical quantity, the average values of A1 products, A2 enterprises and A3 consumers are 4.85, 4.76 and 4.85 respectively, and the coefficient of variation is less than 0.25 (Table 26). It can be seen that the experts are very much recognized for the division of the three first-level index of A1, A2 and A3. Therefore, all three first-level index will be retained.

Table 26 The second round of first-level index statistical parameters

	N	Mean	SD	Skewness	Kurtosis	CV
A1	13	4.8462	.37553	-2.179	3.223	0.077491
A2	13	4.7692	.43853	-1.451	.095	0.09195
A3	13	4.8462	.37553	-2.179	3.223	0.077491

Expert opinions and modifications of second-level index. From the statistical point of view, the mean value of all second-level index is greater than 4, and the standard deviation and coefficient of variation are in a reasonable range (Table 27), indicating that experts very much recognize these nine second-level index, therefore, these nine second-level index will be retained. However, some experts have suggested that the names of the three indexes B1 quality, B3 characteristics and B4 function should be added with "product" and modified to "product quality", "product characteristics" and "product function".

Table 27 The second round of second-level index statistical parameters

	N	Mean	SD	Skewness	Kurtosis	CV
B1	13	4.7692	.43853	-1.451	.095	0.09195
B2	13	4.6923	.48038	-.946	-1.339	0.102377
B3	13	4.7692	.43853	-1.451	.095	0.09195
B4	13	4.6154	.50637	-.539	-2.056	0.109713
B5	13	4.3077	.48038	.946	-1.339	0.111518
B6	13	4.6923	.48038	-.946	-1.339	0.102377
B7	13	4.3846	.50637	.539	-2.056	0.115488
B8	13	4.7692	.43853	-1.451	.095	0.09195
B9	13	4.6923	.48038	-.946	-1.339	0.102377

Expert opinions and modifications of third-level index

From the statistical point of view, the average values of the four third-level index, C6 total investment in sports products, C15 influence of sports featured town products, C30 social class and C37 monthly income, are all lower than 4. Although the coefficient of variation is lower than 0.25, the value is not good, close to 0.25 (Table 28). Therefore, these four indexes are deleted in the second round of index screening. Experts pointed out that it is recommended to modify the "C7 sports product investment ratio" to "sports product investment ratio", modify the "C11 sports characteristic town area" to "sports product scale", modify the "C12 sports characteristic town style" to "sports product style", modify the "C13 sports characteristic town packaging" to "sports product packaging", The "C14 sports characteristic town product awareness" is modified to "sports product awareness", and the "C16 brand core competitiveness" is modified to "sports brand core competitiveness", experts believe that this is more appropriate to the theme. After modification, the final form of three levels of indexes 36.

Table 28 The second round of third-level index statistical parameters

	N	Mean	SD	Skewness	Kurtosis	CV
C1	13	4.7692	.43853	-1.451	.095	0.0919
C2	13	4.5385	.66023	-1.191	.645	0.1455
C3	13	4.2308	.43853	1.451	.095	0.1037
C4	13	4.6154	.50637	-.539	-2.056	0.1097
C5	13	4.3846	.50637	.539	-2.056	0.1155
C6	13	3.7692	.43853	-1.451	.095	0.1163
C7	13	4.6923	.48038	-.946	-1.339	0.1024
C8	13	4.3077	.48038	.946	-1.339	0.1115
C9	13	4.5385	.66023	-1.191	.645	0.1455
C10	13	4.1538	.37553	2.179	3.223	0.0904
C11	13	4.6154	.50637	-.539	-2.056	0.1097
C12	13	4.6923	.48038	-.946	-1.339	0.1024
C13	13	4.7692	.43853	-1.451	.095	0.0919
C14	13	4.6154	.50637	-.539	-2.056	0.1097
C15	13	3.5385	.51887	-.175	-2.364	0.1466
C16	13	4.8462	.37553	-2.179	3.223	0.0775
C17	13	4.6154	.50637	-.539	-2.056	0.1097
C18	13	4.2308	.43853	1.451	.095	0.1037
C19	13	4.7692	.43853	-1.451	.095	0.0919
C20	13	4.6154	.50637	-.539	-2.056	0.1097
C21	13	4.2308	.43853	1.451	.095	0.1037
C22	13	4.6154	.50637	-.539	-2.056	0.1097
C23	13	4.6923	.48038	-.946	-1.339	0.1024
C24	13	4.3077	.48038	.946	-1.339	0.1115
C25	13	4.0769	.49355	.262	2.573	0.1211
C26	13	4.6923	.48038	-.946	-1.339	0.1024
C27	13	4.6923	.48038	-.946	-1.339	0.1024

Table 28 (Continued)

	N	Mean	SD	Skewness	Kurtosis	CV
C28	13	4.2308	.43853	1.451	.095	0.1037
C29	13	4.4615	.51887	.175	-2.364	0.1163
C30	13	3.6154	.76795	-1.760	1.615	0.2124
C31	13	4.6923	.48038	-.946	-1.339	0.1024
C32	13	4.7692	.43853	-1.451	.095	0.0919
C33	13	4.6923	.48038	-.946	-1.339	0.1024
C34	13	4.2308	.43853	1.451	.095	0.1037
C35	13	4.6154	.50637	-.539	-2.056	0.1097
C36	13	4.2308	.43853	1.451	.095	0.1037
C37	13	3.5385	.77625	-1.413	.546	0.2194
C38	13	4.6154	.50637	-.539	-2.056	0.1097
C39	13	4.5385	.66023	-1.191	.645	0.1455
C40	13	4.3846	.65044	-.572	-.332	0.1483

After the results of the second round of screening by the experts. The experts are very recognized for the three first-level indexes and will retain them. The nine secondary indicators also meet the requirements, but it is also necessary to make appropriate modifications, adding "product" before the names of the three indicators B1 quality, B3 characteristics and B4 function, and modifying them to "product quality", "product characteristics" and "product function". In the three-level indicators, 4 three-level indicators are deleted and 6 three-level indicators are modified. Finally, the results of the second round were determined as 3 first-level indicators, 9 second-level indicators and 36 third-level indicators (Table 29).

Table 29 Second round results of Delphi method

First-level index	Result	Second-level index	Result	Third-level index	Result	Suggestion
A1 Products	Keep	B1 Quality	Modify	C1 Quality level	Keep	Some experts have suggested that the names of the three indexes B1 quality, B3 characteristics and B4 function should be added with "product" and modified to "product quality", "product characteristics" and "product function". Experts pointed out that it is recommended to modify the "C7 sports product investment ratio" to "sports product investment ratio", modify the "C11 sports characteristic town area" to "sports product scale", modify the "C12 sports characteristic town style" to "sports product style", modify the "C13 sports characteristic town packaging" to "sports product packaging", The "C14 sports characteristic town product awareness" is modified to "sports product awareness", and the "C16 brand awareness" is modified to "sports brand core competitiveness"
				C2 Quality consistency	Keep	
				C3 Satisfaction	Keep	
		B2 Input-output benefit	Keep	C4 Government fund support	Keep	
				C5 Private capital investment	Keep	
				C6 Total investment in sports products	Delete	
				C7 Sports product investment ratio	Modify	
				C8 Sports product ticket prices	Keep	
				C9 Total output value of sports products	Keep	
				C10 Sports product profit ratio	Keep	
		B3 Features	Modify	C11 Sports characteristic town area	Modify	
				C12 Sports characteristic town style	Modify	
				C13 Sports characteristic town packaging	Modify	
				C14 Sports characteristic town product popularity	Modify	
				C15 Sports characteristic town product influence	Delete	
		B4 Function	Modify	C16 Brand core competitiveness	Modify	
				C17 Functional partition	Keep	
				C18 Degree of functional innovation	Keep	
				C19 Functional effect	Keep	

Table 29 (Continued)

First-level index	Result	Second-level index	Result	Third-level index	Result	Suggestion
A2 Enterprises	Keep	B5 Enterprise image	Keep	C20 Enterprise scale	Keep	
				C21 Enterprise culture	Keep	
				C22 Enterprise environment	Keep	
				C23 Management mode	Keep	
		B6 Employee competence	Keep	C24 Culture and knowledge level	Keep	
				C25 Experience	Keep	
				C26 Service quality	Keep	
				C27 Communication	Keep	
		B7 Basic information	Keep	C28 Age	Keep	
				C29 Occupation	Keep	
A3 Consumers	Keep	B8 Attitude	Keep	C30 Social stratum	Delete	
				C31 Education	Keep	
				C32 Participation degree	Keep	
				C33 Participation motivation	Keep	
		B9 Purchasing power	Keep	C34 Recognition degree	Keep	
				C35 Loyalty	Keep	
				C36 Disposable income	Keep	
				C37 Monthly income	Delete	
				C38 Disposable time	Keep	
				C39 Buying desire	Keep	
		C40 Purchase frequency	Keep			

The third round of expert consultation results and analysis

After the screening results of the second round of experts, the indexes of the third round are formed, and the third round of indexes are finally determined to be 3 first-level index, 9 second-level index and 36 third-level index. The indexes of the second round are renamed and re-sent to the experts in the form of questionnaires (Appendix K), and the conclusions are drawn after recovery.

In the second round of screening, the mean value of both primary and second-level index is greater than 4, and the coefficient of variation is lower than 0.25, which is highly recognized by experts, and the deletion and increase of indexes are not carried out. Therefore, in the third round of expert grading, the first and second-level index are no longer scored, and only the third level indexes are screened.

Expert opinion and modification of third-level index

According to the questionnaire returned by the experts in the third round, the data were obtained and analyzed. The average values of 36 third-level index were all higher than 4, ranging from 4.0769 to 4.8462. The coefficients of variation are all below 0.25, ranging from 0.0775 to 0.1455 (Table 30). From the numerical point of view, the experts are very approved of the third round of three indexes, so the 36 three indexes are retained.

Table 30 The third round of third-level index statistical parameters

	N	Mean	SD	Skewness	Kurtosis	CV
C1	13	4.7692	.43853	-1.451	.095	0.0919
C2	13	4.5385	.66023	-1.191	.645	0.1455
C3	13	4.3846	.50637	.539	-2.056	0.1155
C4	13	4.6154	.50637	-.539	-2.056	0.1097
C5	13	4.4615	.51887	.175	-2.364	0.1163
C6	13	4.6923	.48038	-.946	-1.339	0.1024
C7	13	4.3077	.48038	.946	-1.339	0.1115
C8	13	4.5385	.66023	-1.191	.645	0.1455
C9	13	4.1538	.37553	2.179	3.223	0.0904

Table 30 (Continued)

	N	Mean	SD	Skewness	Kurtosis	CV
C10	13	4.6154	.50637	-.539	-2.056	0.1097
C11	13	4.6923	.48038	-.946	-1.339	0.1024
C12	13	4.7692	.43853	-1.451	.095	0.0919
C13	13	4.6154	.50637	-.539	-2.056	0.1097
C14	13	4.8462	.37553	-2.179	3.223	0.0775
C15	13	4.6154	.50637	-.539	-2.056	0.1097
C16	13	4.3077	.48038	.946	-1.339	0.1115
C17	13	4.7692	.43853	-1.451	.095	0.0919
C18	13	4.6154	.50637	-.539	-2.056	0.1097
C19	13	4.2308	.43853	1.451	.095	0.1037
C20	13	4.6154	.50637	-.539	-2.056	0.1097
C21	13	4.3077	.48038	.946	-1.339	0.1115
C22	13	4.0769	.49355	.262	2.573	0.1211
C23	13	4.6923	.48038	-.946	-1.339	0.1024
C24	13	4.6923	.48038	-.946	-1.339	0.1024
C25	13	4.6154	.50637	-.539	-2.056	0.1097
C26	13	4.2308	.43853	1.451	.095	0.1037
C27	13	4.4615	.51887	.175	-2.364	0.1163
C28	13	4.6923	.48038	-.946	-1.339	0.1024
C29	13	4.7692	.43853	-1.451	.095	0.0919
C30	13	4.6923	.48038	-.946	-1.339	0.1024
C31	13	4.2308	.43853	1.451	.095	0.1037
C32	13	4.6154	.50637	-.539	-2.056	0.1097
C33	13	4.2308	.43853	1.451	.095	0.1037
C34	13	4.6154	.50637	-.539	-2.056	0.1097
C35	13	4.6154	.50637	-.539	-2.056	0.1097
C36	13	4.4615	.51887	.175	-2.364	0.1163

After three rounds of index screening by Delphi method, the market evaluation index model of small towns with sports characteristics is finally determined (Table 31). The first-level index include products, enterprises and consumers, the second-level index include 9 and the third-level index are 36.

Table 31 The final sports characteristic town market evaluation index model after the third round

First-level index	Second-level index	Third-level index
A1 Products	B1 Product Quality	C1 Quality level
		C2 Quality consistency
		C3 Satisfaction
	B2 Input-output Benefit	C4 Government fund support
		C5 Private capital investment
		C6 Sports product input ratio
		C7 Sports product ticket prices
		C8 Total output value of sports products
		C9 Sports product profit ratio
	B3 Product Features	C10 Sports product scale
		C11 Sports product style
		C12 Sports product packaging
		C13 Sports product popularity
	B4 Product Function	C14 Sports Brand core competitiveness
		C15 Functional partition
		C16 Degree of functional innovation
		C17 Functional effect
A2 Enterprises	B5 Enterprise Image	C18 Enterprise scale
		C19 Enterprise culture
		C20 Enterprise environment
		C21 Management mode
	B6 Employee Competence	C22 Culture and knowledge level
		C23 Experience
		C24 Service quality
		C25 Communication

Table 31 (Continued)

First-level index	Second-level index	Third-level index
A3 Consumers	B7 Basic Information	C26 Age
		C27 Occupation
		C28 Education
	B8 Attitude	C29 Participation degree
		C30 Participation motivation
		C31 Recognition degree
		C32 Loyalty
	B9 Purchasing power	C33 Disposable income
		C34 Disposable time
		C35 Buying desire
		C36 Purchase frequency

Step 2: Analytic Hierarchy Process: weight determination

This study adopts analytic hierarchy process. The analytic hierarchy process (AHP), proposed by the American operations research scientist Saaty, is a weighting method by which experts directly determine the weight coefficient of the factors at each level of the evaluated index system according to their importance, experience and relevant professional knowledge.

Analytic hierarchy Process (AHP) is a systematic analysis method that combines qualitative evaluation and quantitative evaluation, and judges the relative importance of each factor at each level based on different experts. Through the hierarchical structure, the expert evaluation is transformed into several factors, and the importance of two indexes in the same level is compared, so that the qualitative evaluation which is difficult to quantify is transformed into quantitative evaluation, and then the weight coefficient of each index is calculated according to the comparison results.

Determine the hierarchical hierarchy

The index system is divided into four levels, the top layer is the target layer, there is only one goal or factor is to determine the weight of the index system, the following are first, second and third level indexes.

Construct judgment matrix

In order to reduce as much as possible, the difficulty and uncertainty of comparing various indexes of different nature and improve the accuracy, we do not compare all indexes together, but compare each other in pairs, and the relative scale is used to express the importance of the two indexes in quantity when comparing, so that we can quantify the subjective judgment. According to the usual practice of psychological research and analytic hierarchy process, we use a scale of 1-5 to compare different indexes in pairs (Table 32).

Table 32 Peer index judgment matrix score scale table

Judging scale	Definition	Meaning
1	Equally important	Indicates that two elements are of equal importance
3	Slightly important	Indicates that the former is slightly more important than the latter
5	Obviously important	Indicates that the former is significantly more important than the latter
7	Strongly important	Indicates that the former is more important than the latter
9	Extremely important	Indicates that the former is more important than the latter
2,4,6,8		Represents the scale when there is a compromise between adjacent scales
The inverse of 1 to 9		The latter is more important than the former

After pairwise comparison of all n indexes, the judgment matrix $A = (a_{ij})_{n \times n}$ can be obtained. In order to make the judgment as scientific and impartial as possible, this study still uses the experts who participated in the Delphi method to empower each index, and distributes the Weight Table of market Evaluation index of

small towns with Sports Characteristics to 13 experts (Appendix L). Through the collation and analysis of the survey data of experts, the reliable judgment matrix of each layer index is determined (Table 33) (Figure 6).

Table 33 Quantitative table of the importance of first-level index

First-level index	A1	A2	A3
A1 Produces	1	1/3	1/2
A2 Enterprises	3	1	2
A3 Consumers	2	1/2	1

$$A = \begin{bmatrix} 1 & 1/3 & 1/2 \\ 3 & 1 & 2 \\ 2 & 1/2 & 1 \end{bmatrix}$$

Figure 6 Judge the result matrix graph

Hierarchical sorting and consistency checking

The purpose of hierarchical single sorting is to determine the importance degree of the elements related to a certain target element at the next level. This step needs to calculate the maximum eigenvector W corresponding to the maximum eigenroot λ_{\max} of the judgment matrix, which represents the influence degree of the element of this level on the target element of the previous level, that is, the weight value.

The equation is as follows:

$$A_w = \lambda_{\max} w$$

The purpose of consistency test is to judge the consistency of thinking logic and minimize the error of human subjective factors. Consistency test is mainly based on matrix theory. The consistency index is calculated by CI, and the smaller the value of CI, the greater the proved consistency. When CI is equal to 0, it indicates that the indexes have complete consistency. When CI is close to 0, there is satisfactory

consistency. The larger the value of the resulting CI, the more inconsistent it is. The random consistency index RI is developed to measure the size of CI.

Table 34 First level index AHP hierarchical analysis results

item	A_w	λ_{max}	CI
A1 Produces	0.505		
A2 Enterprises	0.196	3.0016	0
A3 Consumers	0.299		

SPSS is used to calculate that the λ_{max} value of the first level index of sports characteristic town is 3.0016, and the weight value is 0.505. The A2 enterprise has a weight value of 0.196. A3 consumers have a weight value of 0.299 (Table 34). It can be seen that the highest weight value is the product, followed by the consumer, and finally the enterprise. As can be seen from the table, the CI value of the first-level index is 0, indicating that the index has complete consistency.

There is a positive correlation between the random consistency index RI and the order of the judgment matrix. Generally speaking, the possibility of consistent random deviation increases with the increase of the order of the matrix, that is, the greater the order of the matrix, the greater the probability of consistent random deviation, and the corresponding relationship is shown in the table (Table 35). As there are 3 First-level indexes for the market evaluation of small towns with sports characteristics, the RI value is 0.52.

Table 35 Average random consistency index RI standard value

n	1	2	3	4	5	6	7	8	9
RI	0	0	0.52	0.89	1.12	1.26	1.36	1.41	1.46

CR is the test coefficient that appears to test whether the judgment matrix has satisfactory consistency, which is the test coefficient that takes into account that the

deviation from consistency may be caused by random reasons. The test coefficient is to compare CI with the random consistency index RI, and the formula is as follows:

$$CR=CI/RI$$

$CR=CI/RI$ Under normal circumstances, when $CR<0.1$, the judgment matrix will be considered to have passed the consistency test, if $CR\geq 0.1$, it is considered to have no satisfactory consistency. According to the calculation of the values of the first-level index of sports characteristic towns (Table 36), the CR value is 0, <0.1 , and the consistency test result is passed. The first level index of market evaluation of sports characteristic town is reasonable.

Table 36 Results of consistency test for first-level index

λ_{max}	CI	RI	CR	Result
3.0016	0	0.52	0	Pass

According to the above method, the second-level index and the tertiary index are calculated respectively, and the weight value of the market evaluation index of sports characteristic town is obtained (Table 37).

Table 37 Sports characteristic town market evaluation index weight value

First-level index	Second-level index	Wi	Third-level index	Wi
A1 Products 0.505	B1 Product Quality	0.239	C1 Quality level	0.1733
			C2 Quality consistency	0.0455
			C3 Satisfaction	0.0201
	B2 Input-output benefit	0.147	C4 Government fund support	0.0072
			C5 Private capital investment	0.0057
			C6 Sports product input ratio	0.0376

Table 37 (Continued)

First-level index	Second-level index	Wi	Third-level index	Wi
			C7 Sports product ticket prices	0.0146
			C8 Total output value of sports products	0.0184
			C9 Sports product profit ratio	0.0629
	B3 Product Features	0.036	C10 Sports product scale	0.0040
			C11 Sports product style	0.0198
			C12 Sports product packaging	0.0044
			C13 Sports product popularity	0.0081
	B4 Product Function	0.083	C14 Sports Brand core competitiveness	0.0244
			C15 Functional partition	0.0050
			C16 Degree of functional innovation	0.0108
			C17 Functional effect	0.0432
A2 Enterprises 0.196	B5 Enterprise image	0.067	C18 Enterprise scale	0.0131
			C19 Enterprise culture	0.0051
			C20 Enterprise environment	0.0050
			C21 Management mode	0.0436
	B6 Employee competence	0.129	C22 Culture and knowledge level	0.0097
			C23 Experience	0.0154
			C24 Service quality	0.0695
A3 Consumers 0.299	B7 Basic information	0.032	C25 Communication	0.0343
			C26 Age	0.0174
			C27 Occupation	0.0097
	B8 Attitude	0.193	C28 Education	0.0048
			C29 Participation degree	0.0106
			C30 Participation motivation	0.0492
			C31 Recognition degree	0.0254
			C32 Loyalty	0.1080

Table 37 (Continued)

First-level index	Second-level index	Wi	Third-level index	Wi
	B9Purchasing power	0.074	C33 Disposable income	0.0086
			C34 Disposable time	0.0042
			C35 Buying desire	0.0190
			C36 Purchase frequency	0.0423

Phase 3

The purpose of phase 3 is to verify the application effect of the sports characteristic town market evaluation index model. In this phase, the managers and staff of Zhongnan Shanzhai sports and leisure characteristic towns were selected. They scored the sports characteristic towns under their jurisdiction according to the market evaluation index model and obtained the results.

Zhongnan cottage sports and leisure characteristic town basic situation Zhongnan Shanzhai sports and leisure town belongs to the first group of sports and leisure towns in China. It is located in the core area of Yingpan Town, Shangluo City, Shaanxi Province. It is located at the southern foot of Qinling Mountain, 54 kilometers away from Xi 'an, and is the closest town to Xi 'an among 28 counties in southern Shaanxi Province. Adjacent to G65 Baomao high-speed, Xikang Railway, provincial Highway 102 and the upcoming high-speed rail, the traffic routes are extended in all directions, and the bus self-driving is arbitrary, and the location advantage is obvious (Figure 7). In addition, because it is located in the hinterland of Qinling Mountains, it has natural advantages and a green and pollution-free natural environment, which makes sports and leisure resources unique. Leisure sports projects, outdoor expansion sports and water sports are carried out, highlighting the characteristics of Yingpan Zhongnan Shanzhai sports and leisure town. Mountain resources provide material conditions for sports events such as mountaineering, hiking and outdoor expansion. Water resources have created conditions for water projects such as rafting and swimming. Represented by forest landscapes and nature reserves, it is suitable for exploration, mountaineering, health care and other projects.

These natural resources have laid a solid foundation for the construction of sports and leisure towns and provided opportunities for development.



Figure 7 Zhongnan Shanzhai sports and leisure characteristic town overview

Zhongnan Shanzhai sports and leisure town is divided into five parts: entrance comprehensive service area, Qinling Laowu folk area, Laolin Inn area, health resort area and forest expansion movement. The entrance comprehensive service area mainly includes tourist reception center, ecological parking lot, landscape corridor, toilet, etc. The leisure sports activities mainly include RV, car camp, camping, archery, live CS, mountain cross country, and expansion. Qinling Laowu Folk area retains the simple and heavy style of Qinling village, and creates a characteristic commercial block. The leisure sports activities mainly include bonfire party, expansion, tug-of-war and so on. Laolin Inn area is mainly accommodation, open leisure sports activities such as basketball, table tennis, chess, Go and children's play activities. Health resort is a comprehensive health and wellness living community with unique natural and location advantages, which gathers health and wellness leisure projects and various fitness sports and leisure facilities in one. The leisure and sports activities set up include hiking and mountaineering, TCM physiotherapy, fitness qigong, yoga and other leisure and wellness projects. The forest expansion movement is the largest, avant-garde fashion, research travel, tourism and sports, leisure and experience of the best place in Northwest China so far, and the country's largest forest canyon experience park with outdoor sports as the theme. These include more than 17 challenging, participatory and entertaining individual sports (Figure 8). In order to facilitate the convenience of children, the annual average number of tourists reached more than 250,000, driving the local economic growth and residents' income growth.



Figure 8 Zhongnan Shanzhai sports and leisure town canyon 17 and parent-child paradise project

Analysis on application of sports and leisure characteristic town model in Zhongnan Cottage According to the second stage, the evaluation index and index weight value of sports characteristic town market have been obtained. Combined with the development status of Zhongnan Shanzhai sports health and leisure characteristic town, this paper divides the development level of sports characteristic town market into three levels: high, medium and low. Among them, a score above 0.8 is high, 0.600 to 0.7999 is medium, and less than 0.6 is low.

In this phase, 5 managers and 5 staff of Zhongnan Shanzhai sports and leisure characteristic Town are invited to judge and determine each factor of Zhongnan Shanzhai sports and leisure characteristic Town (Appendix M). In the process of investigation, the score of each index is a five-level system, that is, the highest score is 5 points, and the lowest score is 1 point, so the score value is the average $\times 0.2$. The score of each index is obtained, and the grade of the market index of the town with sports characteristics is found according to the result of the transformation.

Calculation and analysis of third-level index score results

If the average value of C1 (Quality level) is 4.5, then $4.5 \times 0.2 = 0.9$, and $0.9 > 0.8$, higher than 0.8, C1 score grade is high. Calculation of final score method: The score value of each third-level index is multiplied by the weight value of the index respectively to obtain the final score of the third-level index. For example, the score value of C1 is 0.9 and the weight value is 0.1733, then $0.9 \times 0.1733 = 0.15597$, so the final score of C1 is about 0.1560. According to the above calculation

method, the score value, grade and final score of each three indexes are calculated respectively (Table 38). From the point of view of the score level, 19 of the 36 indexes were high, accounting for 52.78% of the total indexes; The 17 indexes are in the middle, accounting for 47.22% of the total indexes, but the score of C20 (Enterprise Environment) is 0.68, indicating that the enterprise environment of Zhongnan Shanzhai sports and leisure characteristic town needs to be improved.

Table 38 Third-level index apply the rating table

Third-level index	Mean	Score	Level	Wi	Final Score
C1	4.5	0.90	High	0.1733	0.1560
C2	4.4	0.88	High	0.0455	0.0400
C3	4.3	0.86	High	0.0201	0.0173
C4	4.1	0.82	High	0.0072	0.0059
C5	4.2	0.84	High	0.0057	0.0048
C6	4.1	0.82	High	0.0376	0.0309
C7	4.0	0.80	High	0.0146	0.0117
C8	3.8	0.76	Medium	0.0184	0.0140
C9	3.7	0.74	Medium	0.0629	0.0465
C10	4.3	0.86	High	0.004	0.0035
C11	4.2	0.84	High	0.0198	0.0166
C12	3.6	0.72	Medium	0.0044	0.0032
C13	3.6	0.72	Medium	0.0081	0.0059
C14	3.8	0.76	Medium	0.0244	0.0185
C15	4.0	0.80	High	0.005	0.0040
C16	3.6	0.72	Medium	0.0108	0.0078
C17	4.1	0.82	High	0.0432	0.0354
C18	3.6	0.72	Medium	0.0131	0.0095

Table 38 (Continued)

Third-level index	Mean	Score	Level	Wi	Final Score
C19	3.7	0.74	Medium	0.0051	0.0037
C20	3.5	0.68	Low	0.005	0.0035
C21	4.4	0.88	High	0.0436	0.0383
C22	3.6	0.72	Medium	0.0097	0.0070
C23	4.2	0.84	High	0.0154	0.0130
C24	4.3	0.86	High	0.0695	0.0598
C25	3.7	0.74	Medium	0.0343	0.0254
C26	4.1	0.82	High	0.0174	0.0142
C27	3.8	0.76	Medium	0.0097	0.0074
C28	3.9	0.78	Medium	0.0048	0.0038
C29	4.0	0.80	High	0.0106	0.0085
C30	4.3	0.86	High	0.0492	0.0423
C31	4.2	0.84	High	0.0254	0.0213
C32	4.3	0.86	High	0.108	0.0929
C33	3.7	0.74	Medium	0.0086	0.0064
C34	3.6	0.72	Medium	0.0042	0.0030
C35	3.6	0.72	Medium	0.019	0.0137
C36	3.8	0.76	Medium	0.0423	0.0322
Total					0.8279

From the final score, the total score of the third-level index is 0.8279, $0.8279 > 0.8$, indicating that the market development level of Zhongnan Shanzhai sports and leisure characteristics town is generally higher. However, there is still a low index, 16 indexes are between 0.7 and 0.7999, indicating that the development of the town market still has a certain development space, so in the development of the town market, we should pay attention to these 17 indexes, and further strengthen the construction of 17 indexes (Table 38).

Calculation and analysis of second-level index score results

There are 9 second-level indexes of market evaluation of sports characteristic town. Taking the first second-level index B1 (Product Quality) as an example, B1 consists of three third-level indexes C1 (Quality level), C2 (Quality consistency), and C3 (Satisfaction). The calculation method for B1 is as follows:

$B1 = C1 \text{ mean} \times 0.2 \times C1 \text{ weight coefficient ratio} + C2 \text{ mean} \times 0.2 \times C2 \text{ weight coefficient ratio} + C3 \text{ mean} \times 0.2 \times C3 \text{ weight coefficient ratio}$.

The mean value of C1 is 4.5

C1 weight coefficient ratio is $0.1733 / (0.1733 + 0.0455 + 0.0201) = 0.73$

The mean value of C2 is 4.4

C2 weight coefficient ratio is $0.0455 / (0.1733 + 0.0455 + 0.0201) = 0.19$

The mean value of C3 is 4.3

The ratio of C3 weight coefficient is $0.0201 / (0.1733 + 0.0455 + 0.0201) = 0.08$

The $B1 = 4.5 \times 0.2 \times 0.73 + 4.4 \times 0.2 \times 0.19 + 4.3 \times 0.2 \times 0.08 = 0.893$.

The score value of B1 is 0.893, $0.893 > 0.8$, indicating that the score value of B1 (Product Quality) is high. It can be concluded that the quality of sports products in Zhongnan Shanzhai sports and leisure characteristic town has been unanimously praised. According to the above calculation method, the other 8 second-level indexes are calculated respectively (Table 39).

Table 39 Second-level index apply the rating table

Second-level index	Wi	Score	Level
B1	0.239	0.8928	High
B2	0.147	0.7769	Medium
B3	0.036	0.8004	High
B4	0.083	0.7884	Medium
B5	0.067	0.8227	High
B6	0.129	0.8152	High
B7	0.032	0.7946	Medium
B8	0.193	0.8540	High
B9	0.074	0.7454	Medium

As can be seen from the table, among the nine second-level indexes, the score value of B1 (Product Quality) is 0.8928, B3 (Product Features) is 0.8004, and B5 (Enterprise Image) is 0.8227. The score of Employee Competence (B6) is 0.8152, and the score of Attitude (B8) is 0.8540. The score values of these five second-level indexes are all over 0.8, indicating a high level. The score of B2 (Input-output Benefit) is 0.7769, the score of B4 (Product Function) is 0.7884, and the score of B7(Basic Information) is 0.7946. B9 (Purchasing Power) had a score of 0.7454, and the four second-level indexes had values between 0.600 and 0.799, so the score was intermediate. Thus, in the second-level indexes, we should pay attention to the construction of Input-output Benefit, Product Function, consumer Basic Information and consumer Purchasing Power.

Calculation and analysis of first-level index score results

There are 3 first-level indexes of market evaluation of sports characteristic town. Take the first-level index A1 (Products) as an example, A1 consists of four second-level indexes: B1 (Product Quality), B2 (Input-output benefit), B3 (Product Features) and B4(Product Function). Then A1 is calculated as follows:

$A1 = B1 \text{ score} \times B1 \text{ weight coefficient ratio} + B2 \text{ score} \times B2 \text{ weight coefficient ratio} + B3 \text{ score} \times B3 \text{ weight coefficient ratio} + B4 \text{ score} \times B4 \text{ weight coefficient ratio}.$

The score of B1 is 0.8928.

B1 weight coefficient ratio is $0.239/0.505=0.4733$

The score of B2 is 0.7769.

The ratio of B2 weight coefficient is $0.147/0.505=0.2911$.

The score of B3 is 0.8004.

B3 weight coefficient ratio is $0.036/0.505=0.0713$.

The score of B4 is 0.7884.

The ratio of B4 weight coefficient is $0.083/0.505=0.1644$.

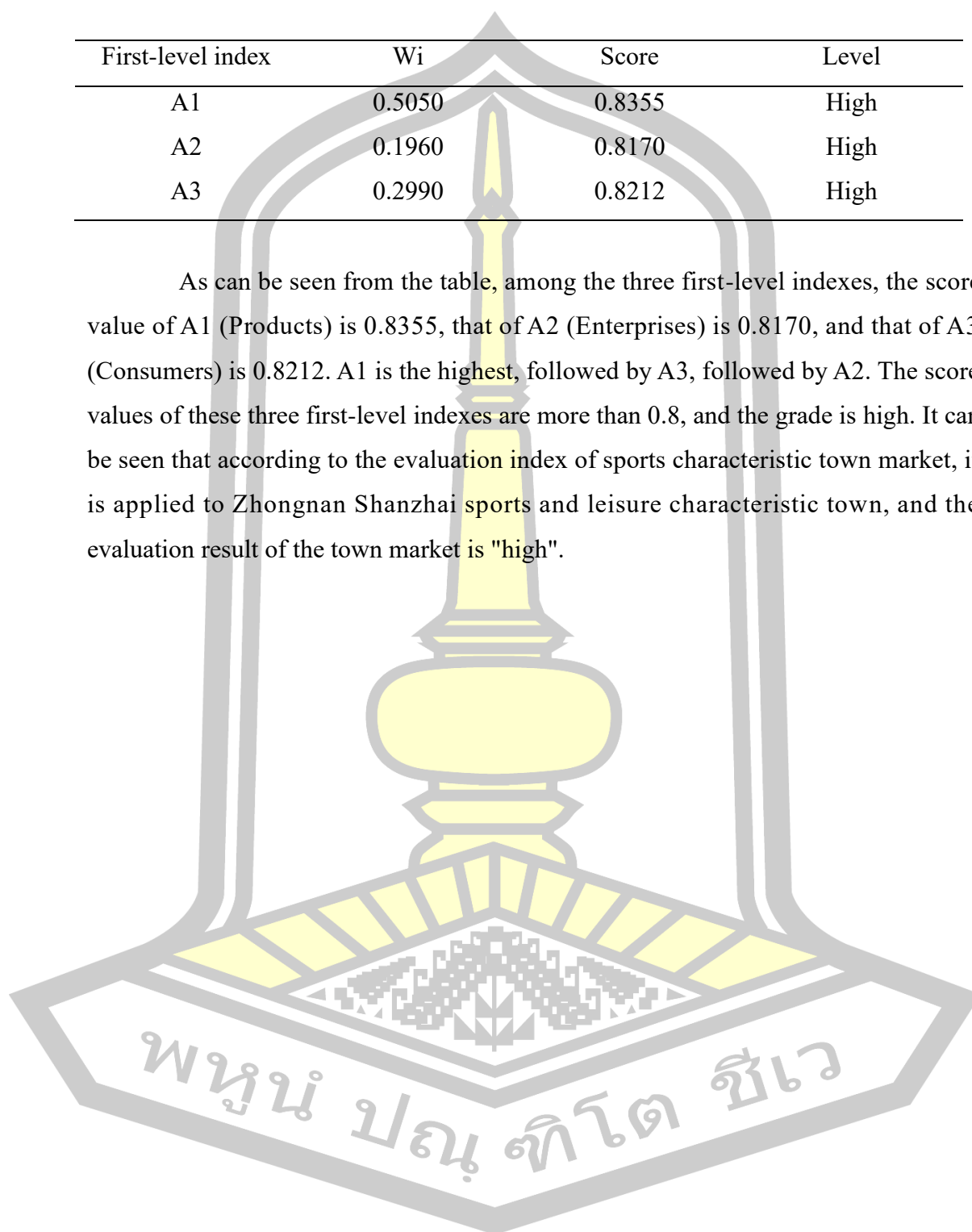
$A1 = 0.8928 \times 0.4733 + 0.7769 \times 0.2911 + 0.8004 \times 0.0713 + 0.7884 \times 0.1644 = 0.8355$

. A2 and A3 are also calculated according to this method, and the final score is obtained (Table 40).

Table 40 First-level index apply the rating table

First-level index	Wi	Score	Level
A1	0.5050	0.8355	High
A2	0.1960	0.8170	High
A3	0.2990	0.8212	High

As can be seen from the table, among the three first-level indexes, the score value of A1 (Products) is 0.8355, that of A2 (Enterprises) is 0.8170, and that of A3 (Consumers) is 0.8212. A1 is the highest, followed by A3, followed by A2. The score values of these three first-level indexes are more than 0.8, and the grade is high. It can be seen that according to the evaluation index of sports characteristic town market, it is applied to Zhongnan Shanzhai sports and leisure characteristic town, and the evaluation result of the town market is "high".



CHAPTER V

CONCLUSIONS, DISCUSSIONS AND SUGGESTIONS

The purpose of this study is to investigate the needs of consumers in sports towns, use STP theory to build a market evaluation index model of sports towns, and test the application effect of the model. Specifically, the first section gives the conclusion, the second section gives the discussion, and the third section summarizes the application and limitations of this study, and gives the enlightenment and suggestions for further research.

Conclusions

The phase 1 of the research results, analyzed the sports characteristic town consumer needs, and the consumer market segmentation; The phase 2 of the research results, the construction of sports characteristic town market evaluation index model; In the phase 1, the results of the study test the application of the model.

Phase 1

Research Objective:

1. To investigate the needs of consumers in small towns with sports characteristics.
2. To analyze the factors that affect consumers' participation in sports towns.

According to the research objective, this stage draws two conclusions through questionnaires and interviews.

Part I: Through the survey of 401 consumer questionnaires, it is concluded that the proportion of male consumers in sports towns is slightly higher than that of female consumers, and most of them are between 26 and 45 years old. From the perspective of education level, they are mainly concentrated at the undergraduate level. From the perspective of occupation, civil servants and public institutions have the most people, followed by enterprises and freelance workers. From the perspective of monthly income, most respondents focus on 5,001 yuan to 8,000 yuan, and most respondents choose 200-500 yuan for each expenditure of sports consumption in small towns with sports characteristics. From the perspective of

participating sports, fitness walking, cycling, mountaineering, watching sports events, marathon, camping and participating in sports festivals are more popular among consumers. From the survey results, the research hypothesis 1 in Chapter 1 is demonstrated: Sports characteristics Consumers in small towns like fitness walking, cycling, mountaineering, watching sports events, marathon sports, camping sports, etc. According to STP theory, this stage investigates the consumers in sports towns from four dimensions: geographical segmentation, population segmentation, psychological segmentation and behavioral segmentation, with a total of 60 questions. The results showed that the Cronbach's Alpha value of the four dimensions was 0.951, indicating high reliability of the questionnaire. In geographical segmentation, the average values of the four values of town size, climate, traffic and terrain are all more than 4, indicating that consumers have relatively consistent views on these four aspects. Among the factors of population segmentation, there are 5 factors, including gender, income, occupation, education and religion, and the religious factor has little influence, while the gender factor has no influence. The most influential factors are income, occupation and education level. Among the values of the correlation matrix, DS15 occupation and DS16 education have the highest correlation, with a value of 0.707. The correlation between variables is strong, and the data comes from the normal distribution population. In psychological segmentation, the mean value is more than 3, indicating that most respondents agree with the question. The standard deviation values are all between 1 and 2, indicating that the data distribution is relatively concentrated. According to the results, the correlation between the variables is strong, and the data comes from the normal distribution population, which is suitable for factor analysis, and the rotation sum of squares is loaded to extract 3 factors. The results of behavior subdivision show that the correlation between variables is strong, and the data comes from the normal distribution population, which is suitable for factor analysis. 7 factors are extracted using the rotation sum of squares loading, and the cumulative value of rotation sum of squares loading is 68.6%.

Part 2: Interviewed 4 managers of government departments and 4 managers of sports towns to find out the factors affecting consumer demand and consumer behavior. Interview conclusions: Factors that affect consumers' participation in sports feature town sports include interest, time, monthly income,

education level, age, gender, personality, lifestyle, travel mode, transportation, travel time, climate, popularity, social class, living standard, publicity, participation motivation, sports content, experience, loyalty, town facilities and services, sports prices, etc. However, according to the consumer questionnaire survey, the degree of influencing factors is different. From the survey results, the research hypothesis 2 in Chapter 1 is demonstrated: Factors that affect consumers' participation in sports town include income, education level, interest, time, etc.

Phase 2

Research Objective:

To develop sports characteristic town market evaluation index.

In this phase, the whole process of constructing market evaluation indicators of small towns with sports characteristics is described. By using Delphi method, 13 experts are invited to conduct three rounds of screening of first-level, second-level and third-level indexes by using five-point Likert scale. The initial four first-level indexes, 12 second-level indexes and 53 third-level indexes are included. Finally, there are 3 first-level indexes (A1Products, A2Enterprises, A3Consumers), 9 second-level indexes (B1 Product Quality, B2 Input-output Benefit, B3 Product Features, B4 Product Function, B5 Enterprise Image, B6 Employee Competence, B7 Basic Information, B8 Attitude, B9 Purchasing power), and 36 third-level indexes (C1 Quality level, C2 Quality consistency, C3 Satisfaction, C4 Government fund support, C5 Private capital investment, C6 Sports product input ratio, C7 Sports product ticket prices, C8 Total output value of sports products, C9 Sports product profit ratio, C10 Sports product scale, C11 Sports product style, C12 Sports product packaging, C13 Sports product popularity, C14 Sports Brand core competitiveness, C15Functional partition, C16 Degree of functional innovation, C17 Functional effect, C18 Enterprise scale, C19 Enterprise culture, C20 Enterprise environment, C21 Management mode, C22 Culture and knowledge level, C23 Experience, C24 Service quality, C25 Communication, C26 Age, C27 Occupation, C28 Education, C29 Participation degree, C30 Participation motivation, C31 Recognition degree, C32 Loyalty, C33 Disposable income, C34 Disposable time, C35 Buying desire, C36 Purchase frequency). The average of 36 third-level indexes is above 4, between 4.0769 and 4.8462; The coefficients of variation are all below 0.25,

ranging from 0.0775 to 0.1455. From the numerical point of view, experts on the third round of three indexes are very recognized, to determine the final index.

The analytic hierarchy process (AHP) is used to calculate the weight value of each index. Finally, the weight value of A1 (Products) is 0.505, A2(Enterprises) is 0.196, and A3 (Consumers) is 0.299. The weight value of products is the highest, followed by consumers, and enterprises are the lowest. Among the second-level indicators, the highest weight value is B1 (Product Quality), and the lowest is B7 (Basic information). Among the three indexes, the highest weight value is C1 (Quality level), and the lowest weight value is C10 (Sports product scale).

Phase 3

Research Objective:

To test the effect of market evaluation indexes of small towns with sports characteristics.

In this phase, the managers and staff of Zhongnan Shanzhai sports and leisure characteristic town are mainly selected. They score the sports characteristic town under their jurisdiction according to the market evaluation index model and get the result. The total score of Zhongnan Shanzhai sports and leisure characteristic town is 0.8279, $0.8279 > 0.8$, indicating that the market development level of Zhongnan Shanzhai sports and leisure characteristic town is higher on the whole. However, there is still one index C20 (enterprise environment) is low, and 16 indexes are between 0.7 and 0.7999, indicating that the development of the town market still has a certain development space, so in the development of the town market, we should pay attention to these 17 indexes and further strengthen the construction of 17 indexes.

Discussions

The research topic of this paper is development of a market evaluation index of sports characteristics for towns in china. This study is divided into three phases, with a total of four research objectives. The phase 1 has two research objectives, while phase 2 and phase 3 both have one research objective. Each phase leads to different conclusions depending on the objective of the study. Below, we will discuss one by one according to the research objectives of different phases.

The research objectives of Phase 1 are : (1) To investigate the needs of consumers in small towns with sports characteristics.(2) To analyze the factors that affect consumers' participation in sports towns. According to the two research purposes, the research results of Phase 1 are discussed in two parts.

Part 1: The conclusion reached in the first part is: The proportion of male consumers in small towns is slightly higher than that of women, and most of them are distributed between the ages of 26-45. From the perspective of education level, they are mainly concentrated at the undergraduate level and above. From the perspective of occupation, civil servants and public institutions have the most people. In terms of monthly income, most respondents focus on 5,001 yuan to 8,000 yuan. This is the same as the research of most scholars such as Ji Yuping , Jing Lan, Wang Chengyang (Ji, 2023; Jing, 2019; Wang, 2020). However, based on the finding of similar studies, there are also some differences. For example, in terms of each time spent on sports consumption in sports towns with sports characteristics and sports items participated, Consumers in different regions choose different items and spend different amounts. According to Ji Yuping's research on Rizhao Olympic water Sports town, consumers mainly participate in water sports, which is consistent with the results of this paper (Ji, 2023). Jing Lan pointed out in her research on Zhongnan Shanzhai sports and leisure characteristic town that the main project for consumers to participate in is the canyon sports park, and the sports consumption is mainly about 200 yuan, which is consistent with the survey results of this paper. (Jing, 2019; Wang, 2020; Lu, 2021) According to STP theory, this study subdivides consumers in sports towns according to four dimensions: geographical segmentation, population segmentation, psychological segmentation and behavioral segmentation, which is consistent with the views of most researchers. They believe that the variables of segmented consumer market mainly include geographical variables, population variables, psychological variables and behavioral variables. Market segmentation based on these variables produces four basic forms of market segmentation: geographical segmentation, demographic segmentation, psychological segmentation and behavioral segmentation. (Cahill, 1997; Ma, Jiang & Wang, 2007; Qu, 2010; Kotler, 2015; Andaleeb, 2016).

Part 2: Through interviews, factors affecting consumer demand and consumer behavior in sports towns include interest, time, monthly income, education

level, age, gender, personality, lifestyle, travel mode, transportation, climate, popularity, social class, living standard, participation motivation, sports content, sports price, town facilities services, +etc. This is consistent with the research results of scholars such as Tang Shi and Ma Yawen. (Wilkie & Cohen, 1977; Cravens, & Piercy, 2009; Tang, 2018). But through the interview, we also got new factors such as publicity, experience, loyalty, which is consistent with the STP theory studied in this paper (Kotler, 1989).

Phase 2

The research objective of Phase 2 is to develop sports characteristic town market evaluation index.

In phase 2, the conclusion is that : On the basis of STP theory, the Delphi method is used to invite experts to screen the market evaluation indicators of sports characteristic towns for three rounds, and finally, there are 3 first-level indexes (Products, Enterprises, Consumers), 9 second-level indexes (Product Quality, Input-output Benefit, Product Features, Product Function, Enterprise Image, Employee Competence, Basic Information, Attitude, Purchasing power), and 36 third-level indexes (Quality level, Quality consistency, Satisfaction, Government fund support, Private capital investment, Sports product input ratio, Sports product ticket prices, Total output value of sports products, Sports product profit ratio, Sports product scale, Sports product style, Sports product packaging, Sports product popularity, Sports Brand core competitiveness, Functional partition, Degree of functional innovation, Functional effect, Enterprise scale, Enterprise culture, Enterprise environment, Management mode, Culture and knowledge level, Experience, Service quality, Communication, Age, Occupation, Education, Participation degree, Participation motivation, Recognition degree, Loyalty, Disposable income, Disposable time, Buying desire, Purchase frequency) .

At present, there is no index evaluation research specifically on the market of small towns with sports characteristics. Some scholars have studied the development level evaluation indicators of small towns with sports characteristics, including some market-related indicators. Comparing the results of this study with these indexes, it is found that the indicators such as function, cost, quality and brand appear most frequently. Wang Ronghui and Gao Xueting constructed the

competitiveness evaluation index system of sports towns in Shandong Province from four dimensions: resource endowment, industrial development, market location and basic support, and the indicators related to the market were consistent with this study (Wang & Gao, 2023). Based on the coupling logic relationship between the construction of small towns with sports characteristics and new-type urbanization, Zhou Wenjing et al. constructed a coupling measurement system from four dimensions: space, ecology, function and humanity, among which the functional indicators were more consistent with the indicators formulated in this study (Zhou & Zhang, 2022). Hou Kai studied the first five sports characteristic towns in Shandong Province and explored their development level evaluation index system. It mainly consists of 6 criteria level indicators, including basic information dimension of sports town, characteristic industry development dimension, sports resource element supporting dimension, sports tourism service dimension, ecological environment dimension, sports characteristic creativity dimension, and 42 specific indicators, such as industrial concentration degree and market share. The basic information, characteristic industries, and elements of sports resources involved are basically consistent with the indicators of this study (Hou, 2020). The analytic hierarchy process is adopted to calculate that the weight value of products is the highest, followed by consumers and enterprises, which is consistent with the weight value of the evaluation index system of the development level of sports characteristic towns in Shandong Province studied by Hou Kai. The weight value of the development dimension of sports characteristic industries is the highest, followed by the basic information dimension of sports characteristic towns. It is confirmed that the two are the cornerstone and backbone of the sustainable growth of sports towns (Hou, 2020).

Phase 3

The research objective of the Phase 3 study is to test the effect of market evaluation indexes of small towns with sports characteristics.

In phase 3, the conclusion reached at this stage is : Zhongnan Shanzhai sports and leisure characteristic town is selected as an example, and this sports characteristic town is scored according to the market evaluation index model. Finally, the following results are obtained: The overall score of Zhongnan Shanzhai sports and leisure characteristic town is 0.8279, which is high, but there are still some medium-

grade indexes. Such as enterprise environment, enterprise scale and sports product packaging, etc. It indicating that it is necessary to further improve the market indicators of Zhongnan Shanzhai sports and leisure characteristic town according to the score, so as to make its small town market sustainable development. This is consistent with the indexes that Yang Fan and Jing LAN et al paid attention to in their research on the business form of Zhongnan Shanzhai sports and leisure town. (Yang, 2018, Jing, 2019)

Summary

This study investigates the needs of consumers in sports characteristic towns and explores the factors and variables that affect consumers' participation in sports characteristic towns. Based on STP theory, the paper constructs the evaluation index model of sports characteristic town market, expounds the whole process of index construction, and calculates the weight value of each index with analytic hierarchy process. Select Zhongnan Shanzhai sports, health and leisure characteristic town for model application research. The results show that the evaluation index model can reflect the market of sports characteristic town well. According to the evaluation index, the existing problems are found, and the market of sports characteristic town is improved day by day.

Suggestions

1. Implications

First of all, this study provides empirical support for the application of STP theory in the market of sports characteristic towns, and provides specific indexes for the market evaluation of Chinese sports characteristic towns. Through investigation and research, it is found that STP theory is suitable for evaluating the market of small towns with sports characteristics, so as to find problems and position them more clearly. STP theory provides a feasible framework for the market evaluation of sports characteristic town.

Secondly, precise positioning to meet the growing sports leisure needs of consumers in sports towns, promote the development of national fitness, and promote the comprehensive construction of a well-off and healthy China.

Thirdly, strengthen brand construction, clarify the realistic dilemma, key factors and market development law of sports characteristic towns, and provide practical reference for the healthy, sustainable and high-quality development of sports characteristic towns.

Finally, it provides empirical basis for formulating policies and strategies for the market development level of small towns with sports characteristics, further accelerating the economic and social development of poor and backward areas and implementing new urbanization strategies.

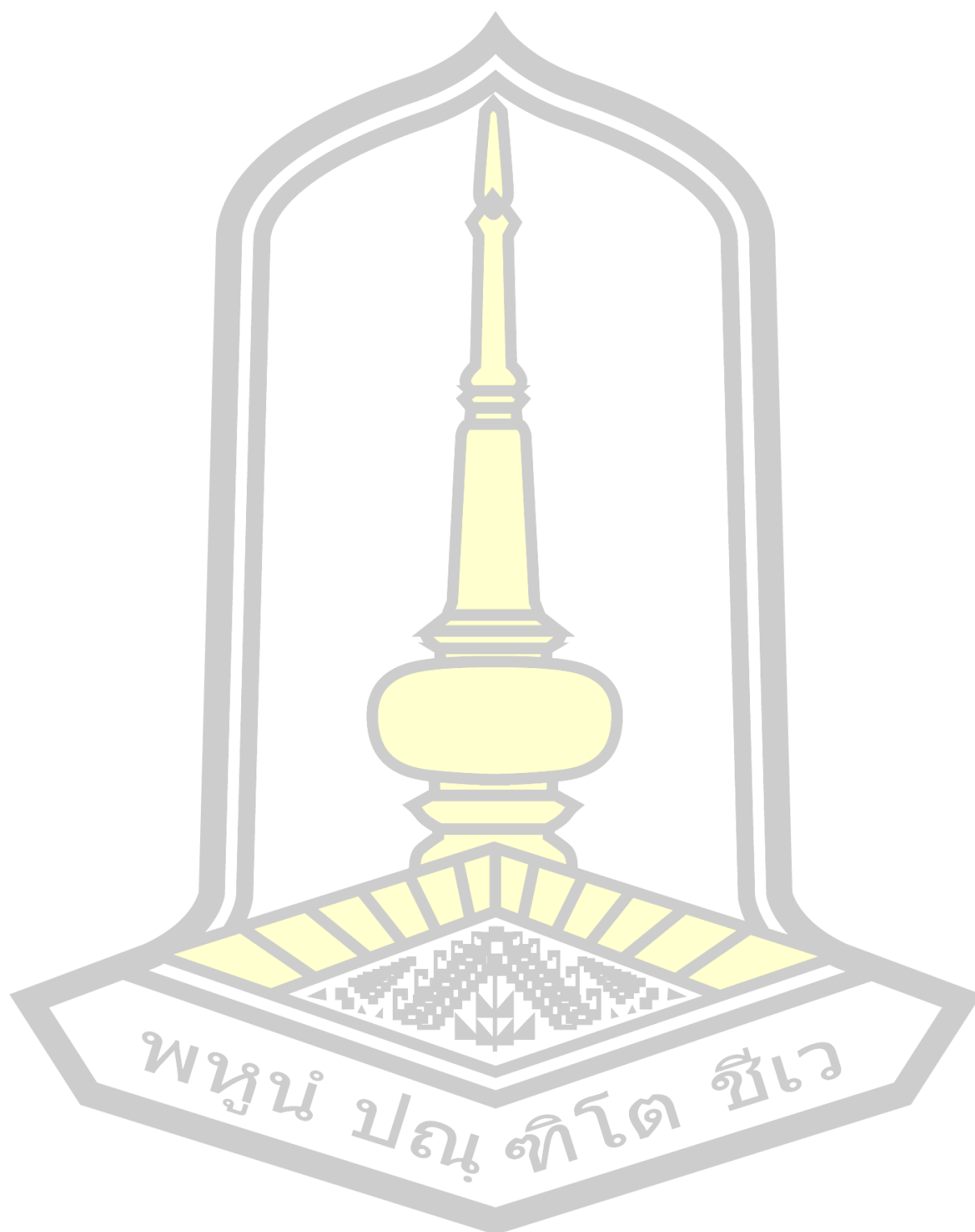
2. Limitation

Although this study provides a good index model for the market evaluation of sports-featured towns from the perspective of STP theory, there are some limitations in this study. As for the distribution of questionnaires, it is impossible to intercept participants directly in small towns. In this study, questionnaires were distributed and collected online by using questionnaires. Although online distribution saves cost and time, it also increases the difficulty of controlling the quality of questionnaires, making it more challenging to find target groups.

3. Further Research

This study is to study the evaluation index of sports characteristic town market. It consists of four regions in China, and each region may involve cultural factors in each region. In the next study, according to the differences of each region, the market evaluation index model is used to find the existing problems and formulate different marketing strategies.

It can be further combined with the management theory, in addition to the sports characteristic town market, to study the management evaluation index of sports characteristic town, the combination of the two can better guide the development of sports characteristic town.

REFERENCES

REFERENCES

- Andaleeb, S.S. (2016). Market segmentation, targeting, and positioning. *In Strategic marketing management in Asia: case studies and lessons across industries* (179-207). Emerald Group Publishing Limited.
- Anderson, J.C. & Gerbing, W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 27(1), 5-24.
- Armstrong, G. & Kotler, P. (2012), *Marketing: An Introduction*. 11th ed. London : Pearson Education.
- Bachmann, D., Elfrink, J. & Vazzana, G. (1996). Tracking the progress of e-mail vs. snail-mail. *Marketing Research*, 8(2), 31-35.
- Bernard, R.H. (2000). *Social Research Methods*: Sage Publications, Thousand Oaks.
- Brengman, M., Geuens, M., Weijters, B., Smith, S.M. & Swinyard, W. R. (2005). Segmenting Internet shoppers based on their Web-usage-related lifestyle: a cross-cultural validation. *Journal of Business Research*, 58(1), 79-88.
- Cadieux, K.V. & Hurley, P. T. (2011). Amenity migration, exurbia, and emerging rural landscapes: Global natural amenity as place and as process. *Geo Journal*, 76, 297-302.
- Cahill, D.J. (1997). Target marketing and segmentation: valid and useful tools for marketing. *Management Decision*, 35(1), 10-13.
- Chang-ying, Y., & Ming-min, X. (2006). Shortest Confidence Interval of Parameter of Gamma Distribution. *Journal of Applied Statistics and Management*, 4, 435-437.
- Che, W., Zhang, R. & Wang, X. (2020). Cultural inheritance and industrial logic coupling: A study on the path of vitality cultivation of sports towns. *Sports science*, 1, 51-58. Doi: 10.16469 / j.carol carroll ss. 202001005.
- Costa, C. (2001). An emerging tourism planning paradigm? A comparative analysis between town and tourism planning. *International Journal of Tourism Research*, 3(6), 425-441.
- Cravens, D.W. & Piercy, N.F. (2009). *Strategic Marketing*, 9th ed. Boston : McGraw Hill Irwin.

- Dang, Q. (2021). *Based on the theory of STP, Hangzhou bay district basketball training organization marketing strategy research*. Master's Thesis, Ningbo university. <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD202301&filename=1022470940.nh>.
- Dibb, S. & Simkin, L. (1991). Targeting, segments and positioning. *International Journal of Retail & Distribution Management*, 19(3), 233.
- Dibb, S. & Simkin, L. (2008). *Market segmentation success: Making it happen!*. New York : Routledge.
- Dibb, S. & Simkin, L. (2016). Market segmentation and segment strategy. In *Marketing theory: A student text* (pp. 251-279). Los Angeles : Sage.
- Dibb, S., Simkin, L., William, P.M. & Ferrell, O.C. (2012). *Marketing: Concepts and Strategies*. 6th ed. London : Cengage.
- Dong, Q. & Shen, K. (2018). The experience of building sports and leisure towns in France and its inspiration to China: A case study of Chamonix Town. *Journal of wuhan sports college*, 6, 20-25. Doi: 10.15930 / j.carol carroll nki WTXB. 2018.06.003.
- Du, C. (2020). Research on fitness equipment brand market expansion marketing strategy based on STP theory. *Modern business*, 33, 16-18. The doi: 10.14097/j.carol carroll nki. 5392/2020.33.004.
- Dwyer, L. & Forsyth, P.J. (2008). Economic measures of tourism yield: What markets to target?. *International Journal of Tourism Research*, 10(2), 155-168. <https://doi.org/10.1002/jtr.648>
- Esson, D.J. (2011). *Selling the Alpine Frontier: The Development of Winter Resorts, Sports, and Tourism in Europe and America, 1865-1941*. California : University of California, Berkeley.
- Fan, B. (2018). Research on the construction mechanism of sports characteristic towns in China from the perspective of Embeddedness theory. *Sports and Science*, 01, 84-89. doi:10.13598/ j.ssn1004-4590.2018.01.013.
- Fan, C., Liu, Q., Jin, Y. & Luo, L. (2020). The types and spatial distribution characteristics of the first batch of sports and leisure towns in China. *Journal of Capital Institute of Physical Education*, 01, 63-68+74. doi:10.14036/j.cnki.cn11-4513.2020.01.011.

- Field, A. (2005). *Discovering statistics using SPSS*. London : Sage Publications.
- Fowler, C.S. & Kleit, R.G. (2014). The effects of industrial clusters on the poverty rate. *Economic Geography*, 90(2), 129-154.
- Fu, M. (2012). Application of STP strategy in Harbin Health Club-A case study of Harbin Renhe International Health Club. *Journal of Harbin Institute of Physical Education*, 02, 54-57.
- Garton, L., Haythornthwaite, C. & Wellman, B. (1999). *Studying on-line social networks*. In S. Jones (Ed.), *Doing Internet Research: Critical Issues and Methods for Examining the Net*. Thousand Oaks, CA : Sag
- Gravetter, F.J. & Forzano, L.A. (2011). *Research Methods for the Behavioral Sciences*. 4th ed. Belmont, CA : Cengage Learning.
- Guo, L. (2019). Research on the construction of sustainable development evaluation index system of sports and leisure characteristic towns. *Journal of Jilin University of Physical Education*, 03, 54-59. doi:10.13720/j.cnki.22-1286.2019.03.011.
- Guo, Q. (2018). Path exploration of the dual model of sports characteristic town construction. *Sports and Science*, 02, 89-94. doi:10.13598/ j.ssn1004-4590.2018.02.015.
- Hair, J., Black, W., Babin, B., Anderson, R. & Tatham, R. (2006). *Multivariate data analysis*. 6th ed. Upper Saddle River, NJ : Pearson Prentice Hall.
- Han, L., Mei, Q., Lu, Y. & Ji, M. (2004). Analysis and Research of AHP-Fuzzy comprehensive evaluation method. *China Safety Science Journal*, 07, 89-92. doi: 10.16265 / j.carol carroll nki issn1003-3033.2004.07.022.
- Hou, K. (2020). Research on development level evaluation index system of sports characteristic towns-A case study of sports and leisure characteristic towns in Shandong Province. *Journal of Economic Research*, 22, 112-114.
- Huang, Z., Hu, X. & Chen, M. (2015). Application of STP strategy theory in sports tourism company marketing. *Sports Research and Education*, 05, 49-51. doi:10.16207/j.cnki.2095-235x.2015.05.010.
- Jan, A.D.A. & Victor, S. (2019). Measuring the Effectiveness of Segmentation, Targeting and Positioning Strategy of L'oreal Products in Kingdom of Saudi Arabia. *IJO-International Journal of Business Management*, 2(09), 68-79.

- Jennings, G. (2010). *Tourism Research*. 2nd ed. Milton, Queensland : John Wiley & Sons Australia, Ltd.
- Ji, Y. (2023). *Research on the Improvement of Tourism Attraction of Rizhao Olympic Water Sports Town*. Master Thesis, Shanxi university. <https://link.cnki.net/doi/10.27284/d.cnki.gsxiu.2023.001171> doi: 10.27284 /, dc nki. Gsxiu. 2023.001171.
- Jiang, T. (2019). Construction of tourism function evaluation system of characteristic towns in Zhejiang Province. *Agricultural Resources and Regionalization in China*, 06, 227-232.
- Jing, L. (2019). *Research on Leisure sports activities in Sports and leisure Characteristic towns of Shangluo City*. Master Thesis, Xi 'an Physical Education University. https://kns.cnki.net/kcms2/article/abstract?v=TmrGBFWiZl0JEPd1j508jBRszH5Q2lqXcmSsNNJClahOfBVJnufPC4vKK8Iqu2ulz9dbheF4hG_hH52SS1BYupIzZB1xd6HNeG3PCorbSzE8q3_cSYOeHvGWF0YtfvUsJkrp6ceHgXxgBqL0Toox7w==&uniplatform=NZKPT&language=CHS
- Kabiru, S.A. & Arshad, R. (2017). ID-OTH 011 A perspective on rural development strategies in Nigeria. In *4th Conference on Business Management*, 29 - 30 Oktober 2017, The Gurney Resprt Hotel & Recidences Penang, Malaysia.
- Kline, R., Kline, R.B. & Kline, R. (2011). Principles and Practice of Structural Equation Modeling. *Journal of the American Statistical Association*, 101(12).
- Kotler, P. (1989). From mass marketing to mass customization. *Planning review*, 17(5), 10-47.
- Kotler, P. (2009). *Marketing Management : Analysis, Planning, Implementation, and Control*. 8th ed. New Jersey : Prentice-Hall International. Inc.
- Kotler, P. (2015). *Marketing Management Analysis, Planning, Implementation, and Contro*. New Jersey: Prentice Hall International.
- Kotler, P.K. (2016). *Marketing management*. Edinburgh : Pearson Education Ltd.
- Kotler, P.T. & Amstrong, G. (2018). *Principles of Marketing*. 17th ed. Netherlands : Pearsons.

- Koziczynski, J. & Hammarström, A.M. (2015). *Segmentation and Customer Relationships at Sapa. School of Business, Society and Engineering. Västerås, Sweden : Mälardalen University.*
- Li, J. & Li, Y. (2019). *Marketing*. Beijing : Higher Education Press.
- Li, L. & Huang, X. (2018). Experience and inspiration in the construction of sports towns in foreign countries. *Journal of Jilin University of Physical Education*, 05, 19-25. doi:10.13720/j.cnki.22-1286.2018.05.004.
- Li, Q. (2016). Characteristic towns are the strategic choice of innovation development in Zhejiang. *China Economic and Trade Guide*, 04, 10-13.
- Liu, M., et al. (2019). Evolution mechanism, operation system and governance path of sports and leisure characteristic towns in China. *Journal of tianjin sports college*, 02, 144-149. The doi: 10.13297 / j.carol carroll nki issn1005-0000.2019.02.009.
- Lu, Z. (2021). *The characteristics of sports leisure town industrial convergence development research*. Ph.D. Thesis, Wuhan sports college. <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CDFDLAST2021&filename=1021039884.nh>
- Luo, J.N. (2003). Overview of Market segmentation research: Review and Prospect. *Journal of Shandong University Philosophy and Social Sciences Edition*), 06, 44-48.
- Ma, Z., Jiang, J. & Wang, J. (2007). Classification and selection of market segmentation criteria. *Market Research*, 10, 48-49.
- Madrigal, R. (1995). Residents' perceptions and the role of government. *Annals of tourism research*, 22(1), 86-102.
- Malhotra, N.K. (2008). *Marketing Research: An Applied Orientation*. 5th ed. Upper Saddle River, NJ : Pearson Education.
- McCracken, G. (1988). *The long interview: Qualitative research methods*. Newbury Park, CA : Sage Publication.
- McDougal, E.R., Syrdal, H.A., Gravois, R. & Kemp, A. (2021). Telling the tale: Applying a strategic brand storytelling process for STP planning. *Journal of Strategic Marketing*, 1-21.

- Morton, C., Anable, J. & Nelson, J.D. (2017). Consumer structure in the emerging market for electric vehicles: Identifying market segments using cluster analysis. *International Journal of Sustainable Transportation*, 11(6), 443-459.
- Moschis, G.P., Lee, E. & Mathur, A. (1997). Targeting the mature market: opportunities and challenges. *Journal of consumer marketing*, 14(4), 282-293.
- Moutinho, L. (2010). Segmentation, Targeting, Positioning and Strategic Marketing. *In Strategic Management in Tourism*, 121–166
- Myers, M.D. (2009). *Qualitative research in business and management*. Thousand Oaks, CA : SAGE Publications, Inc.
- National Development and Reform Commission. (2016). *National Development and Reform Commission on speeding up the construction of small towns with Beautiful characteristics*. https://www.ndrc.gov.cn/xxgk/zcfb/tz/201610/t20161031_963257.html.
- Ni, Z. & Liu, L. (2018). Rural revitalization and regional spatial reconstruction: Experience and future of sports and leisure town construction. *Sports and Science*, 05, 56-62. doi:10.13598/j.ssn1004-4590.2018.05.009.
- Nie, C. & Deng, Y. (2022). An analysis on the high-quality development path of sports and leisure towns under the background of rural revitalization. *Sports Culture Guide*. 06, 15-22.
- Oak, L.P., Won, J.S. & Seung, J.H. (2018). Analysis on STP Strategies of Pyeong Chang Alpensia Resort. *The Journal Of Sport and Applied Science*. 2, doi: 10.13106 / JSAS. 2018. VOL2. NO2.11.
- Patton, M.Q. (1990). *Qualitative research & evaluation methods*. 2nd ed. Thousand Oaks, CA : Sage.
- Pradiptarini, C. (2011). Social media marketing: Measuring its effectiveness and identifying the target market. *UW-L Journal of Undergraduate Research*, 14(2), 2.
- Qu, Y. (2010). *Market Segmentation*. Beijing : Enterprise Management.
- Ries, A. & Trout, J. (1969). Positioning is a game people play in today's me-too market place. *Industrial Marketing*, 54(6), 51-55.

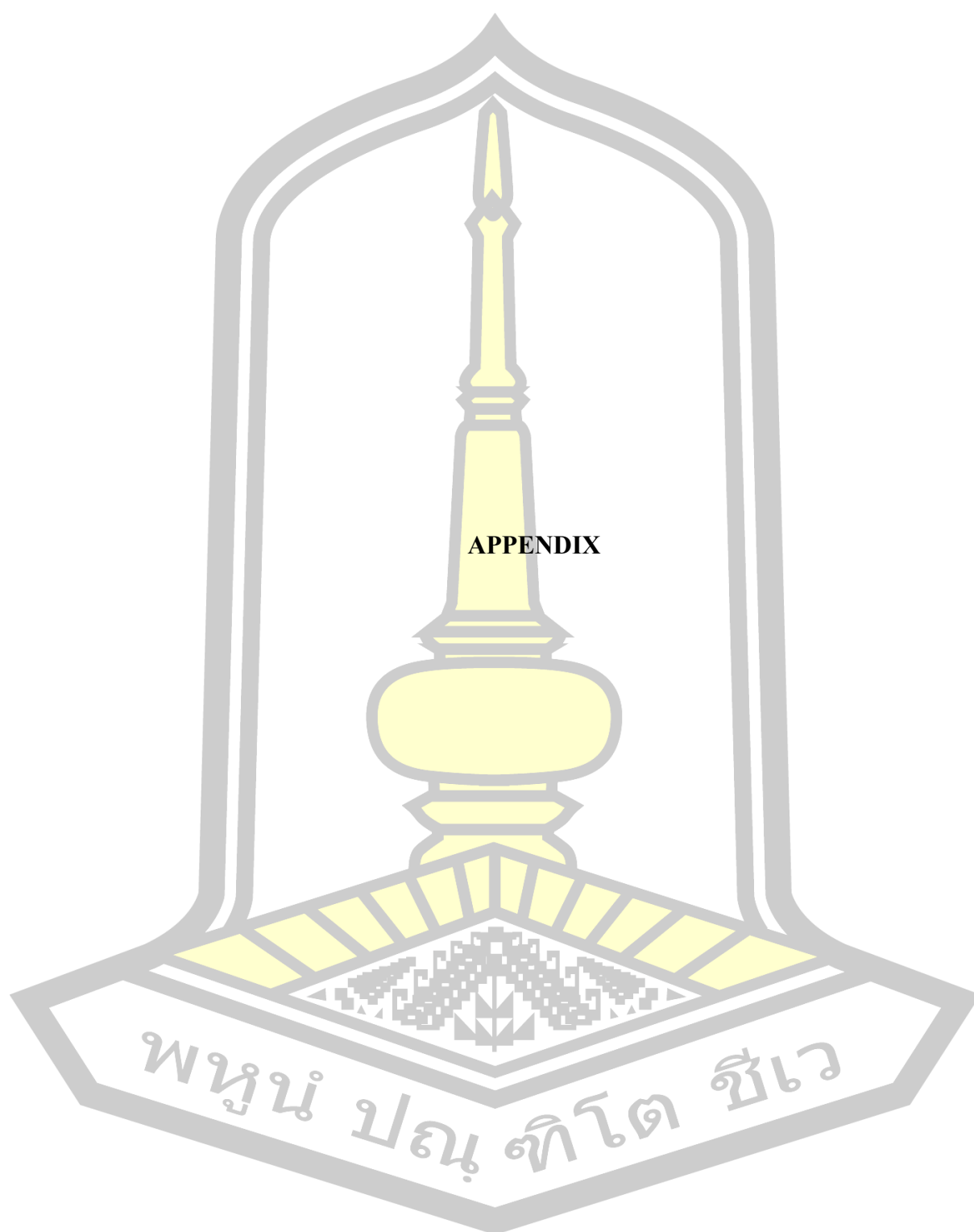
- Ries, A. & Trout, J. (2012). Positioning: *The battle for your mind*.
- Sally, D. & Lyndon, S. (1998). Prioritising target markets. *Marketing Intelligence & Planning*, 16(7), 407- 417.
- Saunders, M. & Thornhill, A. (2009). *Research Methods for Business Students*. 5th ed. New Jersey : Prentice Hall.
- Schifman, L.G. & Kanuk, L.L. (1997). *Consumer Behavior*. 5th ed. Beijing : Tsinghua University Press, Prentice Hall.
- Shapiro, C. & Varian, H.R. (1999). *Information rules: A strategic guide to the network economy*. Boston : Harvard Business Press.
- Shen, K. & Dong, Q. (2018). Local Exploration and Cultivation of sports characteristic Towns: A case study of Coldplay Town in Keqiao, Zhejiang Province. *Journal of wuhan sports college*. 09, 25-31. Doi: 10.15930 / j.carol carroll nki WTXB. 2018.09.004.
- Shi, C. & Jiang, Y. (2018). Characteristic Town evaluation based on K-mean clustering statistics. *Statistics and decision*, 21, 57-59. Doi: 10.13546 / j.carol carroll nki tjyc. 2018.21.013.
- Si, L. & Chen, M. (2022). Connotation, dilemma and guarantee path of standardized and healthy development of sports towns in China. *Journal of Shenyang Institute of Physical Education*, 05, 124-130.
- Si, L. & Wang, W. (2017). Theoretical framework and practical path of spatial production of sports towns in China. *Journal of Shenyang Institute of Physical Education*, 05, 53-58.
- Song, Y. et al. (2018). Research on the concept, connotation and types of sports towns in China. *Journal of Harbin Institute of Physical Education*, 02, 57-61.
- State Council. (2014, March 16). *National New-Type Urbanization Plan (2014-2020)*. https://www.gov.cn/gongbao/content/2014/content_2644805.htm
- State Council. (2014, October 20). *Several Opinions on Accelerating the development of sports industry and promoting sports consumption*. https://www.gov.cn/xinwen/2014-10/20/content_2767791.htm.
- Taaffe, K., Geunes, J. & Romeijn, H.E. (2008). Target market selection and marketing effort under uncertainty: The selective newsvendor. *European Journal of Operational Research*, 189(3), 987-1003.

- Tanford, S. & Malek, K. (2015). Segmentation of reward program members to increase customer loyalty: The role of attitudes towards green hotel practices. *Journal of Hospitality Marketing & Management*, 24(3), 314-343.
- Tang, S. (2017). *Research on Marketing Strategy of Liuzhou City's Commercial Taekwondo Club Based on STP Theory*. Master's Thesis, Guangxi Normal University. <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD201702&filename=1017214250.nh>.
- Tian, X. & Zhao, X. (2018). Research on development level evaluation index system of small towns with sports characteristics. *Journal of chengdu sports institute*, 03, 45-52. Doi: 10.15942 / j.j csu 2018.03.008.
- Turner, R.C. & Carlson, L. (2003). Indexes of Item-Objective Congruence for Multidimensional Items, International. *Journal of Testing*, 3(2), 163-171.
- Wang Boya, Zhang Chewei & CAI Yifei.(2020). Reunderstanding the positioning and functions of characteristic towns: An important carrier of Urban-Rural integration. *Journal of Beijing Normal University (Social Science Edition)*(01),140-147.
- Wang, C. (2020). Cognitive Reflection and reconstruction of sports towns from the perspective of comparison between China and Foreign countries. *Journal of Shanghai sports institute*, 01, 78-86. Doi: 10.16099 / j.s us 2020.01.009.
- Wang, C. (2020). *Research on Evaluation of construction effectiveness of characteristic Towns in Guangxi based on AHP-Fuzzy Comprehensive Evaluation Method*. Master Thesis, Guangxi University. <https://link.cnki.net/doi/10.27034/d.cnki.ggxixu.2020.002032> doi: 10.27034 / , dc nki. Ggxixu. 2020.002032.
- Wang, D., Shi, S., Luo, F. & Cai, J. (2023). Research on integrated development characteristics and optimization path of sports towns in the new era. *Journal of Hubei Normal University (Philosophy and Social Sciences Edition)*, 03, 44-50.
- Wang, Hu. (2020). Research on the construction of refined marketing model of sports brand market from the perspective of STP strategy. *Modern Marketing (Next issue)*, 08, 174-175. doi:10.19932/j.cnki.22-1256/f.2020.08.081.

- Wang, J-L. & Wang, Y. (2011). Research on the innovation of sports goods marketing based on STP model. *Chinese Commerce and Trade*, 30, 49-50.
- Wang, R. & Gao, X. (2023). Evaluation on the competitiveness of sports towns in Shandong Province based on ecological niche theory. *Hubei Sports Science and Technology*, 02, 170-175.
- Weinstein, A. (2014). Segmenting B2B technology markets via psychographics: an exploratory study. *Journal of Strategic Marketing*, 22(3), 257-267.
- Wilkie, W.L. & Cohen, J.B. (1977). *A behavioral Science Look at Market Segmentation Research*. Chicago : American Marketing Association .
- Wind, Y. (1978). Issues and advances in segmentation research. *Journal of marketing research*, 15(3), 317-337.
- Wu, Y. & Wang, L. (2012). Spatial performance of urbanization in China: analysis framework, realistic dilemma and optimization path. *Planner*, 09, 65-70.
- Wu, Z. (2019). *Characteristics in zhejiang province town of comprehensive competitiveness evaluation studies*, Master's Thesis, Hangzhou university of electronic science and technology. <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD202001&filename=1019023025.nh>.
- Xu, J. (2016). The characteristic function of town gathered to "innovation". *Zhejiang academy of social sciences*, 03, 42-43. Doi: 10.14167/j.zjss.2016.03.007.
- Xue, T-T. (2021). *Based on the perspective of social demand of huaian HanWu way tae kwon do club the STP strategy research*. Master's Thesis, Nanjing institute of sport. <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD202201&filename=1021689569.nh>.
- Yang, A. (2008). *The STP strategy application in commercial fitness club*. Master's Thesis, Beijing sports university. <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD2009&filename=2009127928.nh>.
- Yang, B. (2018). Inspiration for sports and leisure town construction from the perspective of supply-side structural reform of sports industry. *Journal of Jilin University of Physical Education*, 04, 44-49. doi:10.13720/j.cnki.22-1286.2018.04.009.

- Yang, Y. & Shen, K. (2018). Discussion on the construction path of sports towns in China under the background of supply-side reform. *Journal of Adult Education in Physical Education*, 01, 36-40. doi:10.16419/j.cnki.42-1684/g8.20180125.013.
- Ye, X., Xie, J. & Dong, M. (2017). Experience in building sports and leisure towns abroad and its implications for China. *Journal of nanjing institute of sport (social science edition)*, 05, 54-58, doi: 10.15877 / j.carol carroll nki nsic. 2017.05.012.
- Yin, H. (2013). A comparative study on the construction of cultural towns in the process of urbanization -- A case study of ancient Chinese towns and foreign cultural towns. *Journal of Changchun Municipal Party School*, 06, 46-49. doi:10.13784/j.cnki.22-1299/d.2013.06.005.
- Yu, D. (2007). *Research on Sports Modernization Theory and its Index System*. Ph.D. Thesis, Fujian Normal University. https://kns.cnki.net/kcms2/article/abstract?v=dFlgZ3unFPgKqcnolAmqkbBiH3p2Nk-dlBzbKulv3NtvWXYjLBHaYoYQP1qtr7kpy49P20IDBcPB5zlyeu-p8Qtao9bZpmTNksMj7QCGRBosbDY7y5Hg9k3oMSsd2oDgq6ZI1EMAvO_ormZe5cwq4g==&uniplatform=NZKPT&language=CHS
- Zeng, L-Y. & Mao, Y-Y. (2020). Review of Marketing Strategy-Case of Landscape Tourism. *Economics and Information Management*. https://www.researchgate.net/publication/349073412_Review_of_Marketing_Strategy-Case_of_Landscape_Tourism.
- Zhang, B., Zhang, Y., Xu, J. & Tian, J. (2018). Experience and inspiration in the construction of sports towns abroad. *Journal of Shandong University of Physical Education*, 04, 47-51, doi:10.14104/j.cnki.1006-2076.2018.04.009.
- Zhang, J. (2017). Characteristic town construction path and model: A case study of Datong City, Shanxi Province. *Agricultural Resources and Regionalization in China*, 01, 145-151.
- Zhang, L. (2018). Sports and leisure characteristic town: concept, type and development path. *Sports science*, 01, 18-26. Doi: 10.16469 / j.carol carroll ss. 201801003.

- Zhang, N., Gao, Z. & Li, M. (2017). Strategic Research on the construction of sports towns in Qinling Mountains, Xi 'an.(eds.)*Proceedings of 2017 3rd International Conference on Humanities and Social Science Research (ICHSSR 2017) (Advances in Social Science,Education and Humanities Research Vol.121)*(pp.364-367). Atlantis Press.
- Zhang, Q-H. (2018). *Shandong province football characteristic town construction path research*. Master's Thesis, Qufu normal university. <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD201802&filename=1018232900.nh>
- Zhang, X. (2017). Research on the construction of "sports town" from the perspective of Internet. *Journal of nanjing institute of sport (social science edition)*, 04, 18-22, doi: 10.15877/j.carolcarrollnksic.2017.04.004.
- Zheng, Z-D. & Xu, Y-Y. (2013). STP and Marketing Strategy of listed sporting goods companies in Fujian Province-A case study of Quanzhou. *Journal of Shandong University of Physical Education*, 06, 28-31. doi:10.14104/j.cnki.1006-2076.2013.06.006.
- Zhou, K. & Han, B. (2018). Research on industry selection and system construction of characteristic small towns based on comprehensive benefit evaluation: A case study of Haimen Samsung Town, Nantong City, Jiangsu Province. *Academic Forum*, 01, 111-115+174. doi:10.16524/j.45-1002.2018.01.038.
- Zhou, W. & Zhang, R. (2022). Measurement and application of the coupling development of sports town construction and new urbanization. *Journal of Shandong University of Physical Education*, 05, 1-9. doi:10.14104/j.cnki.1006-2076.2022.05.001.
- Zhu, M. & Qu, D. (2018). Types, characteristics and enlightenment of sports and leisure towns in foreign countries. *Sports Culture Guide*, 10, 126-131.
- Zuo, M. (2018). *Social demand perspective of martial arts training market STP strategy research*. Master's Thesis, Wuhan sports University. <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD201802&filename=1018254955.nh>.



APPENDIX A

Sports characteristic town consumer status questionnaire Source of questionnaire

Segmentation Classification	Sub-Factors	Quote
Geographic Segmentation	Region	Kotler, P. T., & Amstrong, G. (2018).
	Town size	
	climate	
	traffic	
	landform	
Demographic Segmentation	Age	Yoram Wind,1978.
	Gender	Wilkie, William L. & Joel B.Cohen, 1977.
	Income	Leon G. Schiffman & Leslie Lazar Kanuk, 1997.
	Occupation	Ma Zhu, Jiang Jianye & Wang Jie.2007.
	Education	Qu yunbo,2010.
	Religion	Andaleeb, S. S. 2016.
	Family members	
Psychological Segmentation	Social stratum	Lynn R. Kahle ,1999.
	Life style	Weinstein, A. 2014.
	Character	Dibb, S., & Simkin, L. (2016)
	Motive of purchase	Sarti, S., Darnall, N., & Testa, F. (2018)
Behavioral Segmentation	Opportunity	Peter R. Dickson,1982.
	Benefits	Leon G. Schiffman &
	User profile	Leslie Lazar Kanuk ,1995.
	Utilization rate	Luo J N,2003
	Brand Loyalty	Susilo, W. H. (2016).
	Sensitivity to the service	Dimitriu, R., & Guesalaga, R. (2017,)
	Sensitivity to price	Saleem, M. A., Eagle, L., & Low, D. (2018)
	Sensitivity to channels	Yoseph, F., Malim, N. H. A. H., &
	Sensitivity to advertising	AlMalaily, M. (2019)

Sports characteristic town consumer status questionnaire

Dear Sir/Madam,

Hello, I am a 64-grade doctoral candidate of Mahasarakhan University, and I am conducting my doctoral dissertation research. The purpose of this research is to obtain the current situation of consumers in sports towns. This questionnaire is divided into three parts, the first part is the general information of the respondents, a total of 8 questions. The second part is about the scale of consumer market demand and behavior, a total of 65 questions. The third part is an open question. This questionnaire is an anonymous survey for the purpose of this study only and does not involve your personal privacy. Please fill it out truthfully according to your experience and feelings. Please read each question carefully before answering. Your spontaneous and honest answer is very important to us.

Section 1: General Information

Please add the ✓ symbol to the () text page that works best for you.

1. Region

- () A. Southern Region () B. Northern Region
() C. Northwest Region () D. Qinghai-tibet region

2. Gender

- () A. Male () B. Female

3. Age

- () A.<18 years old () B.18-25 years old () C.26-45 years old
() D.46-60 years old () E.>60 years old

4. Education

- () A. Junior high School or below
() B. Senior high School or technical secondary school
() C. Diploma
() D. Bachelor
() E. Master or higher

5. Occupation

- ☐ A .Civil Servants or Personnel of Public Institutions
- ☐ B .Personnel of Enterprises
- ☐ C. Self-employed
- ☐ D. Student
- ☐ E. Retiree
- ☐ F. Farmer
- ☐ G. Others

6. Monthly income

- ☐ A.2500 Yuan and below
- ☐ B.2501 yuan to 5000 yuan
- ☐ C.5001 yuan to 8000 yuan
- ☐ D.8001 yuan to 10000 yuan
- ☐ E.10001 yuan and above

7. How much do you spend each time on sports special town sports?

- ☐ A. Less than 200 yuan
- ☐ B.200 yuan to 500 yuan
- ☐ C.501 yuan to 800 yuan
- ☐ D.801 yuan to 1000 yuan
- ☐ E.1001 yuan or more

8. What sports activities did you participate in in Sports town? (Multiple options available)

- ☐ A. Marathon
- ☐ B. Dragon Boat
- ☐ C. Sailing
- ☐ D. Rowing
- ☐ E. Paragliding
- ☐ F. Canoeing
- ☐ G. Motorsport
- ☐ H. Cross Country
- ☐ I. Snow Sports
- ☐ J. Golf
- ☐ K. Fitness walking
- ☐ L. Cycling
- ☐ M. Camping
- ☐ N. Basic ball games
- ☐ O. Fishing
- ☐ P. Mountaineering
- ☐ Q. Watching sporting events
- ☐ R. Participating in sporting festivals
- ☐ S. Others

Section 2: Investigate consumer market needs and behaviors

Explanation: Please rate each item from 1 to 5. please tick ✓ in the mark according to your opinions. Using the scale range from 1 = Strongly disagree, 2= Disagree, 3 = Normal, 4 = Agree, 5 = Strongly agree.

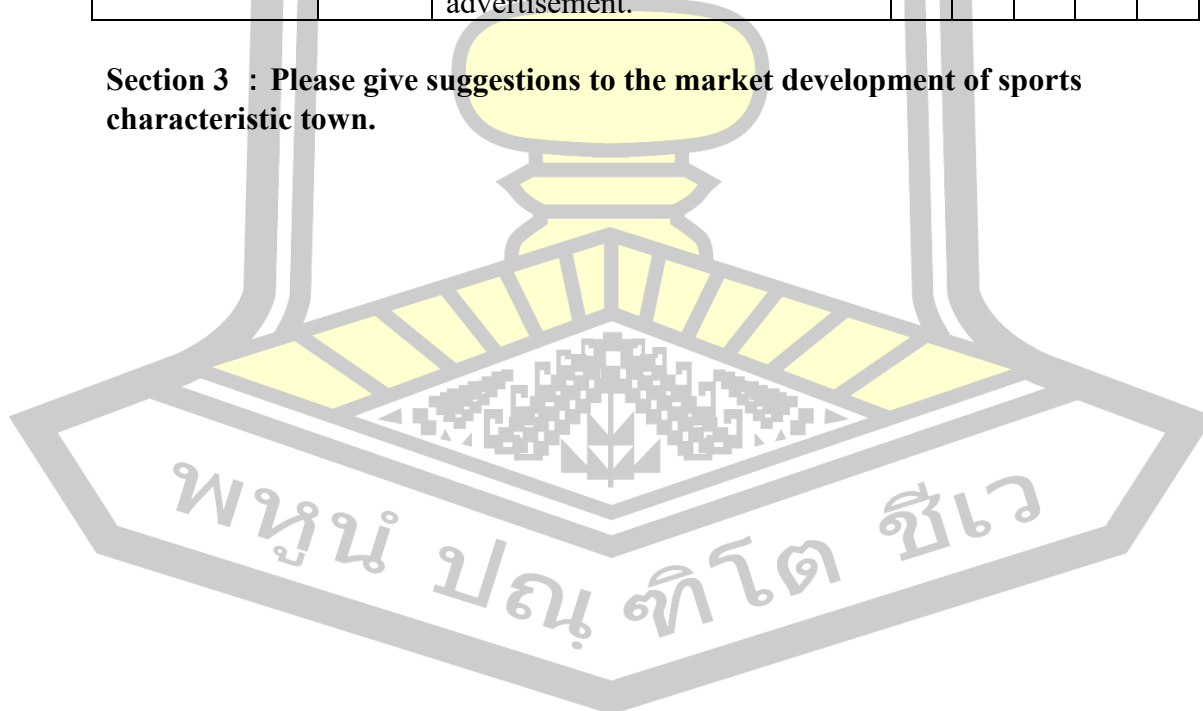
Dimensions	NO.	Questions	5	4	3	2	1
Geographic Segmentation	9	I would choose a sports town based on geography.					
	10	I consider the size of the town when choosing a sports town.					
	11	The climate will affect my participation in sports town.					
	12	I usually choose a town with good transportation.					
	13	I have a small town topography requirement.					
Demographic Segmentation	14	Age is an important factor affecting my participation in sports town.					
	15	Gender is an important factor that affects my participation in sports town.					
	16	Income is an important factor affecting my participation in sports town.					
	17	Occupation is an important factor affecting my participation in sports town.					
	18	Education is an important factor affecting my participation in sports town movement.					
	19	Religion is an important factor in my participation in sports town.					
	20	Family population is an important factor affecting my participation in sports town.					
Psychological Segmentation	21	People of higher social class are more active in participating in sports.					
	22	People from lower social classes do not or rarely participate in sports in sports towns.					
	23	Social class affects my participation in sports town.					
	24	My standard of living will affect my participation in sports town.					

Dimensions	NO.	Questions	5	4	3	2	1
	25	People with high living standards pursue sports town sports with higher quality.					
	26	People with low living standards are reluctant to participate in sports town sports.					
	27	I like to participate in sports in sports town.					
	28	My personality will affect my participation in sports town.					
	29	Extroverts are more likely to participate in sports in a sports town.					
	30	Gregarious people like to participate in sports in a sports town.					
	31	My motivation for coming to sports town is to exercise.					
	32	My motivation for coming to sports town is to relax.					
	33	My motivation for coming to sports town is to learn skills.					
	34	My motivation for coming to sports town was to make friends.					
	35	My motivation for coming to sports town was excitement.					
	36	My motivation for coming to sports town was to spend time with my family.					
	37	My motivation for coming to Sports Town is corporate building.					
Behavioral Segmentation	38	I would come to Sports Town on a work day.					
	39	I would come to Sports town on a weekend.					
	40	I would come to Sports town on a national holiday.					
	41	I would choose to come to sports town in winter and summer vacation.					
	42	I would choose to come to Sports town on my vacation.					
	43	I was in a good mood after participating in Sports Town.					

Dimensions	NO.	Questions	5	4	3	2	1
	44	Improve my health after taking part in Sports Town.					
	45	I learned sports skills after participating in Sports Town.					
	46	I feel so excited after participating in Sports Town.					
	47	I spent time with my family at Sports Town.					
	48	I made new friends by participating in Sports Town.					
	49	My participation in Sports Town deepened my bond with my colleagues.					
	50	I'm a potential user of Sports Town.					
	51	I'm a first-time user of Sports Town.					
	52	I'm a regular user of Sports Town.					
	53	I will often go to sports town to take part in sports.					
	54	I occasionally go to a sports town to play sports.					
	55	I'm not going to sports town again.					
	56	I chose only one brand that I like Sports Town.					
	57	I will choose multiple brands of sports town that I like.					
	58	I have no claim on the sports town brand.					
	59	I am satisfied with the facilities and services in Sports Town.					
	60	I am satisfied with the sports service in Sports Town.					
	61	I am satisfied with the accommodation service in Sports Town.					
	62	I was pleased with the food service at Sports Town.					
	63	I think the sports tickets in Sports town are reasonably priced.					

Dimensions	NO.	Questions	5	4	3	2	1
	64	I think the accommodation in Sports Town is reasonably priced.					
	65	I think the dining in Sports Town is reasonably priced.					
	66	I was introduced to Sports Town through friends, colleagues and family.					
	67	I saw the sports town promotion on TV.					
	68	I read about sports towns on Internet sites.					
	69	I read about sports towns in newspapers and magazines.					
	70	I saw the publicity of sports town from Tiktok and public accounts.					
	71	I think sports town needs more advertising.					
	72	Through advertising, consumers in sports towns can be increased.					
	73	I will participate in sports town because of the attraction of the advertisement.					

Section 3 : Please give suggestions to the market development of sports characteristic town.



APPENDIX B

Interview outline

Interview outline (Government department manager)

No	Questions
Q1	Introduce the basic situation and market development status of sports characteristic town.
Q2	Introduce the basic situation of sports characteristic town consumer groups.
Q3	What factors do you think affect the demand and behavior of consumers in sports towns?
Q4	What do you think are the criteria for consumer market segmentation in sports towns? How to break it down?
Q5	How do you think sports towns should select target markets?
Q6	In your opinion, from what aspects should sports towns be positioned in the market?
Q7	What do you think are the indexes for the market evaluation of sports towns? What are the most important indexes?
Q8	Talk about your views and suggestions on the current development of sports town market in China.

Interview outline (Government department manager)

No	Questions
Q1	Introduce the basic situation and market development status of sports characteristic towns in the area
Q2	Introduce the basic situation of consumer groups in sports towns with local characteristics
Q3	What factors do you think affect the demand and behavior of consumers in sports towns in your region? Why?
Q4	What do you think is the standard of consumer market segmentation in sports characteristic towns in your region? How to break it down?
Q5	How do you think sports towns in your region should select target markets?
Q6	Do you think the location of sports towns in your area is accurate? From which aspects should the market be positioned?
Q7	What do you think are the indexes for the market evaluation of sports towns? What are the most important indexes?
Q8	Talk about your views and suggestions on the current development of sports town market in China.

APPENDIX C

IOC results from the first round of the questionnaire

N0.	QUESTIONS	Exp1	Exp2	Exp3	Exp4	Exp5	Total	Average	Results
1	Region	1	1	1	1	1	5	1.0	Pass
2	Gender	1	0	1	1	1	4	0.8	Pass
3	Age	1	1	1	1	1	5	1.0	Pass
4	Education	1	1	1	1	1	5	1.0	Pass
5	Occupation	1	1	1	1	1	5	1.0	Pass
6	Monthly income	1	1	1	1	1	5	1.0	Pass
7	How much do you spend each time on sports special town sports?	1	1	1	1	1	5	1.0	Pass
8	What sports activities did you participate in in Sports town?	1	1	0	1	1	4	0.8	Pass
9	I would choose a sports town based on geography.	0	1	0	1	1	3	0.6	Pass
10	I consider the size of the town when choosing a sports town.	1	1	1	0	1	4	0.8	Pass
11	The climate will affect my participation in sports town.	1	1	1	1	0	4	0.8	Pass
12	I usually choose a town with good transportation.	1	1	0	1	1	5	0.8	Pass
13	I have a small town topography requirement.	1	0	1	1	1	4	0.8	Pass
14	Age is an important factor affecting my participation in sports town.	1	-1	1	1	1	3	0.6	Pass
15	Gender is an important factor that affects my participation in sports town.	1	1	0	1	1	4	0.8	Pass
16	Income is an important factor affecting my participation in sports town.	1	1	1	1	1	5	1.0	Pass

N0.	QUESTIONS	Exp1	Exp2	Exp3	Exp4	Exp5	Total	Average	Results
17	Occupation is an important factor affecting my participation in sports town.	1	0	1	1	1	4	0.8	Pass
18	Education is an important factor affecting my participation in sports town movement.	1	1	1	1	0	4	0.8	Pass
19	Religion is an important factor in my participation in sports town.	1	0	1	1	1	4	0.8	Pass
20	Family population is an important factor affecting my participation in sports town.	0	1	1	1	1	4	0.8	Pass
21	People of higher social class are more active in participating in sports.	1	1	1	1	1	5	1.0	Pass
22	People from lower social classes do not or rarely participate in sports in sports towns.	1	1	-1	1	1	3	0.6	Pass
23	Social class affects my participation in sports town.	1	1	1	1	1	5	1.0	Pass
24	My standard of living will affect my participation in sports town.	1	1	1	1	1	5	1.0	Pass
25	People with high living standards pursue sports town sports with higher quality.	1	1	1	0	1	4	0.8	Pass
26	People with low living standards are reluctant to participate in sports town sports.	1	0	1	1	1	4	0.8	Pass
27	I like to participate in sports in sports town.	1	1	0	1	0	3	0.6	Pass
28	My personality will affect my participation in sports town.	1	1	1	1	1	5	1.0	Pass
29	Extroverts are more likely to participate in sports in a sports town.	1	1	1	1	0	4	0.8	Pass
30	Gregarious people like to participate in sports in a sports town.	1	0	1	1	0	3	1.0	Pass

N0.	QUESTIONS	Exp1	Exp2	Exp3	Exp4	Exp5	Total	Average	Results
31	My motivation for coming to sports town is to exercise.	1	1	1	1	1	5	1.0	Pass
32	My motivation for coming to sports town is to relax.	1	1	1	1	1	5	1.0	Pass
33	My motivation for coming to sports town is to learn skills.	1	1	1	0	1	4	0.8	Pass
34	My motivation for coming to sports town was to make friends.	1	0	1	1	1	4	0.8	Pass
35	My motivation for coming to sports town was excitement.	1	1	1	1	1	5	1.0	Pass
36	My motivation for coming to sports town was to spend time with my family.	0	1	1	1	1	4	0.8	Pass
37	My motivation for coming to Sports Town is corporate building.	1	1	-1	1	1	3	0.6	Pass
38	I would come to Sports Town on a work day.	1	1	1	1	1	5	1.0	Pass
39	I would come to Sports town on a weekend.	1	1	1	1	1	5	1.0	Pass
40	I would come to Sports town on a national holiday.	1	1	1	1	1	5	1.0	Pass
41	I would choose to come to sports town in winter and summer vacation.	1	1	1	1	1	5	1.0	Pass

N0.	QUESTIONS	Exp1	Exp2	Exp3	Exp4	Exp5	Total	Average	Results
42	I would choose to come to Sports town on my vacation.	1	1	1	1	1	5	1.0	Pass
43	I was in a good mood after participating in Sports Town.	1	1	1	1	1	5	1.0	Pass
44	Improve my health after taking part in Sports Town.	1	1	1	1	1	5	1.0	Pass
45	I learned sports skills after participating in Sports Town.	1	1	1	0	1	4	0.8	Pass
46	I feel so excited after participating in Sports Town.	1	1	1	1	1	5	1.0	Pass
47	I spent time with my family at Sports Town.	0	1	1	1	1	4	0.8	Pass
48	I made new friends by participating in Sports Town.	1	1	1	1	1	5	1.0	Pass
49	My participation in Sports Town deepened my bond with my colleagues.	1	1	1	1	1	5	1.0	Pass
50	I'm a potential user of Sports Town.	1	1	1	1	-1	3	0.6	Pass
51	I'm a first-time user of Sports Town.	1	1	1	1	1	5	1.0	Pass
52	I'm a regular user of Sports Town.	1	0	1	1	1	4	0.8	Pass
53	I will often go to sports town to take part in sports.	1	1	0	1	1	4	0.8	Pass

N0.	QUESTIONS	Exp1	Exp2	Exp3	Exp4	Exp5	Total	Average	Results
54	I occasionally go to a sports town to play sports.	1	1	1	1	1	5	1.0	Pass
55	I'm not going to sports town again.	1	0	1	0	1	3	0.6	Pass
56	I chose only one brand that I like Sports Town.	1	1	1	1	1	5	1.0	Pass
57	I will choose multiple brands of sports town that I like.	0	1	1	1	1	4	0.8	Pass
58	I have no claim on the sports town brand.	1	1	0	1	1	4	0.8	Pass
59	I am satisfied with the facilities and services in Sports Town.	1	1	1	1	1	5	1.0	Pass
60	I am satisfied with the sports service in Sports Town.	1	1	1	1	1	5	1.0	Pass
61	I am satisfied with the accommodation service in Sports Town.	1	1	1	1	1	5	1.0	Pass
62	I was pleased with the food service at Sports Town.	1	1	1	1	1	5	1.0	Pass
63	I think the sports tickets in Sports town are reasonably priced.	1	1	1	1	1	5	1.0	Pass
64	I think the accommodation in Sports Town is reasonably priced.	1	1	1	1	1	5	1.0	Pass
65	I think the dining in Sports Town is reasonably priced.	1	1	1	1	1	5	1.0	Pass

N0.	QUESTIONS	Exp1	Exp2	Exp3	Exp4	Exp5	Total	Average	Results
66	I was introduced to Sports Town through friends, colleagues and family.	1	1	1	1	1	5	1.0	Pass
67	I saw the sports town promotion on TV.	1	1	1	1	1	5	1.0	Pass
68	I read about sports towns on Internet sites.	1	1	1	1	1	5	1.0	Pass
69	I read about sports towns in newspapers and magazines.	1	1	1	0	1	4	0.8	Pass
70	I saw the publicity of sports town from Tiktok and public accounts.	1	1	1	1	1	5	1.0	Pass
71	I think sports town needs more advertising.	0	1	1	1	1	4	0.8	Pass
72	Through advertising, consumers in sports towns can be increased.	1	1	0	1	1	4	0.8	Pass
73	I will participate in sports town because of the attraction of the advertisement.	1	1	1	1	1	5	1.0	Pass
74	Please give suggestions to the market development of sports characteristic town.	1	1	1	1	1	5	1.0	Pass
Total								0.892	Pass

APPENDIX D

Cronbach α coefficient table of questionnaire test(Try out)

No.	Questions	(CITC) \square	Term deleted α coefficient	Cronbach α
Q9	I would choose a sports town based on geography.	0.017	0.959	0.958
Q10	I consider the size of the town when choosing a sports town.	0.446	0.958	
Q11	The climate will affect my participation in sports town.	0.337	0.958	
Q12	I usually choose a town with good transportation.	0.272	0.958	
Q13	I have a small town topography requirement.	0.428	0.958	
Q14	Age is an important factor affecting my participation in sports town.	0.213	0.959	
Q15	Gender is an important factor that affects my participation in sports town.	0.372	0.958	
Q16	Income is an important factor affecting my participation in sports town.	0.326	0.958	
Q17	Occupation is an important factor affecting my participation in sports town.	0.424	0.958	
Q18	Education is an important factor affecting my participation in sports town movement.	0.339	0.958	
Q19	Religion is an important factor in my participation in sports town.	0.354	0.958	
Q20	Family population is an important factor affecting my participation in sports town.	0.285	0.959	
Q21	People of higher social class are more active in participating in sports.	0.377	0.958	
Q22	People from lower social classes do not or rarely participate in sports in sports towns.	0.185	0.959	
Q23	Social class affects my participation in sports town.	0.416	0.958	
Q24	My standard of living will affect my participation in sports town.	0.358	0.958	

No.	Questions	(CITC)□	Term deleted α coefficient	Cronbach α
Q25	People with high living standards pursue sports town sports with higher quality.	0.251	0.958	
Q26	People with low living standards are reluctant to participate in sports town sports.	0.241	0.958	
Q27	I like to participate in sports in sports town.	0.624	0.957	
Q28	My personality will affect my participation in sports town.	0.373	0.958	
Q29	Extroverts are more likely to participate in sports in a sports town.	0.257	0.958	
Q30	Gregarious people like to participate in sports in a sports town.	0.431	0.958	
Q31	My motivation for coming to sports town is to exercise.	0.618	0.957	
Q32	My motivation for coming to sports town is to relax.	0.459	0.958	
Q33	My motivation for coming to sports town is to learn skills.	0.499	0.957	
Q34	My motivation for coming to sports town was to make friends.	0.472	0.957	
Q35	My motivation for coming to sports town was excitement.	0.533	0.957	
Q36	My motivation for coming to sports town was to spend time with my family.	0.421	0.958	
Q37	My motivation for coming to Sports Town is corporate building.	0.657	0.957	
Q38	I would come to Sports Town on a work day.	0.362	0.958	
Q39	I would come to Sports town on a weekend.	0.647	0.957	
Q40	I would come to Sports town on a national holiday.	0.538	0.957	
Q41	I would choose to come to sports town in winter and summer vacation.	0.580	0.957	
Q42	I would choose to come to Sports town on my vacation.	0.491	0.957	
Q43	I was in a good mood after participating in Sports Town.	0.653	0.957	

No.	Questions	(CITC)□	Term deleted α coefficient	Cronbach α
Q44	Improve my health after taking part in Sports Town.	0.649	0.957	
Q45	I learned sports skills after participating in Sports Town.	0.650	0.957	
Q46	I feel so excited after participating in Sports Town.	0.699	0.957	
Q47	I spent time with my family at Sports Town.	0.625	0.957	
Q48	I made new friends by participating in Sports Town.	0.754	0.957	
Q49	My participation in Sports Town deepened my bond with my colleagues.	0.712	0.957	
Q50	I'm a potential user of Sports Town.	0.639	0.957	
Q51	I'm a first-time user of Sports Town.	0.651	0.957	
Q52	I'm a regular user of Sports Town.	0.548	0.957	
Q53	I will often go to sports town to take part in sports.	0.722	0.957	
Q54	I occasionally go to a sports town to play sports.	0.699	0.957	
Q55	I'm not going to sports town again.	0.314	0.958	
Q56	I chose only one brand that I like Sports Town.	0.460	0.958	
Q57	I will choose multiple brands of sports town that I like.	0.608	0.957	
Q58	I have no claim on the sports town brand.	0.545	0.957	
Q59	I am satisfied with the facilities and services in Sports Town.	0.793	0.957	
Q60	I am satisfied with the sports service in Sports Town.	0.651	0.957	
Q61	I am satisfied with the accommodation service in Sports Town.	0.714	0.957	
Q62	I was pleased with the food service at Sports Town.	0.801	0.956	
Q63	I think the sports tickets in Sports town are reasonably priced.	0.763	0.957	
Q64	I think the accommodation in Sports Town is reasonably priced.	0.718	0.957	
Q65	I think the dining in Sports Town is reasonably priced.	0.758	0.957	

No.	Questions	(CITC)□	Term deleted α coefficient	Cronbach α
Q66	I was introduced to Sports Town through friends, colleagues and family.	0.730	0.957	0.957
Q67	I saw the sports town promotion on TV.	0.728	0.957	
Q68	I read about sports towns on Internet sites.	0.694	0.957	
Q69	I read about sports towns in newspapers and magazines.	0.615	0.957	
Q70	I saw the publicity of sports town from Tiktok and public accounts.	0.704	0.957	
Q71	I think sports town needs more advertising.	0.684	0.957	
Q72	Through advertising, consumers in sports towns can be increased.	0.718	0.957	
Q73	I will participate in sports town because of the attraction of the advertisement.	0.776	0.957	



APPENDIX E
IOC final results of the questionnaire

N0.	QUESTIONS	Round 1	Round 2	Final	Result
Q1	Region	1.0	1.0	1.0	Pass
Q2	Gender	0.8	1.0	1.0	Pass
Q3	Age	1.0	1.0	1.0	Pass
Q4	Education	1.0	1.0	1.0	Pass
Q5	Occupation	1.0	1.0	1.0	Pass
Q6	Monthly income	1.0	1.0	1.0	Pass
Q7	How much do you spend each time on sports special town sports?	1.0	1.0	1.0	Pass
Q8	What sports activities did you participate in in Sports town?	0.8	1.0	1.0	Pass
Q9	I would choose a sports town based on geography.	0.6	0.4 (Inaccurate representation)		Delete
Q10	I consider the size of the town when choosing a sports town.	0.8	1.0	1.0	Pass
Q11	The climate will affect my participation in sports town.	0.8	1.0	1.0	Pass
Q12	I usually choose a town with good transportation.	0.8	0.8 (Modified to "Traffic will affect my trip to Sports town")	0.8	Pass
Q13	I have a small town topography requirement.	0.8	1.0	1.0	Pass
Q14	Age is an important factor affecting my participation in sports town.	0.6	0.4 (Little relevance)		Delete
Q15	Gender is an important factor that affects my participation in sports town.	0.8	0.8	0.8	Pass

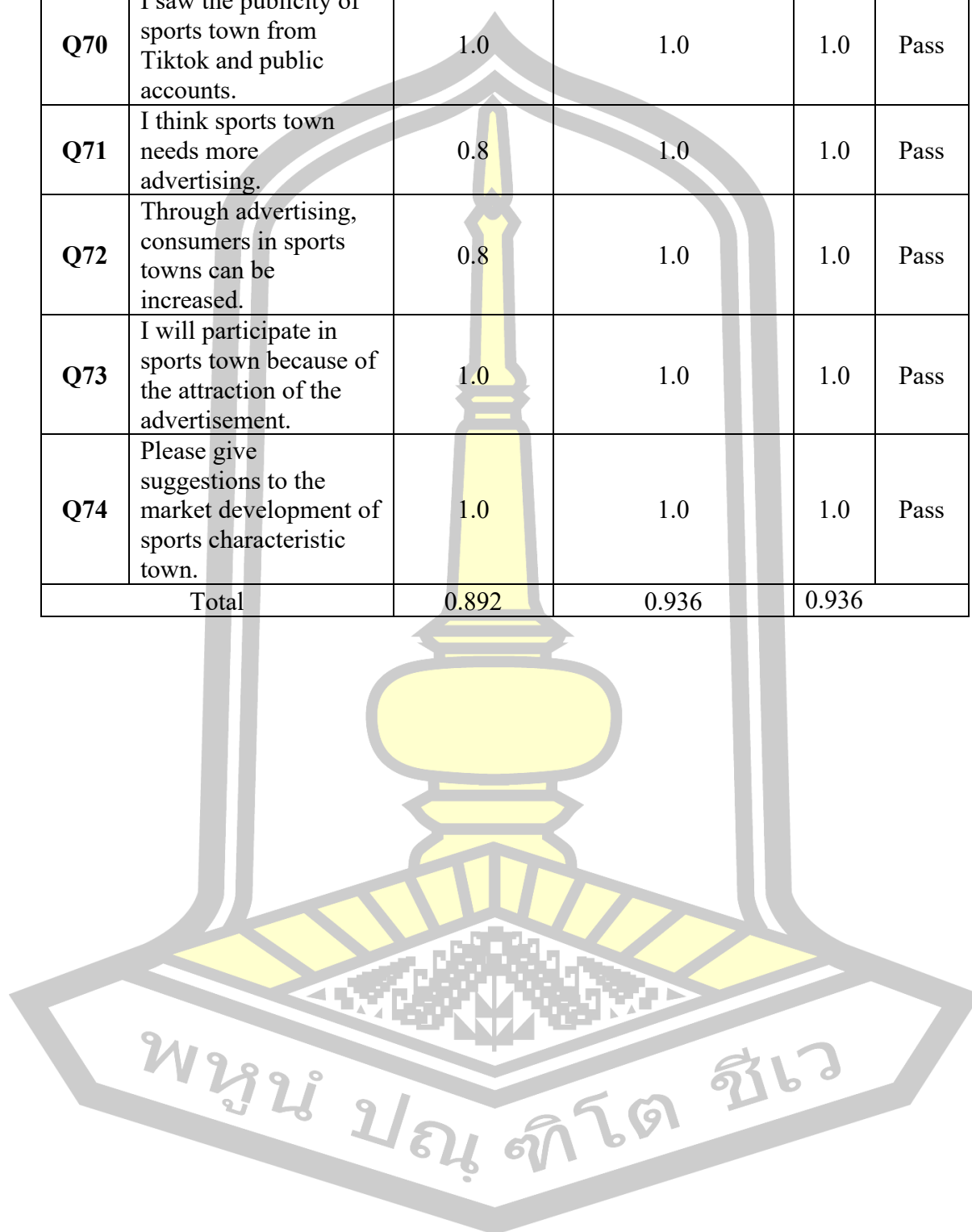
N0.	QUESTIONS	Round 1	Round 2	Final	Result
Q16	Income is an important factor affecting my participation in sports town.	1.0	1.0	1.0	Pass
Q17	Occupation is an important factor affecting my participation in sports town.	0.8	1.0	1.0	Pass
Q18	Education is an important factor affecting my participation in sports town movement.	0.8	0.8	1.0	Pass
Q19	Religion is an important factor in my participation in sports town.	0.8	0.8	1.0	Pass
Q20	Family population is an important factor affecting my participation in sports town.	0.8	0.4		Delete
Q21	People of higher social class are more active in participating in sports.	1.0	1.0	1.0	Pass
Q22	People from lower social classes do not or rarely participate in sports in sports towns.	0.6	0.4		Delete
Q23	Social class affects my participation in sports town.	1.0	1.0	1.0	Pass
Q24	My standard of living will affect my participation in sports town.	1.0	1.0	1.0	Pass
Q25	People with high living standards pursue sports town sports with higher quality.	0.8	0.8 (Modify to "I am willing to spend money on sports")	0.8	Pass

N0.	QUESTIONS	Round 1	Round 2	Final	Result
Q26	People with low living standards are reluctant to participate in sports town sports.	0.8	0.8 (Modified to "I am willing to spend money in sports towns")	0.8	Pass
Q27	I like to participate in sports in sports town.	0.6	0.8	0.8	Pass
Q28	My personality will affect my participation in sports town.	1.0	1.0	1.0	Pass
Q29	Extroverts are more likely to participate in sports in a sports town.	0.8	0.4 (Little relevance)		Delete
Q30	Gregarious people like to participate in sports in a sports town.	1.0	1.0	1.0	Pass
Q31	My motivation for coming to sports town is to exercise.	1.0	1.0	1.0	Pass
Q32	My motivation for coming to sports town is to relax.	1.0	1.0	1.0	Pass
Q33	My motivation for coming to sports town is to learn skills.	0.8	0.8	0.8	Pass
Q34	My motivation for coming to sports town was to make friends.	0.8	1.0	1.0	Pass
Q35	My motivation for coming to sports town was excitement.	1.0	1.0	1.0	Pass
Q36	My motivation for coming to sports town was to spend time with my family.	0.8	1.0	1.0	Pass
Q37	My motivation for coming to Sports Town is corporate building.	0.6	0.6	0.6	Pass
Q38	I would come to Sports Town on a work day.	1.0	1.0	1.0	Pass
Q39	I would come to Sports town on a weekend.	1.0	1.0	1.0	Pass

N0.	QUESTIONS	Round 1	Round 2	Final	Result
Q40	I would come to Sports town on a national holiday.	1.0	1.0	1.0	Pass
Q41	I would choose to come to sports town in winter and summer vacation.	1.0	1.0	1.0	Pass
Q42	I would choose to come to Sports town on my vacation.	1.0	1.0	1.0	Pass
Q43	I was in a good mood after participating in Sports Town.	1.0	1.0	1.0	Pass
Q44	Improve my health after taking part in Sports Town.	1.0	1.0	1.0	Pass
Q45	I learned sports skills after participating in Sports Town.	0.8	1.0	1.0	Pass
Q46	I feel so excited after participating in Sports Town.	1.0	1.0	1.0	Pass
Q47	I spent time with my family at Sports Town.	0.8	1.0	1.0	Pass
Q48	I made new friends by participating in Sports Town.	1.0	1.0	1.0	Pass
Q49	My participation in Sports Town deepened my bond with my colleagues.	1.0	1.0	1.0	Pass
Q50	I'm a potential user of Sports Town.	0.6	0.6	0.6	Pass
Q51	I'm a first-time user of Sports Town.	1.0	1.0	1.0	Pass
Q52	I'm a regular user of Sports Town.	0.8	1.0	1.0	Pass
Q53	I will often go to sports town to take part in sports.	0.8	0.8	0.8	Pass
Q54	I occasionally go to a sports town to play sports.	1.0	1.0	1.0	Pass

N0.	QUESTIONS	Round 1	Round 2	Final	Result
Q55	I'm not going to sports town again.	0.6	0.6	0.6	Pass
Q56	I chose only one brand that I like Sports Town.	1.0	1.0	1.0	Pass
Q57	I will choose multiple brands of sports town that I like.	0.8	0.8	0.8	Pass
Q58	I have no claim on the sports town brand.	0.8	1.0	1.0	Pass
Q59	I am satisfied with the facilities and services in Sports Town.	1.0	1.0	1.0	Pass
Q60	I am satisfied with the sports service in Sports Town.	1.0	1.0	1.0	Pass
Q61	I am satisfied with the accommodation service in Sports Town.	1.0	1.0	1.0	Pass
Q62	I was pleased with the food service at Sports Town.	1.0	1.0	1.0	Pass
Q63	I think the sports tickets in Sports town are reasonably priced.	1.0	1.0	1.0	Pass
Q64	I think the accommodation in Sports Town is reasonably priced.	1.0	1.0	1.0	Pass
Q65	I think the dining in Sports Town is reasonably priced.	1.0	1.0	1.0	Pass
Q66	I was introduced to Sports Town through friends, colleagues and family.	1.0	1.0	1.0	Pass
Q67	I saw the sports town promotion on TV.	1.0	1.0	1.0	Pass
Q68	I read about sports towns on Internet sites.	1.0	1.0	1.0	Pass
Q69	I read about sports towns in newspapers and magazines.	0.8	1.0	1.0	Pass

N0.	QUESTIONS	Round 1	Round 2	Final	Result
Q70	I saw the publicity of sports town from Tiktok and public accounts.	1.0	1.0	1.0	Pass
Q71	I think sports town needs more advertising.	0.8	1.0	1.0	Pass
Q72	Through advertising, consumers in sports towns can be increased.	0.8	1.0	1.0	Pass
Q73	I will participate in sports town because of the attraction of the advertisement.	1.0	1.0	1.0	Pass
Q74	Please give suggestions to the market development of sports characteristic town.	1.0	1.0	1.0	Pass
Total		0.892	0.936	0.936	



APPENDIX F

IOC final results of the interviews

Outline of interviews with managers in government departments IOC results

No	Questions	Results
Q1	Introduce the basic situation and market development status of sports characteristic town.	1
Q2	Introduce the basic situation of sports characteristic town consumer groups.	0.8
Q3	What factors do you think affect the demand and behavior of consumers in sports towns?	1
Q4	What do you think are the criteria for consumer market segmentation in sports towns? How to break it down?	1
Q5	How do you think sports towns should select target markets?	1
Q6	In your opinion, from what aspects should sports towns be positioned in the market?	1
Q7	What do you think are the indexes for the market evaluation of sports towns? What are the most important indexes?	1
Q8	Talk about your views and suggestions on the current development of sports town market in China.	0.8
Total		0.95

Outline of interviews with managers in sports town IOC results

No	Questions	Results
Q1	Introduce the basic situation and market development status of sports characteristic towns in the area	1
Q2	Introduce the basic situation of consumer groups in sports towns with local characteristics	0.8
Q3	What factors do you think affect the demand and behavior of consumers in sports towns in your region? Why?	1
Q4	What do you think is the standard of consumer market segmentation in sports characteristic towns in your region? How to break it down?	1
Q5	How do you think sports towns in your region should select target markets?	1
Q6	Do you think the location of sports towns in your area is accurate? From which aspects should the market be positioned?	1
Q7	What do you think are the indexes for the market evaluation of sports towns? What are the most important indexes?	1
Q8	Talk about your views and suggestions on the current development of sports town market in China.	0.8
Total		0.95

APPENDIX G

Interview notes for this study

Interview notes with managers in government departments

1. Introduce the basic situation and market development status of sports characteristic town.

The first interviewee. In 2017, the State General Administration of Sport announced the first batch of 96 pilot towns with national sports characteristics, and later emerged a large number of provincial sports characteristics towns, and the number of sports characteristics towns is relatively large. In recent years, it has also been more valued by the state, and the market development is on the rise.

The second interviewee. There are more sports characteristic towns, 96 announced in 2017, mainly distributed in the Yangtze River basin and the lower reaches of the Yellow River, forming the core circle of Shanghai, Jiangsu and Anhui, the core belt of the middle and lower reaches of the Yangtze River and the core circle of Beijing, Tianjin and Hebei, because these areas are relatively developed economically, so the development trend of sports town market in these areas is good.

The third interviewee. The first batch of national sports characteristics of a total of 96 towns, at the beginning of the pilot in the exploratory stage, although the number is relatively large, but over a long period of time, some pilot there are "fragmented development", "new bottles of old wine" and other problems. In 2018, the General Administration of Sport of the State announced that it canceled 3 pilot qualification projects of characteristic towns and 30 warning and rectification projects, so sports characteristic towns must have characteristics to ensure the sustainable development of the market.

The fourth interviewee. Since 2016, the state has issued 15 policy documents on characteristic towns, and provinces have also issued policy documents on their own provinces according to the actual situation of each province, attaching great importance to supporting the development of characteristic towns. The first batch announced 96 national-level sports towns, but due to the two-year novel coronavirus epidemic, the good market of sports towns has stagnated for several years, and now it has improved, and I believe it will become better and better.

2. Introduce the basic situation of sports characteristic town consumer groups.

The first interviewee. The consumer group of the sports town depends on whether the project opening of the sports town is consistent with the consumer demand. They like the sports in the town, have the demand for sports, and are willing to spend time in the town for sports.

The second interviewee. Consumer groups are generally sports enthusiasts, they have a strong interest in sports, and they have a certain consumption power, a relatively stable income, there is enough time.

The third interviewee. Because they are involved in sports, so the consumer group is slightly younger, basically between 25 and 50 years old, they are traveling together, the purpose is to challenge sports.

The fourth interviewee. The consumer group should be positioned according to the target market of the sports town, the health and leisure category is favored by older consumers, challenging sports are favored by young people, and sports competitions are favored by athletes and high-level sports. These consumers have certain financial sources, enough to support their spare time life.

3. What factors do you think affect the demand and behavior of consumers in sports towns?

The first interviewee.

There are many factors that affect consumer demand and behavior, such as interest, time, monthly income, education level, age, gender, personality, lifestyle and so on.

The second interviewee.

Factors include travel mode, transportation, travel time, climate, popularity, social class, living standards, etc., but I think the most influential factors are interest, time, and money.

The third interviewee.

Influencing factors include interest, personality, purchasing power, time, publicity, supply and so on.

The fourth interviewee.

I think interest is the first choice, only the first interest, will participate in, so the town must pay attention to the characteristics of the publicity, improve

consumer desire. In addition, it should also include participation motivation, sports content, experience, loyalty, town facilities and services, sports prices and so on.

4. What do you think are the criteria for consumer market segmentation in sports towns? How to break it down?

The first interviewee.

Market segmentation should be divided according to the differences in consumer demand in the overall market, so as to achieve the goal of satisfying different consumers' services. It can be segmented by location, natural environment, city size, climate, income level, household demographics, participation motivation, preferences, timing, interests, brand loyalty, etc.

The second interviewee.

Market segmentation criteria are very complex, marketing theory combines these criteria into four subdivision dimensions, namely, population and geographical characteristics, psychological characteristics and lifestyle, product attitude and benefit pursuit characteristics, consumer behavior and value. Demographic variables include age, sex, family life cycle, income, occupation, education, religion and other factors. Geographical characteristic variables include geographical location, administrative level, etc. Geographical environment mainly includes region, terrain, climate, town size, traffic conditions and so on. Maslow's demand theory well explains the different effects of psychological characteristics and lifestyle on the pursuit of interest preferences. The different pursuit of interests will lead to different product attitudes and make completely different evaluation and purchase decisions on the same product. Consumption behavior includes the frequency, occasion, time and loyalty of the use of goods, and value includes the use of goods by consumers and the value it represents.

The third interviewee.

At present, the market segmentation of sports characteristic town is not completely clear, but we can use the four variables of market segmentation to subdivide the consumer market of sports characteristic town. The four variables include geographic segmentation, demographic characteristics, psychostatistical characteristics, and behavioral factors.

The fourth interviewee.

Managers should subdivide the market of sports towns according to the factors that affect or reflect the characteristics of consumers. These factors can be divided into two categories. One is the factors that reflect the characteristics of consumers, such as geographical factors, humanistic factors and psychological factors. The other is the factors directly related to sports, such as the interests pursued by consumers through sports, the timing of consumer sports, the brand loyalty of consumers to sports towns, and so on.

5. How do you think sports towns should select target markets?

The first interviewee.

There are many kinds of target market options, some sports towns choose a dense single market, only concentrate on a part of the market, such as some sports towns, only for the elderly to do sports rehabilitation, so he can choose leisure and health characteristics of the town. Some choose to provide only one product for all types of consumers, such as football town, which provides football consumption for consumers of different ages. Some sports towns have large investment, all the popular sports are covered, and the marketing is wide.

The second interviewee.

On the basis of market segmentation and careful selection, the sports town has selected and purposefully entered several market segments in combination with the advantages of the town, so as to disperse the business risks of the sports town. Even if one market segment loses its appeal, sports towns can make money in other segments.

The third interviewee.

Some sports characteristic towns in the market segmentation, choose 2 or a few segments as the target market, the implementation of specialized production and sales.

The fourth interviewee.

There are three kinds of target market selection strategies: undifferentiated market strategy, differentiated market strategy and concentrated market strategy. The reality of each sports town is different, and there is no clear regulation, which choice

is the best, can only be said to choose the most suitable market according to the situation of the sports town.

6. In your opinion, from what aspects should sports towns be positioned in the market?

The first interviewee.

Sports towns should make full use of local characteristics and avoid homogenization with other sports towns. In the positioning, we must first consider the target customer positioning, the target customer's age, attitude, purchasing power, etc., and then position its products, including functions, inputs, prices, quality, etc., and finally position the enterprise, including advertising, staff ability, knowledge, and so on.

The second interviewee.

In the development stage of sports town, in order to avoid the quick success, short-term effect of characteristics and repeated waste of resources, it is necessary to locate the town type by combining the factors of town region, folk custom, industry, culture, sports and so on.

The third interviewee.

Based on the function and type positioning of a town with sports characteristics, the main industry that conforms to the characteristics of the town and has the greatest development potential should be selected. This main industry should be the sports industry, and other sideline industries can also be developed to drive other sideline industries.

The fourth interviewee.

Market positioning should take into account the characteristics of enterprises and products, combined with the characteristics of various sports marketing types, and pass the positioning of sports town through sports marketing activities. Sports marketing types include sports activities and event sponsorship, celebrity endorsement, stadium advertising, naming and other ways, the characteristics of each way are not the same, suitable products are not the same. The theme tourism activities, events and training projects of sports towns should be carefully planned, innovative thinking and gradually implemented to form the

characteristics of differentiation, originality, characteristics and irreplaceability, so as to achieve the effect of inheriting the culture of sports towns.

7. What do you think are the indexes for the market evaluation of sports towns? What are the most important indexes?

The first interviewee.

At present, there are many indexes to evaluate the development of small towns with sports characteristics, including some market indexes. However, there are few researches on the indexes that specifically evaluate the market, and there is no unified index model. I think the big evaluation index mainly include industry, ecology, function and management. Industry includes sports industry quantity, scale, industrial income, industrial regional competitiveness and so on. Ecology includes the level of scenic spots, green land rate, water quality standard rate, air quality good and good rate, noise standard rate, garbage harmless treatment rate. Features include small-town level, transportation, facility area, number of medical facilities, wifi and digital management coverage. Management includes the level of management personnel, management mode, management organization and so on.

The second interviewee.

The evaluation should be carried out from four aspects: function, form, system and industry. The function includes community function, tourism function and culture function. The form includes ecology and image. The system includes government guidance, enterprise main body and market operation. Industry includes industrial development, factor aggregation, input-output benefit.

The third interviewee.

The government, enterprise and society form a specific relationship. The government is the policy maker, the enterprise is the operation main body of the sports town, and the society assumes the evaluation, consultation and supervision function of the sports town. It is urgent to evaluate the effectiveness of the sports town market, including infrastructure, natural environment, cultural promotion, industrial activities and social support.

The fourth interviewee.

Sports characteristic town to continue to survive, the first is to locate what market, what is the market potential customer group, what is the profit point, how

much market influence, are all indexes that need to be measured. Therefore, I think we should evaluate the market of sports towns from the five aspects of economic construction, industrial construction, ecological construction, cultural construction and people's livelihood construction.

8. Talk about your views and suggestions on the current development of sports town market in China.

The first interviewee.

Sports towns should actively seek subsidies from the government, based on policy support, supplemented by government subsidies, to increase the town's hematopoietic function. Excessive subsidies not only cost the limited financial resources of the government, but also have a negative impact on the town's profits.

The second interviewee.

Due to the lack of industry support, the ability to be hit in the market competition is weaker. When the construction of some characteristic towns in China develops to the middle and late stage, after the relevant preferential policies are cancelled at the government level, the situation of insufficient development momentum immediately appears due to the absence of core industries, so special attention should be paid to the positioning of the main sports industry.

The third interviewee.

Small towns with sports characteristics realize profits and value in a short time. On the one hand, it is necessary to strengthen the integration between the sports industry and various industries to achieve the development of multiple industries and promote the development of multiple industrial chains. On the other hand, it is also necessary to strengthen the publicity of the town and publicize the brand culture of the town in order to better attract tourists through the "charm" of the town itself.

The fourth interviewee.

Sports towns should adopt a development model based on independent investment and supplemented by subsidies from the government. If the subsidy rate is within a specific range, the increase of the subsidy rate will lead to the increase of the profit level of the town; if the investment subsidy is too high, it may lead to vicious competition, eventually resulting in oversupply and reducing the profit rate of the town.

Interview notes with managers in sports town

1. Introduce the basic situation and market development status of sports characteristic towns in the area.

The first interviewee.

The problem of sports characteristic town construction is the market problem in the final analysis, and the market is the battlefield to test the success of sports characteristic town construction. Fuyang Yinhu Smart Sports Town, as the first smart sports characteristic town, belongs to the national sports and leisure demonstration zone, with a total investment of more than 5 billion yuan, of which 3 billion yuan is invested in infrastructure and 2 billion yuan is invested in industry, "through the drive of smart industry, the development of characteristic sports and leisure tourism, to create a smart sports town integrating industry and tourism." Focusing on the new smart sports and leisure experience, the development of a variety of indoor and outdoor new smart sports fitness and entertainment activities, tourists can experience 3D golf, 3D polo and other VR/AR sports experience projects, the development of dragon boat, gliding, rowing, canoeing, luxury cruise ships and other modern fashion cutting-edge sports projects, good prospects for development.

The second interviewee.

As one of the first pilot towns with sports characteristics in the country, Rizhao Olympic Water Sports Town is based on its natural advantages, innovates the integrated development of multiple formats of "sports +" towns, nurtures the industrial core, actively explores a new model of composite development of sports towns, enriches the connotation of "water sports capital", and diversifies the development of football, tennis, Marine golf and other projects, so that sports can better serve national fitness. To help the high-quality development of the sports industry. In the early stage of construction, the COVID-19 epidemic in 2020 and 2021 caused a small number of consumers and serious losses. However, in 2022, with the end of the epidemic, the increase of consumers and the holding of events, the market gradually improved.

The third interviewee.

Zhongnan Shanzhai Sports and Leisure Town is located in Yingpan Town, Shangluo City, Shaanxi Province, 42 kilometers away from Xi 'an. It is a

comprehensive scenic spot integrating residence, sightseeing, experience, health care, elderly care, vacation and entertainment. In addition to the investment of the operating company, the town also integrates special funds such as education and sports, tourism poverty alleviation, and tourism services. In general, it can basically solve the funding problem, but due to natural environmental reasons, the income is poor in the off-season, and the impact of the epidemic in the past few years, and it is currently in the development period.

The fourth interviewee.

Longyangxia Sports Town is located in the Yellow River Grand Canyon area, with unique topography, large fluctuations, both mountains, canyons and basins, and sufficient water resources. Longyang Gorge, with its unique geographical advantages and folk characteristics, was selected as one of the first characteristic towns in China. According to the tourism development idea of "one circle, two lakes and four cities", with the Yellow River culture, national culture and industrial culture as the soul, and characterized by low-carbon, slow life and green ecology, we will fully promote the integrated development of "culture, sports and tourism" in Longyang Gorge. The town has a basketball arena, tennis arena, bicycle path, water sports area, Yellow River Grand Canyon fishing area, sports infrastructure is becoming more and more perfect with the growth of the domestic economy and consumer desire this year, the potential customer base of sports towns is large, I believe the market will slowly rise.

2. Introduce the basic situation of consumer groups in sports towns with local characteristics.

The first interviewee.

Fuyang Yinhu Smart Sports Town development projects are frontier projects, so the consumer groups are slightly higher class, higher income level, high requirements for living standards, and these projects have certain requirements for skills, so they need a certain basis for sports.

The second interviewee.

The first consumers of Rizhao Olympic Water sports Town are all because of the water project brand sports, and the number of regular users in other projects is more.

The third interviewee.

Zhongnan Shanzhai has three advantages of good ecology, location and resources, highlighting the three themes of leisure vacation, health and health, outdoor rest, can be played at will, both free to play, but also to build a company group, age is not limited, because different projects are set for different age stages, we have parent-child sports, leisure projects, and challenging projects, because the ticket price is reasonable, The income of consumer groups can be satisfied from low to high.

The fourth interviewee.

Most of the consumers are bicycle enthusiasts, the age is mainly concentrated in the young and middle-aged, and there are more consumers in the province. However, with the holding of international road cycling races, international rock climbing competitions, and challenges to cross the Yellow River, it has also attracted many sports enthusiasts across the country.

3. What factors do you think affect the demand and behavior of consumers in sports towns in your region? Why?

The first interviewee.

Our town has golf, rowing and other high-consumption items, the income requirements of consumers may be higher, consumers' income, hobbies are factors that affect consumer demand and behavior. In addition, it also includes the facilities of the town, the service of the town, the satisfaction of the town, etc., which will affect his continued consumption.

The second interviewee.

Interest is the driving force for participation and the primary factor for consumption. This is followed by time, purchasing power, climate, region, transportation, experience, and publicity. Our town's consumption season is generally from May to October, some consumers are summer vacation with their children, just the children do not go to school, some parents leave, have enough time to play, and summer hot, just can play water sports. The experience of consumers is mainly the facilities and services, we do a good job, there is a reputation, they will introduce friends and colleagues to play.

The third interviewee.

Our town is very cool in summer, just can escape the summer heat, the factors that generally affect consumers to play in the town include participation motivation, consumption power, consumption awareness, publicity, long-term road, time arrangement, the number of people to play and so on.

The fourth interviewee.

Longyang Gorge transportation is too little, foreign passengers need to take a bus in Xining to Longyang Gorge, one to the summer peak, tickets are very tight, peak season tickets are too expensive and other reasons, resulting in many consumers have to give up the trip to Longyang Gorge. The geographical location, high altitude, cold winter, tourism development is affected by the seasons, there are short peak season, long off-season problems. Longyangxia sports characteristic town is in the development stage, site facilities, accommodation, catering, service and other aspects are gradually improving, the town management is not in place, a large number of tourists into the town, resulting in damage and pollution of the ecological environment in the town.

4. What do you think is the standard of consumer market segmentation in sports characteristic towns in your region? How to break it down?

The first interviewee.

The market segmentation of sports characteristic town is guided by sports consumers, and the demand and behavior characteristics of consumers are classified. Consumers' needs and desires for the functions, specifications, quality, price, packaging and other aspects of sports town products are not the same, and there are also differences in purchasing behavior or purchasing habits. It is precisely this difference in consumer demand that we should carry out market segmentation in advance when building sports towns.

The second interviewee.

Subdivide consumer groups according to the classification standards related to consumer purchase or use of different products. These classification standards directly reflect the corporate culture's cognition of consumer groups or other internal and external standards. Before the construction of sports town, we have carried out corresponding research, analyzed the impact factors of sports participation,

and inferred the impact factors related to the characteristic projects of the town to divide consumer groups.

The third interviewee.

I think it should be analyzed from three aspects, one is to analyze the differences in psychological needs of consumers in sports towns, the other is to choose social background variables such as culture, social class, marriage and family status as the subdivision criteria, and the third is to take product use occasion subdivision, utilization rate and brand loyalty subdivision, and interest subdivision as the main criteria for behavioral subdivision.

The fourth interviewee.

The essence of sports town market segmentation is segmented consumers, rather than segmented goods. There are all kinds of consumers with different needs in the market, and market segmentation in sports town is to find the difference between the needs of different consumers, and then classify consumers with basically the same needs into a class, so that an overall market can be divided into several market segments. Of course, these markets also need to take full account of local characteristics and building capacity.

5. How do you think sports towns in your region should select target markets?

The first interviewee.

Sports characteristic towns should determine the basic development direction according to their own main products, and in the target market selection, give priority to the target market that is favorable to themselves, only in this way can the market positioning be completed.

The second interviewee.

Rizhao Olympic water sports Town adopts the layout mode of "one core", "two rings" and "multiple plates", that is, the water sports town with the water characteristic sports town as the core, supported by the three-dimensional multi-functional plate surrounded by the city's shared ring line and the coastal recreational tour ring line, has become the core area of the central vitality area of Rizhao City. The town follows the development idea of "one industry and multiple". Highlight sports features.

The third interviewee.

Novel fake sports leisure characteristic town of choice is disparate market, the whole town in sports market is divided into parent-child movement, cross-country, return, canyons, jungle paradise, health care, etc., according to different market segments, design different sports, meet the needs of different consumers.

The fourth interviewee.

Due to the geographical location and climate, Longyangxia sports characteristic town chooses a concentrated market, concentrates the advantageous force, and focuses on the development of the bicycle sports market, reduces costs and improves popularity.

6. Do you think the location of sports towns in your area is accurate? From which aspects should the market be positioned?

The first interviewee.

Fuyang Yinhu Smart Sports Town is the first town to propose smart sports, we use innovative positioning in positioning, while seizing superior resources with competitors, mining potential market demand position, and through innovative positioning to fill the gap in the smart market.

The second interviewee.

Rizhao City further integrates superior resources, gives full play to the location advantages of water sports towns, and has a very clear positioning. It plans to build Rizhao Olympic Water Sports Town, making the town the only area in the country that can hold all water sports events at the same time. In addition, it also involves tennis, football, basketball and other sports, and truly realizes a full range of fitness services.

The third interviewee.

Our town has a clear positioning, which is divided into three sections. The first section is health culture, the second section is sports park, and the third section is rural revitalization service.

The fourth interviewee.

The town is positioned accurately, taking full account of geographical advantages and consumer needs.

7. What do you think are the indexes for the market evaluation of sports towns? What are the most important indexes?

The first interviewee.

According to the suggestions of experts, we will evaluate the sports town from four dimensions, including the basic information dimension, the characteristic industry dimension, the characteristic resources dimension and the public service dimension. Basic information includes construction planning, capital resources, and taxation. Characteristic industries include industrial competitiveness level, scale, market popularity, market demand, sports industry benefits and so on. Characteristic resources include natural resources, cultural resources and resource publicity channels; Public services include sports infrastructure, the number of activities carried out, the level of activities carried out, the public service budget, and the construction of public services.

The second interviewee.

Rizhao Olympic Water Sports Town is mainly composed of six evaluation index, which are the tourism reception conditions of the town, the brand image of the town, the service situation of the town, the destination accessibility, the value attribute of sports tourism and the sports tourism resources.

The third interviewee.

The evaluation index of sports towns should involve residents' quality of life, economic development, ecological environment, social management, public services and so on. Zhongnan Shanzhai is more concerned about the quality of life of residents, ecological environment, public services these indexes.

The fourth interviewee.

Evaluation index should include infrastructure, overall image, price, product, environment, service, safety, Small town practitioner literacy, consumer purchasing power and so on.

8. Talk about your views and suggestions on the current development of sports town market in China.

The first interviewee

Effectively connecting urban and rural areas, avoiding the transition of urban construction, reducing residents' living costs, increasing employment opportunities,

and developing the local sports feature project industry can explore the sustainable development path suitable for the local area, create jobs and training opportunities for local residents, and allow rural local residents to enjoy the dividends of sports.

The second interviewee

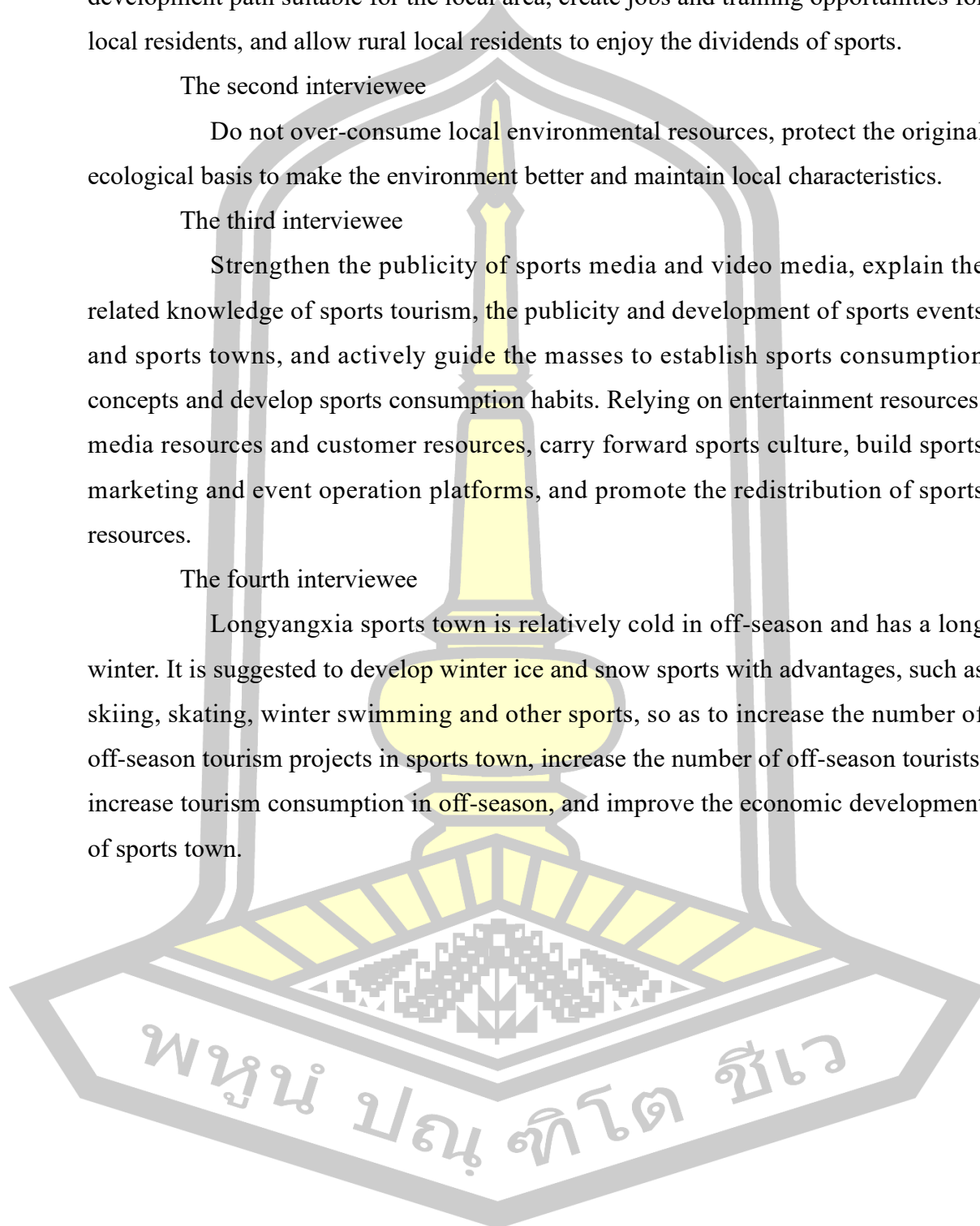
Do not over-consume local environmental resources, protect the original ecological basis to make the environment better and maintain local characteristics.

The third interviewee

Strengthen the publicity of sports media and video media, explain the related knowledge of sports tourism, the publicity and development of sports events and sports towns, and actively guide the masses to establish sports consumption concepts and develop sports consumption habits. Relying on entertainment resources, media resources and customer resources, carry forward sports culture, build sports marketing and event operation platforms, and promote the redistribution of sports resources.

The fourth interviewee

Longyangxia sports town is relatively cold in off-season and has a long winter. It is suggested to develop winter ice and snow sports with advantages, such as skiing, skating, winter swimming and other sports, so as to increase the number of off-season tourism projects in sports town, increase the number of off-season tourists, increase tourism consumption in off-season, and improve the economic development of sports town.



APPENDIX H

Sports characteristic town market evaluation index Construction expert evaluation table (First Round)

Dear expert:

Hello!

I am a PHD student in Mahasarakham University, Thailand, and my thesis topic is " Development of a Market Evaluation Index of Sports Characteristics for Towns in China ". This research needs to construct market evaluation index of small towns with sports characteristics. The Delphi method is adopted. The main purpose is to supplement, delete and modify the First-level indexes with the help of the professional knowledge of experts, so as to build a comprehensive and scientific market evaluation index model of small towns with sports characteristics. You are an expert in this research field, so you need to use your solid theoretical knowledge and rich scientific research experience to judge the evaluation index of this research. Your opinion is the main basis of my paper research, I hope you can help in your busy schedule, this survey will be divided into two to three rounds, please follow your real ideas and practice, and can continue to give support in the following one to two rounds of questionnaires!

This study is based on STP theory, STP theory refers to the enterprise to select the target market on the basis of a certain market segmentation, market positioning, and then position their products or services in the selected target market. The purpose of this study is to subdivide the sports characteristic town market, understand the consumer demand, use reasonable evaluation index to evaluate the sports characteristic town market, and finally provide a practical positioning choice.

Thank you very much for your strong support and help!

Advisor: Watthanapong Khongsuebsor

PhD student: Jing Li

Expert basic information

1. Your name:
2. Your Professional title:
3. Your research direction:
4. Your work unit:

Description: Evaluation

index at all levels were compiled into Likert 5 subscale form, according to "very important", "important", "general", "not important", "very important" assigned 5, 4, 3, 2, 1 scores. Please rate according to your knowledge and mark "√" in the corresponding column. Thank you!

First-level index	5	4	3	2	1	Suggestion	Second-level index	5	4	3	2	1	Suggestion
A1 Products							B1 Quality						
							B2 Cost						
							B3 Price						
							B4 Features						
							B5 Function						
A2 Enterprises							B6 Enterprise image						
							B7 Employee competence						
A3 Competitiveness							B8 Brand core competitiveness						
							B9 Management service competitiveness						
A4 Consumers							B10 Basic information						
							B11 Attitude						
							B12 Purchasing power						

First-level index	Second-level index	Third-level index	5	4	3	2	1	Suggestion
A1 Products	B1 Quality	C1 Quality level			3	2	1	
		C2 Quality consistency						
		C3 Satisfaction						
		C4 Sense of experience						
	B2 Cost	C5 Government fund support						
		C6 Private capital investment						
		C7 Total investment in sports products						
		C8 Sports product investment ratio						
		C9 Potential risk						
	B3 Price	C10 Sports product ticket prices						
		C11 Total output value of sports products						
		C12 Sports product profit ratio						
	B4 Features	C13 Sports characteristic town area						
		C14 Sports characteristic town style						
		C15 Sports characteristic town packaging						
		C16 Sports characteristic town attribute						
		C17 Sports characteristic town product popularity						
		C18 Sports characteristic town product influence						
	B5 Function	C19 Functional partition						
		C20 Degree of functional innovation						
		C21 Functional role						
		C22 Functional effect						
A2 Enterprises	B6 Enterprise	C23 Enterprise						

	image	scale							
		C24 Enterprise culture							
		C25 Enterprise environment							
	B7 Employee competence	C26 Culture and knowledge level							
		C27 Experience							
		C28 Service quality							
		C29 Code of conduct							
		C30 Communication							
		C31 Brand image							
		C32 Brand culture							
		C33 Brand value							
A3 Competitiveness	B8 Brand core competitiveness	C34 Brand price							
		C35 Management mode							
		C36 Service attitude							
		C37 Geographical topography							
	B9 Management service competitiveness	C38 Age							
		C39 Occupation							
		C40 Gender							
A4 Consumers	B10 Basic information	C41 Social stratum							
		C42 Religion							
		C43 Education							
		C44 Participation degree							
		C45 Participation motivation							
		C46 Recognition degree							
	B11 Attitude	C47 Liking degree							
		C48 Loyalty							
		C49 Disposable income							
		C50 Monthly income							
		C51 Disposable time							
		C52 Marketing tools							
		C53 Buying desire							
	B12 Purchasing power								

APPENDIX I

IOC results from expert evaluation tables

First-level indexes	Exp 1	Exp 2	Exp 3	Exp 4	Exp 5	Total	Average	RESULTS
A1 Produces	1	1	1	1	1	5	1	PASS
A2Enterprises	1	1	1	1	0	4	0.8	PASS
A3Competitiveness	0	1	1	0	1	3	0.6	PASS
A4Consumers	1	1	1	1	1	5	1	PASS
Second-level index	Exp 1	Exp 2	Exp 3	Exp 4	Exp 5	Total	Average	Results
B1 Quality	1	1	1	1	1	5	1	PASS
B2 Cost	1	0	1	1	1	4	0.8	PASS
B3 Price	1	1	1	1	1	5	1	PASS
B4 Features	1	1	0	1	1	4	0.8	PASS
B5 Function	1	1	1	1	1	5	1	PASS
B6 Enterprise image	1	1	1	1	1	5	1	PASS
B7 Employee competence	1	0	1	1	1	4	0.8	PASS
B8 Brand core competitiveness	1	1	1	1	1	5	1	PASS
B9 Management service competitiveness	1	1	1	1	-1	3	0.6	PASS
B10 Basic information	0	1	1	1	1	4	0.8	PASS
B11 Attitude	1	1	1	1	1	5	1	PASS
B12 Purchasing power	1	1	1	1	1	5	1	PASS
Third-level indexes	Exp 1	Exp 2	Exp 3	Exp 4	Exp 5	Total	Average	Results
C1 Quality level	1	1	1	1	1	5	1	PASS
C2 Quality consistency	1	1	0	1	1	4	0.8	PASS
C3 Satisfaction	1	1	1	1	1	5	1	PASS
C4 Sense of experience	0	1	1	1	1	4	0.8	PASS
C5 Government fund support	1	1	1	1	1	5	1	PASS
C6 Private capital investment	1	1	1	0	1	4	0.8	PASS
C7 Total investment in sports products	1	1	1	1	1	5	1	PASS

Third-level indexes	Exp1	Exp2	Exp3	Exp4	Exp5	Total	Average	Results
C8 Sports product investment ratio	1	1	1	1	1	5	1	PASS
C9 Potential risk	1	-1	1	1	1	3	0.6	PASS
C10 Sports product ticket prices	1	1	1	1	1	5	1	PASS
C11 Total output value of sports products	1	1	1	1	1	5	1	PASS
C12 Sports product profit ratio	1	1	1	1	1	5	1	PASS
C13 Sports characteristic town area	1	0	1	1	1	4	0.8	PASS
C14 Sports characteristic town style	1	1	1	1	1	5	1	PASS
C15 Sports characteristic town packaging	1	1	1	1	1	5	1	PASS
C16 Sports characteristic town attribute	1	1	1	1	1	5	1	PASS
C17 Sports characteristic town product popularity	1	1	1	1	1	5	1	PASS
C18 Sports characteristic town product influence	1	1	1	1	0	4	0.8	PASS
C19 Functional partition	1	1	1	1	1	5	1	PASS
C20 Degree of functional innovation	1	1	1	1	1	5	1	PASS
C21 Functional role	1	1	0	1	1	4	0.8	PASS
C22 Functional effect	1	1	1	1	1	5	1	PASS
C23 Enterprise scale	1	1	1	1	0	4	0.8	PASS
C24 Enterprise culture	0	1	1	1	1	4	0.8	PASS
C25 Enterprise environment	1	0	1	1	1	4	0.8	PASS
C26 Culture and knowledge level	1	1	1	1	1	5	1	PASS
C27 Experience	1	1	1	1	1	5	1	PASS
C28 Service quality	1	1	1	1	1	5	1	PASS

Third-level indexes	Exp1	Exp2	Exp3	Exp4	Exp5	Total	Average	Results
C29 Code of conduct	1	0	1	1	1	4	0.8	PASS
C30 Communication	1	1	1	1	1	5	1	PASS
C31 Brand image	1	1	1	1	1	5	1	PASS
C32 Brand culture	1	1	0	1	1	4	0.8	PASS
C33 Brand value	1	1	1	1	1	5	1	PASS
C34 Brand price	1	1	1	1	1	5	1	PASS
C35 Management mode	1	1	1	1	1	5	1	PASS
C36 Service attitude	1	1	1	0	1	4	0.8	PASS
C37 Geographical topography	1	1	1	1	-1	3	0.6	PASS
C38 Age	1	1	1	1	0	4	0.8	PASS
C39 Occupation	1	1	1	1	1	5	1	PASS
C40 Gender	-1	1	1	1	1	3	0.6	PASS
C41 Social stratum	1	1	1	1	1	5	1	PASS
C42 Religion	1	-1	1	1	1	3	0.6	PASS
C43 Education	1	1	1	1	1	5	1	PASS
C44 Participation degree	1	1	1	0	1	4	0.8	PASS
C45 Participation motivation	1	1	1	1	1	5	1	PASS
C46 Recognition degree	1	1	1	1	1	5	1	PASS
C47 Liking degree	1	1	0	1	1	4	0.8	PASS
C48 Loyalty	1	1	1	1	1	5	1	PASS
C49 Disposable income	1	1	1	1	1	5	1	PASS
C50 Monthly income	0	1	1	1	1	4	0.8	PASS
C51 Disposable time	1	1	1	1	1	5	1	PASS
C52 Marketing tools	1	1	-1	1	1	3	0.6	PASS
C53 Buying desire	1	1	1	1	1	5	1	PASS

APPENDIX J

Sports characteristic Town market evaluation index Construction expert evaluation table (Second Round)

Dear expert,

Hello!

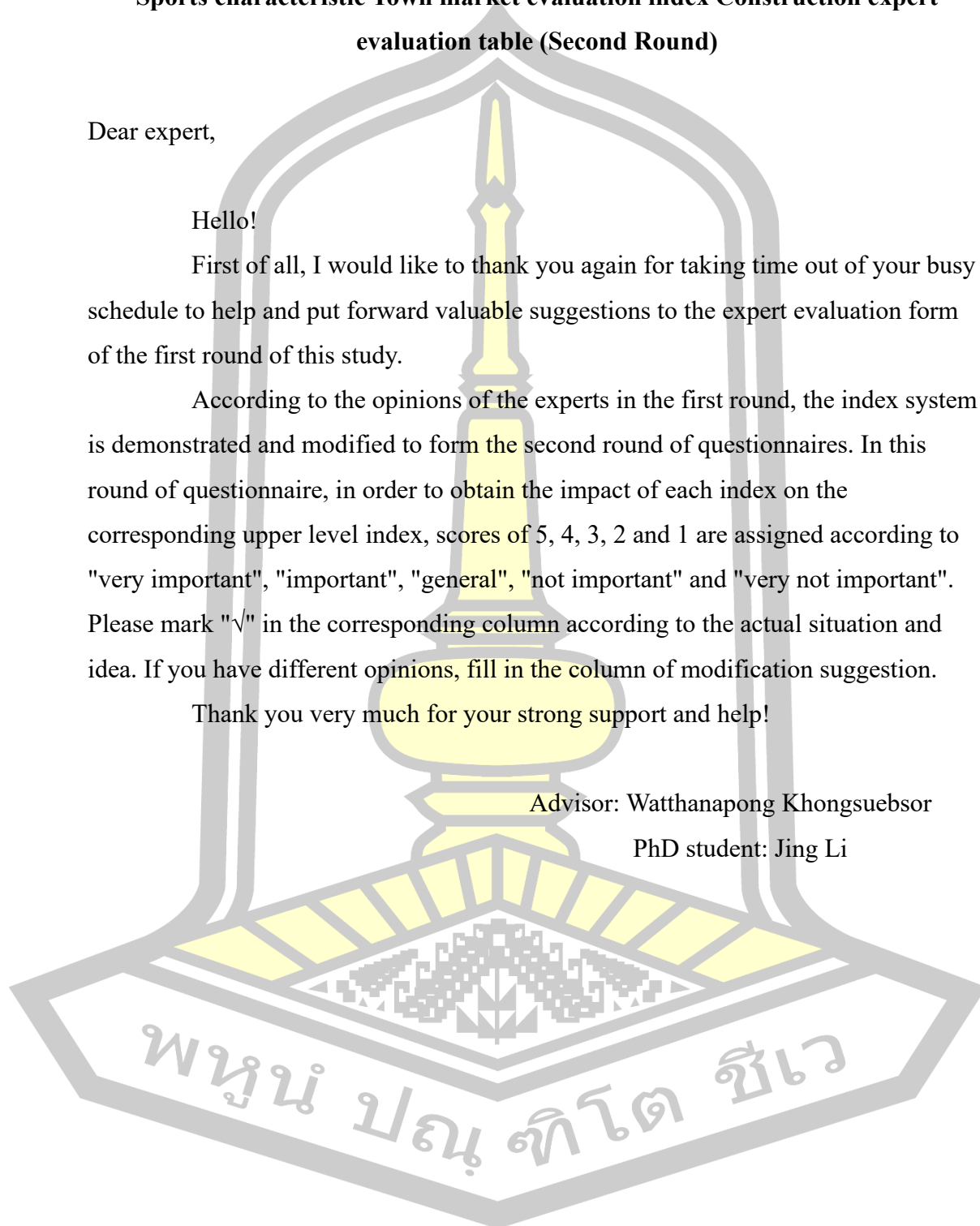
First of all, I would like to thank you again for taking time out of your busy schedule to help and put forward valuable suggestions to the expert evaluation form of the first round of this study.

According to the opinions of the experts in the first round, the index system is demonstrated and modified to form the second round of questionnaires. In this round of questionnaire, in order to obtain the impact of each index on the corresponding upper level index, scores of 5, 4, 3, 2 and 1 are assigned according to "very important", "important", "general", "not important" and "very not important". Please mark "√" in the corresponding column according to the actual situation and idea. If you have different opinions, fill in the column of modification suggestion.

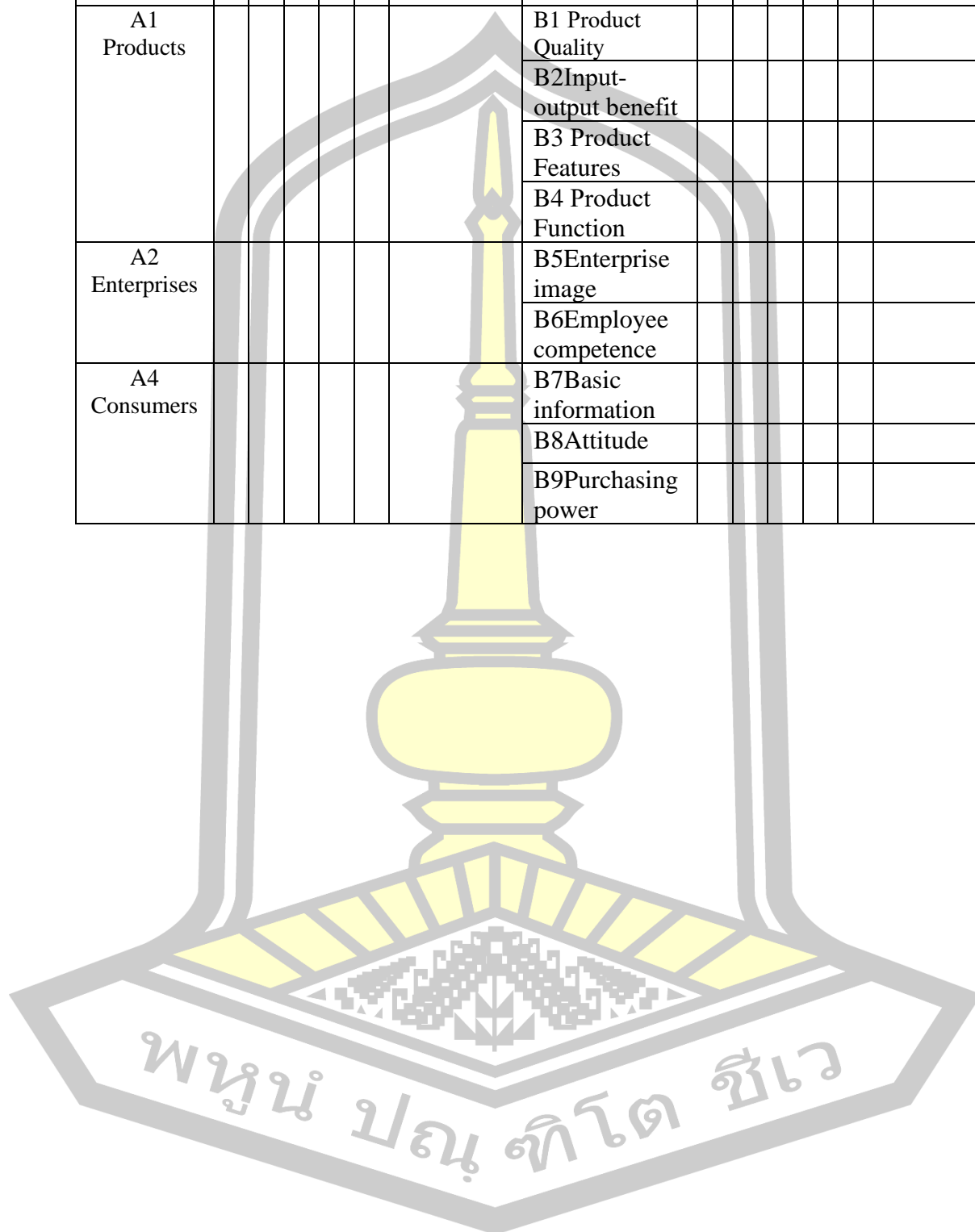
Thank you very much for your strong support and help!

Advisor: Watthanapong Khongsuebsor

PhD student: Jing Li



First-level index	5	4	3	2	1	Suggestion	Second-level index	5	4	3	2	1	Suggestion
A1 Products							B1 Product Quality						
							B2 Input-output benefit						
							B3 Product Features						
							B4 Product Function						
A2 Enterprises							B5 Enterprise image						
							B6 Employee competence						
A4 Consumers							B7 Basic information						
							B8 Attitude						
							B9 Purchasing power						



First-level index	Second-level index	Third-level index	5	4	3	2	1	Suggestion
A1 Products	B1 Product Quality	C1 Quality level						
		C2 Quality consistency						
		C3 Satisfaction						
	B2 Input-output benefit	C4 Government fund support						
		C5 Private capital investment						
		C6 Total investment in sports products						
		C7 Sports product investment ratio						
		C8 Sports product ticket prices						
		C9 Total output value of sports products						
		C10 Sports product profit ratio						
	B3 Product Features	C11 Sports characteristic town area						
		C12 Sports characteristic town style						
		C13 Sports characteristic town packaging						
		C14 Sports characteristic town product popularity						
		C15 Sports characteristic town product influence						
	B4 Product Function	C16 Brand core competitiveness						
		C17 Functional partition						
		C18 Degree of functional innovation						
		C19 Functional effect						

First-level index	Second-level index	Third-level index	5	4	3	2	1	Suggestion
A2 Enterprises	B5Enterprise image	C20 Enterprise scale						
		C21 Enterprise culture						
		C22 Enterprise environment						
		C23 Management mode						
	B6Employee competence	C24 Culture and knowledge level						
		C25 Experience						
		C26 Service quality						
		C27 Communication						
A3 Consumers	B7 Basic information	C28 Age						
		C29 Occupation						
		C30 Social stratum						
		C31 Education						
	B8 Attitude	C32 Participation degree						
		C33 Participation motivation						
		C34 Recognition degree						
		C35 Loyalty						
	B9Purchasing power	C36 Disposable income						
		C37Monthly income						
		C38 Disposable time						
		C39 Buying desire						
		C40 Purchase frequency						

พหุ ประสิทธิภาพ

APPENDIX K

Sports characteristic Town market evaluation index Construction expert evaluation table (Third Round)

Dear expert,

Hello!

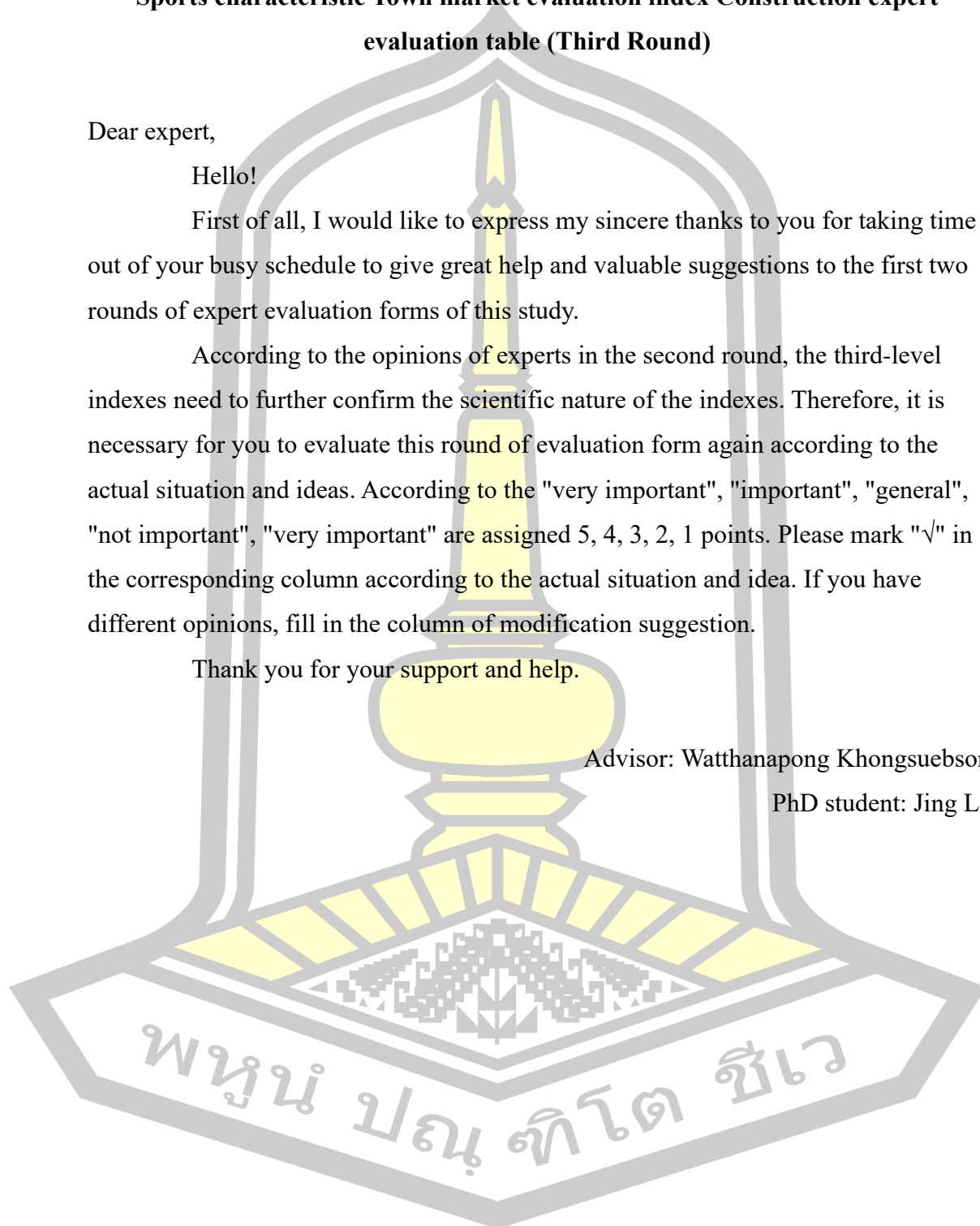
First of all, I would like to express my sincere thanks to you for taking time out of your busy schedule to give great help and valuable suggestions to the first two rounds of expert evaluation forms of this study.

According to the opinions of experts in the second round, the third-level indexes need to further confirm the scientific nature of the indexes. Therefore, it is necessary for you to evaluate this round of evaluation form again according to the actual situation and ideas. According to the "very important", "important", "general", "not important", "very important" are assigned 5, 4, 3, 2, 1 points. Please mark "√" in the corresponding column according to the actual situation and idea. If you have different opinions, fill in the column of modification suggestion.

Thank you for your support and help.

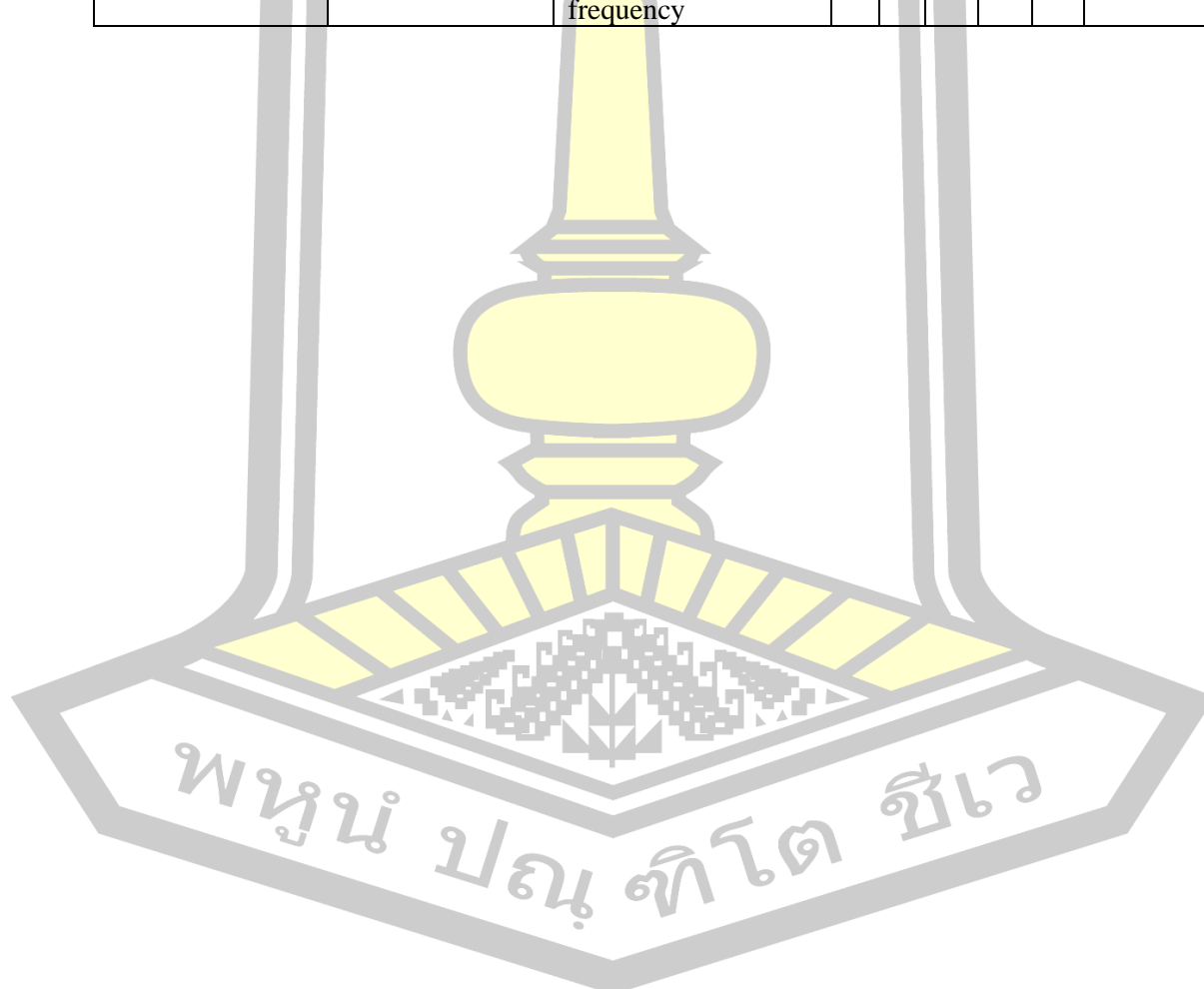
Advisor: Watthanapong Khongsuebsor

PhD student: Jing Li



First-level index	Second-level index	Third-level index	5	4	3	2	1	Suggestion
A1 Products	B1 Product Quality	C1 Quality level						
		C2 Quality consistency						
		C3 Satisfaction						
	B2 Input-output benefit	C4 Government fund support						
		C5 Private capital investment						
		C6 Sports product input ratio						
		C7 Sports product ticket prices						
		C8 Total output value of sports products						
		C9 Sports product profit ratio						
	B3 Product Features	C10 Sports product scale						
		C11 Sports product style						
		C12 Sports product packaging						
		C13 Sports product popularity						
	B4 Product Function	C14 Sports Brand core competitiveness						
		C15 Functional partition						
		C16 Degree of functional innovation						
		C17 Functional effect						
A2 Enterprises	B5 Enterprise image	C18 Enterprise scale						
		C19 Enterprise culture						
		C20 Enterprise environment						
		C21 Management mode						
	B6 Employee competence	C22 Culture and knowledge level						
		C23 Experience						
		C24 Service quality						
		C25 Communication						

First-level index	Second-level index	Third-level index	5	4	3	2	1	Suggestion
A3 Consumers	B7Basic information	C26 Age						
		C27 Occupation						
		C28 Education						
	B8 Attitude	C29 Participation degree						
		C30 Participation motivation						
		C31 Recognition degree						
		C32 Loyalty						
	B9Purchasing power	C33 Disposable income						
		C34 Disposable time						
		C35 Buying desire						
		C36 Purchase frequency						



APPENDIX L

Weight table of market evaluation index of sports characteristic town

Dear expert,

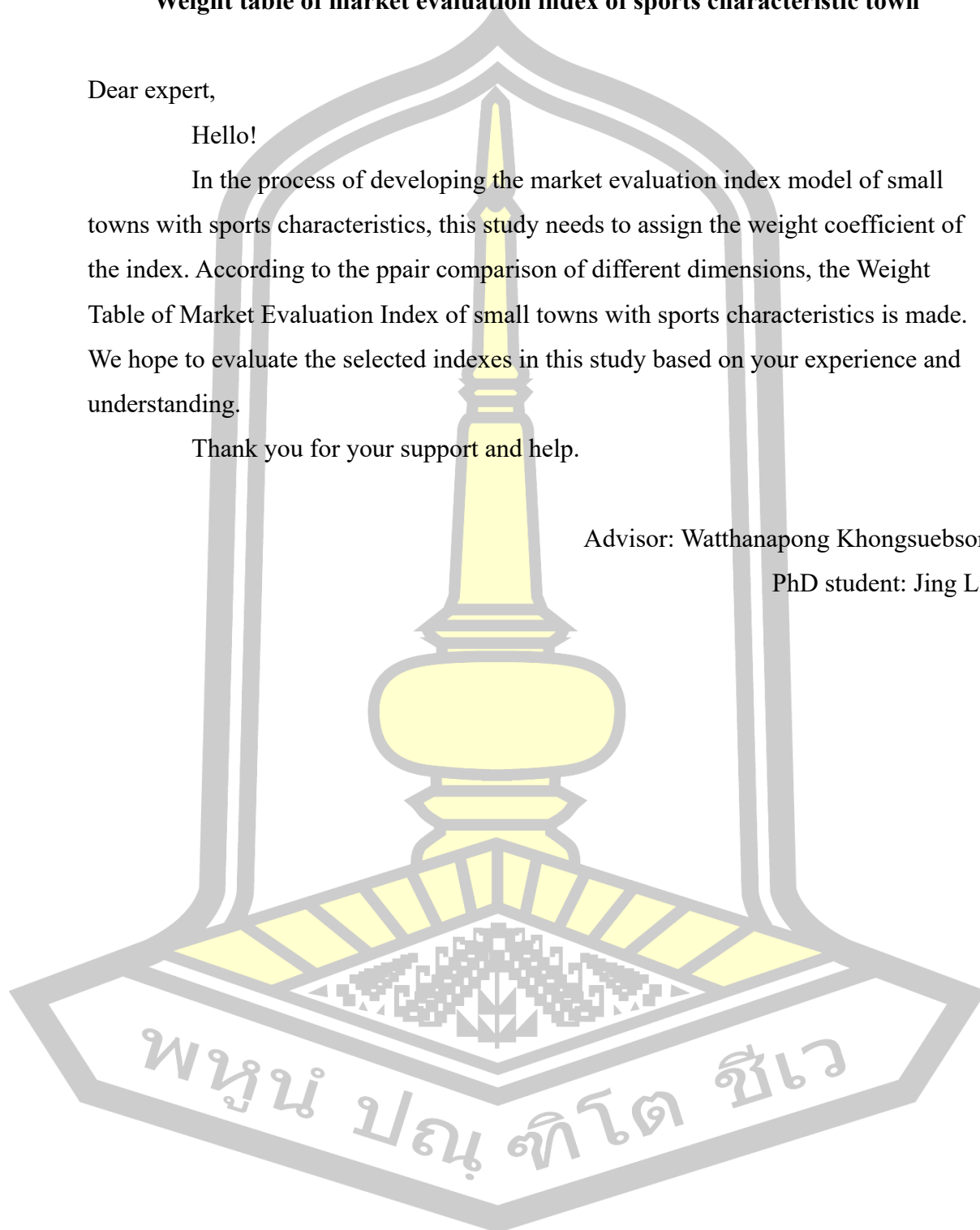
Hello!

In the process of developing the market evaluation index model of small towns with sports characteristics, this study needs to assign the weight coefficient of the index. According to the pair comparison of different dimensions, the Weight Table of Market Evaluation Index of small towns with sports characteristics is made. We hope to evaluate the selected indexes in this study based on your experience and understanding.

Thank you for your support and help.

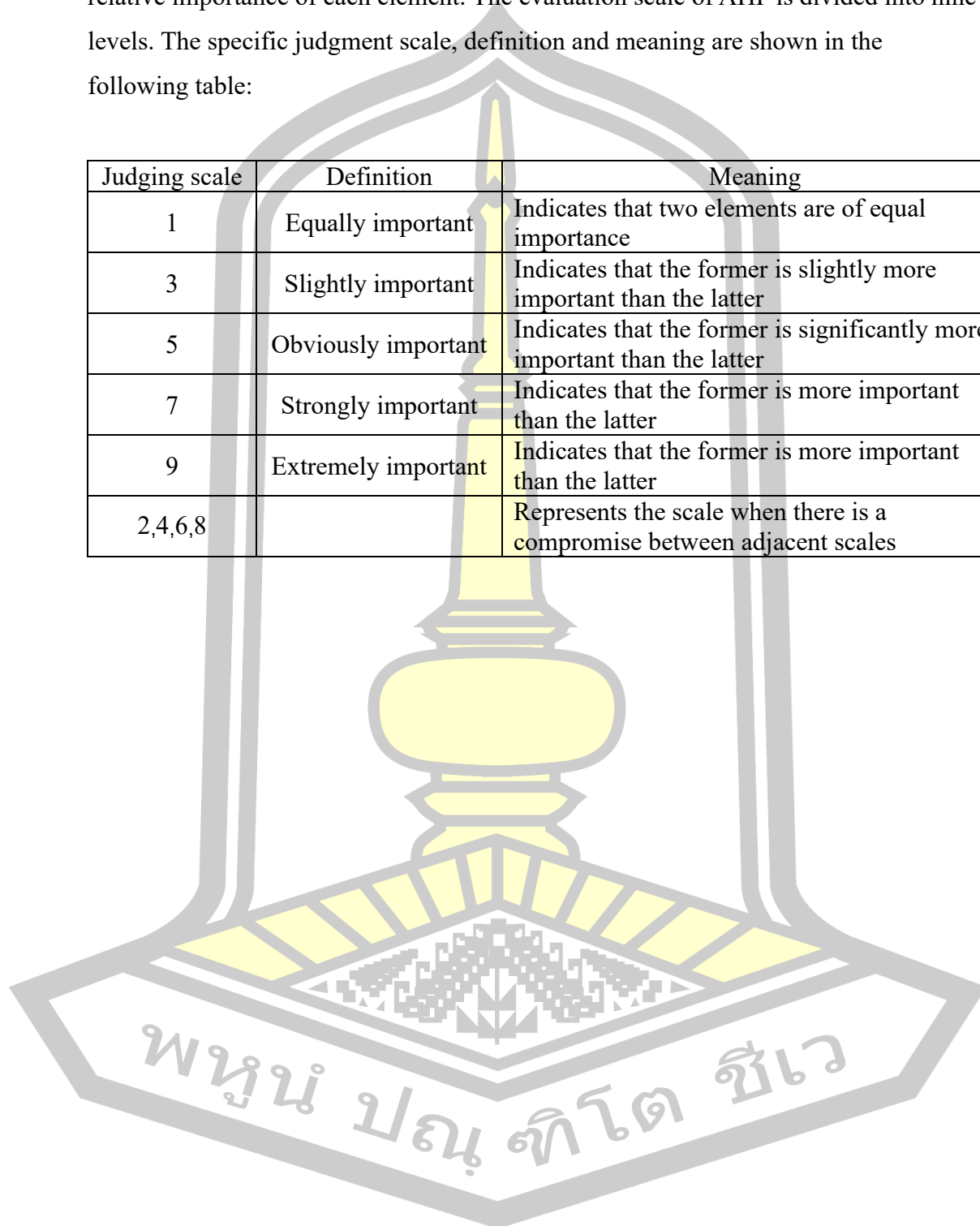
Advisor: Watthanapong Khongsuebsor

PhD student: Jing Li



Description: The analytic hierarchy process (AHP) is used to evaluate the relative importance of each element. The evaluation scale of AHP is divided into nine levels. The specific judgment scale, definition and meaning are shown in the following table:

Judging scale	Definition	Meaning
1	Equally important	Indicates that two elements are of equal importance
3	Slightly important	Indicates that the former is slightly more important than the latter
5	Obviously important	Indicates that the former is significantly more important than the latter
7	Strongly important	Indicates that the former is more important than the latter
9	Extremely important	Indicates that the former is more important than the latter
2,4,6,8		Represents the scale when there is a compromise between adjacent scales



Evaluation of Second-level index

	Extremely important	Strongly important	Obviously important	Slightly important	Equally important	Slightly important	Obviously important	Strongly important	Extremely important	
B1 Product Quality										B2 Input-output benefit
B1 Product Quality										B3 Product Features
B1 Product Quality										B4 Product Function
B2 Input-output benefit										B3 Product Features
B2 Input-output benefit										B4 Product Function
B3 Product Features										B4 Product Function
B5Enterprise image										B6Employee competence
B7Basic information										B8 Attitude
B7Basic information										B9Purchasing power
B8 Attitude										B9Purchasing power

Evaluation of Third-level index

	Extremely important	Strongly important	Obviously important	Slightly important	Equally important	Slightly important	Obviously important	Strongly important	Extremely important										
C1 Quality level																			C2 Quality consistency
C1 Quality level																			C3 Satisfaction
C2 Quality consistency																			C3 Satisfaction
C4 Government fund support																			C5 Private capital investment
C4 Government fund support																			C6 Sports product input ratio
C4 Government fund support																			C7 Sports product ticket prices
C4 Government fund support																			C8 Total output value of sports product
C4 Government fund support																			C9 Sports product profit ratio
C5 Private capital investment																			C6 Sports product input ratio
C5 Private capital investment																			C7 Sports product ticket prices
C5 Private capital investment																			C8 Total output value of sports product
C5 Private capital investment																			C9 Sports product profit ratio
C6 Sports product input ratio																			C7 Sports product ticket prices
C6 Sports product input ratio																			C8 Total output value of sports product
C6 Sports product input ratio																			C9 Sports product profit ratio

APPENDIX M

Weight table of market evaluation index of sports characteristic town

Dear managers and staff,

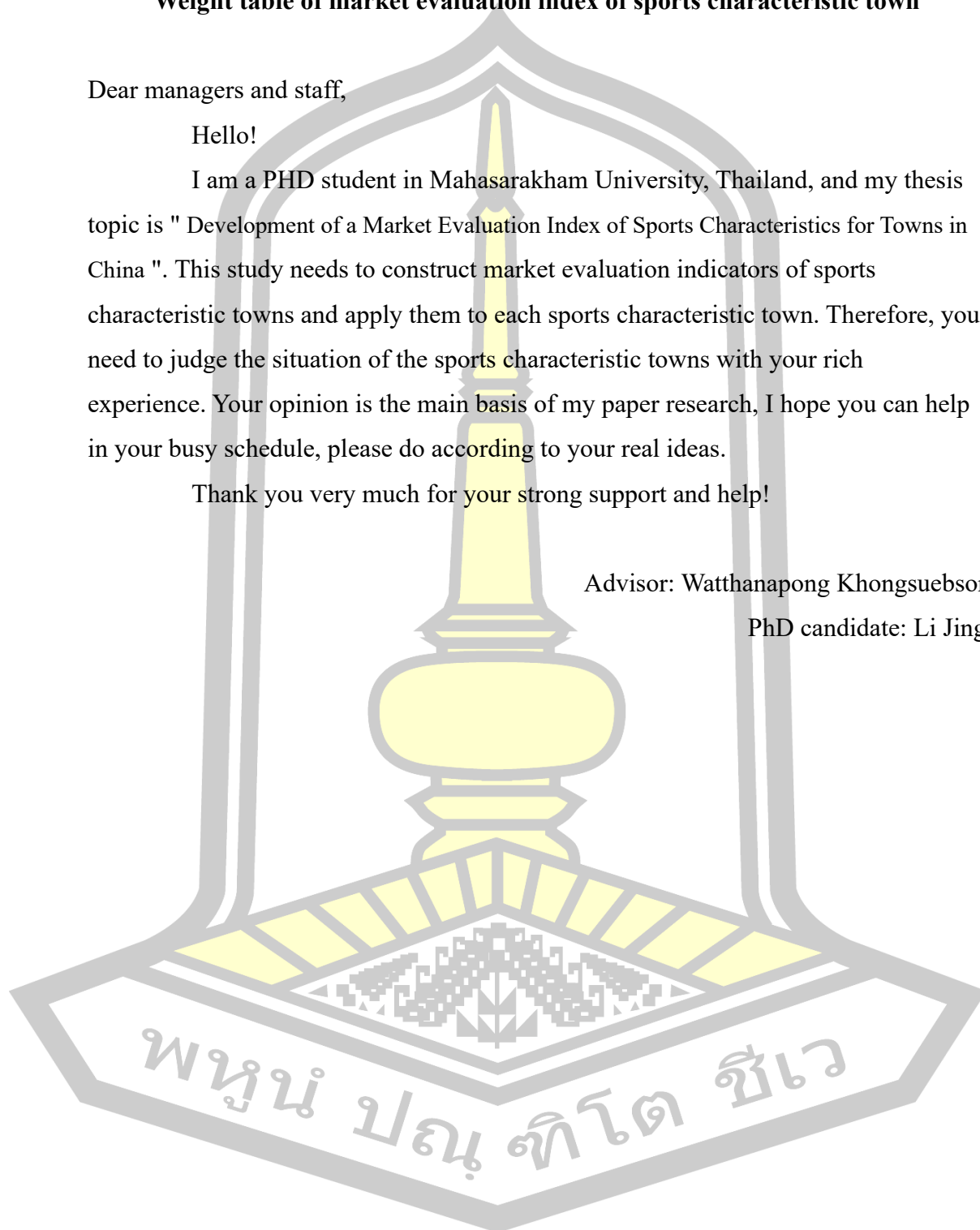
Hello!

I am a PHD student in Mahasarakham University, Thailand, and my thesis topic is " Development of a Market Evaluation Index of Sports Characteristics for Towns in China ". This study needs to construct market evaluation indicators of sports characteristic towns and apply them to each sports characteristic town. Therefore, you need to judge the situation of the sports characteristic towns with your rich experience. Your opinion is the main basis of my paper research, I hope you can help in your busy schedule, please do according to your real ideas.

Thank you very much for your strong support and help!

Advisor: Watthanapong Khongsuebsor

PhD candidate: Li Jing



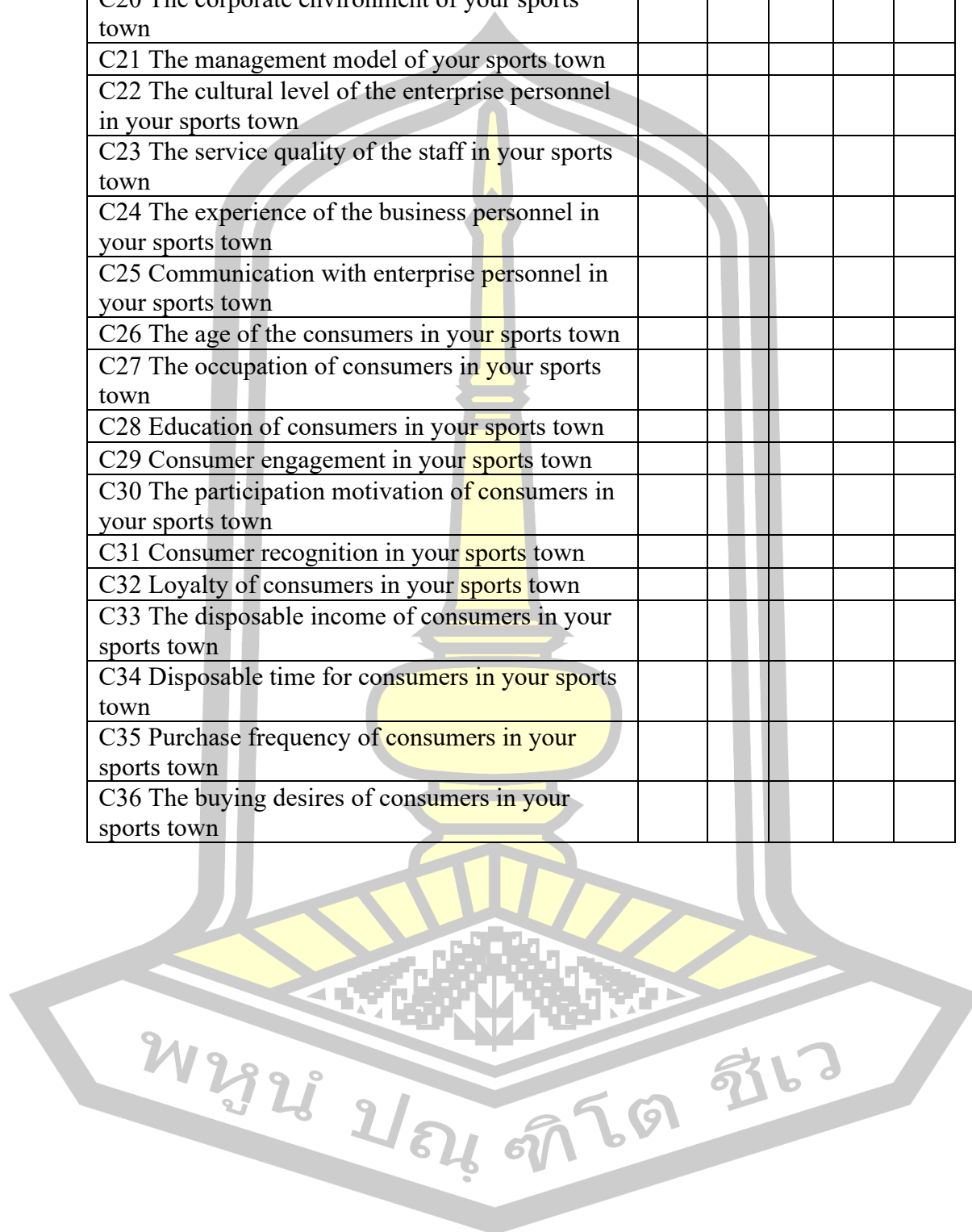
Basic information

1. Your name:
2. Your working years:
3. Your position:
4. Your work unit:

Description: Evaluation indicators at all levels are compiled into Likert 5 subscale form, according to "very good", "good", "general", "not very good", "very bad" assigned 5, 4, 3, 2, 1 scores. Please rate according to your knowledge and mark "√" in the corresponding column. Thank you!

Evaluation index	5	4	3	2	1
C1 The quality level of your sports town					
C2 Quality consistency in your sports town					
C3 Satisfaction with sports products in your sports town					
C4 The level of government funding support in your sports town					
C5 Private capital investment in your sports town					
C6 Sports product input ratio of your sports town					
C7 Ticket price degree of your sports town					
C8 Total output value of sports products in your sports town					
C9 Profit ratio of sports products in your sports town					
C10 The scale of sports products in your sports town					
C11 Style of sports products in your sports town					
C12 Packaging of sports products in your sports town					
C13 Popularity of sports products in your sports town					
C14 The core competitiveness of sports brand in your sports town					
C15 Functional zoning of your sports town					
C16 The functional innovation of your sports town					
C17 The functional effects of your sports town					
C18 The size of your sports town					
C19 The corporate culture of your sports town					

Evaluation index	5	4	3	2	1
C20 The corporate environment of your sports town					
C21 The management model of your sports town					
C22 The cultural level of the enterprise personnel in your sports town					
C23 The service quality of the staff in your sports town					
C24 The experience of the business personnel in your sports town					
C25 Communication with enterprise personnel in your sports town					
C26 The age of the consumers in your sports town					
C27 The occupation of consumers in your sports town					
C28 Education of consumers in your sports town					
C29 Consumer engagement in your sports town					
C30 The participation motivation of consumers in your sports town					
C31 Consumer recognition in your sports town					
C32 Loyalty of consumers in your sports town					
C33 The disposable income of consumers in your sports town					
C34 Disposable time for consumers in your sports town					
C35 Purchase frequency of consumers in your sports town					
C36 The buying desires of consumers in your sports town					



APPENDIX N

Human ethics research certificate



MAHASARAKHAM UNIVERSITY ETHICS COMMITTEE FOR RESEARCH INVOLVING HUMAN SUBJECTS

Certificate of Approval

Approval number: 498-497/2023

Title : Development of a Market Evaluation Index of Sports Characteristics for Towns in China.

Principal Investigator : Jing Li

Responsible Department : Faculty of Education

Research site : Ankang City, Shanxi Province, China

Review Method : Expedited Review

Date of Manufacture : 30 November 2023

expire : 29 November 2024

This research application has been reviewed and approved by the Ethics Committee for Research Involving Human Subjects, Mahasarakham University, Thailand. Approval is dependent on local ethical approval having been received. Any subsequent changes to the consent form must be re-submitted to the Committee.

Ratree S.

(Asst. Prof. Ratree Sawangjit)

Chairman

Approval is granted subject to the following conditions: (see back of this Certificate)

APPENDIX O

Expert Invitation Letter Example



FACULTY OF EDUCATION
MAHASARAKHAM UNIVERSITY

79/2 Muang, Maha Sarakham,
44000, THAILAND
Tel/fax +66 43 713 174
Email: cia.edu@msu.ac.th

Center for International Affairs

MHERSI No. 0605.5 (2) /CL5295

Date: November 21, 2023

To:

Prof. Lu Zongcheng
Ankang University, China

Subject:

Thesis Reviewer Invitation

Our student, Jing Li, student ID 64010564007 majoring in the Ph.D. Exercise and Sports Science program is currently undertaking a research project titled "Development of a Market Evaluation Index of Sports Characteristics for Towns in China" under the guidance of Dr. Watthanapong Khongsuebsor.

To ensure the successful execution and the highest quality of this research project, we are seeking your valuable expertise and experience. Therefore, I am delighted to extend a formal invitation to you to serve as a reviewer for the research instrument designed for this thesis project.

Your participation in this academic endeavor is highly valued and appreciated. Should you require any further information or have questions regarding this invitation, please do not hesitate to contact us by email.

Yours sincerely,

Assoc. Prof. Chowwalit Chookhampaeng
Dean, Faculty of Education,
Mahasarakham University



FACULTY OF EDUCATION
MAHASARAKHAM UNIVERSITY

79/2 Muang, Maha Sarakham,
44000, THAILAND
Tel/fax +66 43 713 174
Email: cia.edu@msu.ac.th

Center for International Affairs

MHERSI No. 0605.5 (2) /CL5295

Date: November 21, 2023

To:

Prof. Shi Bing
Shaanxi Normal University, China

Subject:

Thesis Reviewer Invitation

Our student, **Jing Li**, student ID **64010564007** majoring in the **Ph.D. Exercise and Sports Science** program is currently undertaking a research project titled "**Development of a Market Evaluation Index of Sports Characteristics for Towns in China**" under the guidance of **Dr. Watthanapong Khongsuebsor**.

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Assoc. Prof. Chowwalit Chookhampaeng
Dean, Faculty of Education,
Mahasarakham University



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44000, THAILAND
Tel/fax +66 43 713 174
Email: cia.edu@msu.ac.th

Center for International Affairs

MHERSI No. 0605.5 (2) /CL5295

Date: November 21, 2023

To:

Prof. Yang Shaochang
Baoshan University, China

Subject:

Thesis Reviewer Invitation

Our student, **Jing Li**, student ID **64010564007** majoring in the **Ph.D. Exercise and Sports Science** program is currently undertaking a research project titled "**Development of a Market Evaluation Index of Sports Characteristics for Towns in China**" under the guidance of **Dr. Watthanapong Khongsuebsor**.

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Yours sincerely,

Assoc. Prof. Chowwalit Chookhampaeng
Dean, Faculty of Education,
Maharakham University



FACULTY OF EDUCATION
MAHASARAKHAM UNIVERSITY

79/2 Muang, Maha Sarakham,
44000, THAILAND
Tel/fax +66 43 713 174
Email: cia.edu@msu.ac.th

Center for International Affairs

MHERSI No. 0605.5 (2) /CL5295

Date: November 21, 2023

To:

Prof. Zhang Baogeng
Zhaoqing University, China

Subject:

Thesis Reviewer Invitation

Our student, Jing Li, student ID 64010564007 majoring in the Ph.D. Exercise and Sports Science program is currently undertaking a research project titled "Development of a Market Evaluation Index of Sports Characteristics for Towns in China" under the guidance of Dr. Watthanapong Khongsuebsor.

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Yours sincerely,

Assoc. Prof. Chowwalit Chookhampaeng
Dean, Faculty of Education,
Mahasarakham University



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79/2 Muang, Maha Sarakham,
44000, THAILAND
Tel/fax +66 43 713 174
Email: cia.edu@msu.ac.th

Center for International Affairs

MHERSI No. 0605.5 (2) /CL5295

Date: November 21, 2023

To:

Prof. Zhou Liangjun
Guangzhou Sport University, China

Subject:

Thesis Reviewer Invitation

Our student, Jing Li, student ID 64010564007 majoring in the Ph.D. Exercise and Sports Science program is currently undertaking a research project titled " Development of a Market Evaluation Index of Sports Characteristics for Towns in China " under the guidance of Dr. Watthanapong Khongsuebsor.

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Yours sincerely,

Assoc. Prof. Chowwalit Chookhampaeng
Dean, Faculty of Education,
Mahasarakham University

BIOGRAPHY

NAME	Ms.Jing Li
DATE OF BIRTH	12, May, 1987
PLACE OF BIRTH	Shaoyang City, Hunan province,China
ADDRESS	Building 1, Xinhua Park, Bashan West Road, Hanbin District, Ankang City, Shaanxi Province, China
POSITION	Associate professor
PLACE OF WORK	Ankang University 92 Yucai Road, Hanbin District, Ankang City, Shaanxi Province
EDUCATION	2009, Bachelor's Degree, Social Sports, Hunan Institute of Science and Technology 2012, Master's Degree, Sports Humanities Sociology, Guang Zhou Sport University 2024, Doctor of Philosophy (Ph.D.), Exercise and Sport Science, Mahasarakham University

