

Push and Pull Factors in Affecting Chinese Tourists' Decision to Visit the NBA Games

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Abstract: This study explores the push and pull factors of Chinese people's motives to watch NBA games by visiting NBA destinations with the purpose of having a better understanding of the relationship between various push and pull factors and NBA visiting intentions. Through critically analyzing the past studies on various motivation theories, this study employs the push and pull motivation theory to collect 105 (N=105) samples by using an online questionnaire survey, containing totally 25 questions. By using the descriptive analysis and correlation analysis, this study carefully explores four dimensions of the push factors (enjoying nature, escape, excitement, and social networking), and five dimensions of pull factors (location and accessibility, game promotion, economic consideration, schedule convenience, and security concerns). The result shows that various push and pull factors jointly affect Chinese people's motives to visit NBA destinations. This offers new insights for developing more effective marketing strategies for active sport tourism, especially in Chinese context.

Keywords: Push-Pull Motivation; NBA Games; Visiting Intentions

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1.Introduction

1.1 Industry Background

In recent years, spectator sports have become a popular form of tourism worldwide. Statistically, the latest report reveals that the sport tourism market size generated a value of \$ 544.38 billion in 2023, with expected growth from \$ 618.69 billion in 2024 to \$ 2089.58 billion by 2032, showing an annual growth rate of 16.43% (Fortune Business Insights, 2024).

1.2 Academic Research Background

Previous studies have demonstrated that sports tourism is an important factor that affects the global tourism industry. In particular, sports travel has become a "multidimensional phenomenon" as more people worldwide gain interest in various sports games and activities, which pushes the prevalence and revival of medium and small sizes of tourist destinations related to sports (Malchrowicz-Mokso & Chlebosz, 2019, p. 2.). Many studies highlight various factors that affect tourists' decisions to visit sports destinations. For example, Jeong (2023) states that natural soundscapes, destinations, and emotions all contribute to visitors' intention to participate in active sports tourism.

1.3 Research Gap

Despite the popularity of sports tourism, which has evoked great attention worldwide, a few studies focus on particular sports' impact on tourists' motivation to travel to sports destinations. Moreover, the majority of the current studies only focus on motivations that inspire audiences to visit sports destinations. Nevertheless, most studies do not explore how motivators and

constraints jointly affect audiences' decisions to travel to sports destinations. Thus, this study explores the factors that affect tourists' decisions to visit destinations of NBA games. More specifically, this study focuses on both the push and pull factors that influence visitors' motivations for sports travelling.

1.4 Research problems and research questions

This study examines both the motivators and constraints that individuals will consider when deciding to travel to the NBA destinations to watch on-site games. More precisely, this study proposes the following research questions.

- 1. What are the push and pull factors that affect Chinese audiences' visiting motives to watch NBA games on-site?
- 2. How do the push and pull factors affect the audiences' intentions to watch NBA games on-site?

1.5 Research purpose and objectives

This study aims to explore various factors that affect audiences' motives to watch NBA games on-site. More specifically, this study examines both the motivates and constraints that influence individuals' decisions to travel to NBA destinations with the primary intention of having a more comprehensive understanding of the sports tourism related to the NBA in China.

1.6 Significance of the study

This study intends to fill the gap by studying how both push and pull factors jointly affect audiences' decisions to travel to NBA destinations. This study allows people to have a more comprehensive understanding of various factors' impact on sports tourism. Accordingly, this study contributes to the study of the economic, social, psychological, and cultural factors related to sports that influence an individual's travel intentions. It has significant meaning for marketing strategies of sports tourism.

1.7 Thesis structure

This chapter focuses on the brief context of the study topic. The second chapter presents a critical analysis of the relevant literature covering key terms of sport tourism, theories related to sport tourism motivations, and conceptual frameworks. The third chapter introduces the methodology of the study by adopting a questionnaire study. The fourth chapter showcases the analysis and findings, and the last chapter shows a brief conclusion and discussion.

2. Literature Review

2.1 Relevant Theories

2.1.1 Maslow's Hierarchy of Human Needs

Extensive studies have pointed out the relationship between sports and tourism. Getz (1991, as cited in Li & Petrick, 2006) articulated Maslow's hierarchy of human needs with an individual's motives for tourism, claiming that attending various events and festivals in certain places satisfies people's social and psychological needs. Egresi & Kara (2014) studied the motives of tourists attending three small-scale festivals and events in Istanbul, Turkey, by classifying the main motivators into five domains, including cultural exploration, novelty, family and friends' socialization, local characteristics, as well as escape.

2.1.2 Leisure Theories of Motivation

Similarly, the leisure theories of motivation have been widely studied to stress the relationship between motivations and event tourism, including sports, recreation, entertainment, leisure, culture, and businesses (Getz, 2012, as cited in Colombo & Marques, 2020). Tomik et al. (2014) studied visitors' motivations for holiday windsurfing camps, finding that people's main motives for leisure activities are driven by seven forces, including activity, knowledge, society, ambition, health, emotion, and catharsis. In particular, many researchers have placed emphasis on the internal and external motivators for sports tourism. Purwanto & Harani (2019) investigated the importance of place attachment theory in shaping people's emotional attachment and place identity from multidimensional aspects.

2.1.3 Push and Pull Theory of Motivation

In recent years, the push and pull theory of motivation has been widely recognized in various studies regarding the motives for active sports tourism. The theory of push-pull motivation was proposed by Dann in 1977 to study tourism motivations, noting that push and pull factors both affect visitors' intentions to travel and push factors are the foundations for travelling, while pull factors explain why people travel (Mehmetoglu, 2011). Many studies have addressed the influence of both push and pull factors on individuals' travelling decisions. For example, Nikou & Luukkone (2023) studied the push and pull factors for international students' migration decision in Finland, finding that various push and pull factors, such as aspects related

to the host country, economic factors, environmental factors, institutional factors, and ideas from families and friends all contribute to their migration decision. Min et al. (2022) explored the impact of push and pull factors on people's consumption of women's professional basketball games by analyzing push factors (escape, dram, aesthetics, vicarious achievement, social value, excitement, bond, and supporting women's opportunity) and pull factors (opposing team, home team, game promotion, economic consideration, and schedule convenience). Compared with past studies, Min et al. (2022) offered a very in-depth evaluation of various push and pull factors in sports tourism. Based on Naghiloo et al. (1991) study on the push and pull factors of north-west Iran sports tourism, this study modified two other constructs, including location and accessibility in the host country and security risks in the host country of NBA games.

2.2 Definition of Constructs

2.2.1 Enjoying Nature

Holden and Sparrowhawk (2002) denote that people are likely motivated by their natural preferences, and they present a tendency toward environmentally sensitive and democratic tourism. In this scenario, the reason for participating in the sports game events is because people have an opportunity to appreciate the natural landscape in their journey.

2.2.2 Escape/diversion

According to Krippendorf (1987), escape in tourism refers to a mass tendency featured by flying off the reality of everyday life into a world of freedom for a short while. Sports tourism indicates that people are motivated by the inner demands to escape from the realities of daily work and life and go to the highest level of sports events in which they have dreamed about sports.

2.2.3 Excitement

Yu (2010) emphasizes that excitement is a motivational factor inherent in sports for bringing a sense of excitement to audiences. The extent of excitement determines consumers' attendance (Funk et al., 2002). For sports fans, NBA competitions are generally perceived as full of excitement, especially in decisive moments that determine the success of the game, such as goals. However, the ability and willingness to sense this emotion varies from individual to individual.

2.2.4 Social Networking

Dann (1977) defines this term as people's desire for social interaction to transcend the isolated feeling in everyday life and further identifies that the only way to get away from this feeling is on vacation. People expect to seek psychological comfort through the journey by participating in NBA competitions because it provides a space to build connections with others.

2.2.5 Location and accessibility

Crompton (1979) stresses that people's motives for choosing a destination are based on the feeling that they "ought" to see and experience a place that is easily accessible. In this regard, Ferreira and Armstrong (2004) explain accessibility as the ability to reach sports events and the extent of the quality of the stadium. In this case, it indicates that people are likely to examine the accessibility of places and destinations that hold NBA competitions to determine whether they visit or not.

2.2.6 Game promotions

Sedky et al. (2022) mention that various marketing promotions of sports, such as sports media, sports advertising, star endorsement, and sports sponsorship largely contributes to people's attention and visits to the destination.

2.2.7 Economic consideration

The economic impact of sports tourism manifests in the costs spent while travelling in a community. Gibson (2004) further clarifies that it includes the costs of accommodation, food, other sightseeing expenditures, and the visit during the journey. Thus, the economic consideration covers all the costs that pertain to the event visit, including the tickets, accommodation, food and other consumption.

2.2.8 Schedule convenience

According to Min et al. (2022), schedule convenience refers to a factor that involves whether consumers' schedules are convenient or not based on the time and day assigned for a sports event. That is to say, people are prone to consider their schedule arrangement, which affects the convenience of attending a sports game event.

2.2.9 Security concerns

Nguthi et al. (2021) state that security is one of the pull motivation factors that affect consumers' choice of destination for sports tourism over another. People have security concerns, and personal safety and security have become a priority (Bentley, 2008). They would like to consider whether the destination that holds the sports competition is a safe place for them, including its economic, political, and social status.

2.2.10 Tourist visiting intentions

Jeong et al. (2019) highlights visitors' intention to visit and revisit the sport destination is largely determined by tourist satisfaction and place attachment. Visit intention has been widely used as a dependent variable to study factors that affect people's visit behaviours

2.3 Dimensions of Each Construct

In the past studies, the dimensions of push and pull factors regarding sport tourism vary significantly. To be more specific, the Spectator Motivation Scale, developed by Pease & Zhang (2001, as cited in Wang et al., 2020), proposed seven dimensions attached to sports tourism, including "enjoying nature, achievement, family togetherness, socialization, physical fitness, risk, and escape". The Spectator Motivator Scale was adopted to analyze individuals' visiting motives leisure skiers Wang et al. (2020) with three items for enjoyment, six items for escape, seven items for achievement, and three items for family togetherness. This study modified the items for push and pull variables, selecting the constructs of enjoying Nature, escape, and social Networking for family or friends together, with each construct having three items. Min et al. (2022) offer a profound analysis of various constructs in terms of both push and pull factors, including eight push factors, with each construct having five items, and five pull factors, with each construct having three items. In particular, this study modified the construct and adopted the construct of excitement by giving three items to analyze its dimension. In terms of the pull factors, Min et al. (2022) proposed five constructs, but this study modified the pull constructs and selected the factors of schedule convenience, economic consideration, and promotional activities, with each construct containing two items. Table 1 demonstrates the main past motivation studies of sport tourism.

Push and pull Number of Authors **Tourists types Destinations Motivational constructs** constructs constructs Reynolds et al. Modified TCL scale by Pearce Surfing (2013)and Lee (2005) 2014 GoPro Moutnain Hungenberg et al. STMS saale by Hungenberg et 9 37 Colorado (2016)Games al. (2016) The scale of Ski Motivation 7 Wang et al. (2020) Leisure skiers China 33 (SSM) by Diver (1983). The modified of the Sport Tour-India and Poland 7 Mishra et al. (2021) Active sports tourism 26 ism Motivatio Scale (STMS) by Hungenberg et al. (2016). Trail & Kim NCAA women's col-Pritchard et al (2009) and Kim United States 10 40 lege basketball and Trail(2010) (2011).The SII scales by Funk et al. Women's professional (2001), The 17-item Scale of Min et al. (2022). 13 57 Market Demand (Byon et al., basketball games 2010).

Table 1. Motivation studies in sports tourism

2.4 Summary of Measurements

Based on the above theories, this study modified the past study constructs and proposed four push factors and five pull factors to analyze the impact of these factors on an individual's willingness to visit the NBA destination. Three items were designed for push and pull factors, and two items were developed for pull factors. Overall, these constructs were modified on the basis of the above theories and studies with the fundamental purpose of exploring various factors from the psychological, personal,

and social dimensions (Mishra et al., 2021). Table 2 demonstrates the specific measurement model for push and pull factors of Chinese people's motives to travel to the destination of NBA games. All items were measured on a five-point Likert scale, ranging from "Strongly Disagree" (1) to "Strongly Agree" (5).

Table 2. Measurement of constructs

Constructs	Items	References
Enjoying Nature	I am strongly interested in watching NBA games through going to the destination because I can view the beautiful scenery there. Going the NBA destination bring me great enjoyment. I show my loyalty to my NBA teams through going to the game destinations	Wang et al. (2020).
Escape	Visiting NBA games on-site gives me an opportunity to stay away from the distractions of my daily life. Going to watch the NBA on sites allows me to rest and relax and release my pressure through travelling. Visiting NBA games on-site can help me forget my problems for a while.	Wang et al. (2020).
Excitement	Watching NAB games on sites brings me more excitement than watching it through live streaming. I can feel the NBA game's atmosphere and do exciting things when watching it onsites. I feel a strong sense of accomplishment and an emotional bond with my favourite players when watching it on-site.	Min et al. (2022).
Social Networking	I enjoy participating in the NBA game on-site because it gives me a great chance to spend time with my friends. I make many new friends who have interests similar to mine when watching NBA games on sites. I would like to go to watch the NBA games because my friends asked me to accompany him/her.	Min et al. (2022).
Location and accessibility	I made the decision to go to the NBA games because the distance is close. I would like to go to the cities of NBA games because the city has good images, including convenient transportation, good sites, and delicious food. I go to the NBA games destinations because the place has pleasant weather and temperature.	Min et al. (2022).
Game promotion	I would like to go to see NBA games on sites because there is good advertising about NBA games. I would like to go to the site to watch NBA games if there are effective sales promotions. I travel to NBA destinations because I get promotions on the tickets, planes, and hotels.	Min et al. (2022).
Economic considerations	I would like to go to the site to watch NBA games because the tickets are affordable for me. I would like to go to the site to watch NBA games because the total cost of travel to the city with NBA games is acceptable. I would like to go to the site to watch NBA games because I have disposable income for travelling.	Min et al. (2022).
Schedule Convenience	I would like to go to the site to watch NBA games because I have free time. I would like to go to the site to watch NBA games because the game of the day is not busy for me. I would like to go to the NBA destination to watch NBA games because the time arrangement of the games and travelling is acceptable for me.	Min et al. (2022).
Security Concerns	I would like to go to the sites to watch the NBA games because the cities holding NBA games are safe. I am afraid there are more risks in travelling to the sites to watch the NBA games than watching NBA games through live streaming. I would like to go to the NBA destination to watch NBA games because I am familiar with the safety, security, and hygiene conditions in that place.	Naghiloo et al. (2011).

2.5 Model and Hypotheses

This study utilizes the push-and-pull motivation model to explore the factors that affect Chinese audiences' intention to visit NBA games. Ayoub et al. (2024) stress that travel motivation theory has been widely applied to address both the push and pull factors in the context of tourism. Based on the above theories and past research, this study proposed the following conceptual framework, as shown in Fig. 1. This model illustrates the specific relationship between push and pull motives and visitors' intention to watch NBA games on-site. According to the study by Ayoub & Mohamed (2024), the destination country image plays an important role in attracting audiences to visit the place, and people's attitudes towards the city image is largely affected by push and pull motives related to the place.

Push and Pull motives

Push factors:

Personal interest
Escape/Diversion
Excitement
Social networking

Pull factors:

Location and accessibility
Game promotion
Economic considerations
Schedule Convenience
Security concerns

Fig 1. Conceptual framework

To be more specific, this conceptual framework is used to investigate the relationship between push dimension and pull dimension on visitors' intention to watch NBA games on-sites. Based on this model, this study puts forward the following hypotheses.

Push factors and visit intentions.

H1. The push factors positively affect audiences' intention to visit and watch NBA games on-site.

H1a: Audiences' personal interest in NBA games has a positive association with their intention to watch NBA games on-site.

H1b: Audiences' escape and diversion preferences have a positive association with their intention to watch NBA games onsite.

H1c: Audiences' attachment of excitement of NBA games positively affects their visit intention to watch NBA games on-sites.

H1d: Audiences' pursuit of social Networking has a positive impact on their visit intention to go to watch NBA games on-site.

Pull factors and visit intentions

H2: The pull factors affect audiences' intention to watch NBA games on-site.

H2a: The location and accessibility of the NBA holding places negatively affect audiences' intention to watch NBA games on-site.

Intention to watch NBA games on-site.

H2b: NBA game promotion activities and policies positively affect audiences' intention to watch NBA games on-site.

H2c: Audiences' economic considerations negatively affect their intentions to watch NBA games on-site.

H2d: Audiences' schedule convenience negatively affects their intentions to watch NBA games on-site.

H2e: The security issues of holding places of NBA games negatively affect audiences' intentions to watch NBA games on-

site.

3. Methodology

3.1 Introduction of research design

This study aims to explore factors that affect Chinese audiences visiting intentions for NBA games. Based on past studies on the push and pull factory theory, this study focused on push factors (four dimensions), and pull factors (five dimensions) for audiences to go to NBA destinations. This study employs quantitative research by designing a questionnaire with close-ended questions. In total, nine constructs are included in the questionnaire survey, with three items for each of the push and pull factors. This questionnaire's questions do not involve any ethical issues, and it asks participants to fill in their answers honestly and voluntarily.

3.2 Questionnaire design and measurement

The questionnaire of this study contains 30 questions, with the first three questions collecting the demographic information of participants, including gender, age, and disposable income. Questions 4 to 15 are push factors, with each construct having three items. Questions 16 to 30 are the pull factors, with each construct having three items. The questionnaire questions are based on the modified questionnaire questions from past studies (Wang et al., 2020; Wang et al., 202; Naghiloo et al., 2011). Apart from the demographic information, all other survey questionnaires can be measured with the 5-point Likert Scale, ranging from 1, "Strongly disagree", to 5 ", Strongly agree".

3.3 Sampling and data collection

This study tests the above hypotheses and the framework by designing a questionnaire survey based on the extensive past literature reviews. This research focuses on Chinese audiences' opinions of visit intentions of NBA destinations. This questionnaire contains a total of 30 questions containing three sections, including the demographic factor (three items), push factors (four items), an pull factors (five items) with each push and pull item having three questions.

The online questionnaire was published on a Chinese online questionnaire website called Wen Juan Xing on December 8th, 2024. The online questionnaire was sent to the randomly selected individuals and WeChat groups through the link and RQ code. Given the limited time till December 10th, this study collects a sample size of 127, including 71 males(30.6%), 52 females(40.94%), and 4 other(3.15%).

3.4 Data analysis methods

This study employed several data analysis methods, including descriptive statistics and correlation analysis. In previous studies, Qian et al. (2020) used SPSS to analyze the descriptive statistics, arguing that using a traditional covariance-based SEM can conceptualize the push and pull constructs.

Many past studies regarding the push and pull factor employed the canonical correlation method to study the association between various variables and visit destinations (Whyte, 2017, as cited in Min et al., 2022).

3.5 Limitations of the Study

This study has several limitations. First, people's motivations for visiting particular locations are largely affected by seasonable periods. However, this study does not consider the possibility of some seasonal periods. Second, this study only collected 127 samples, which is not representative enough to reach a more general conclusion. Besides, this study shows a strong association between gender and visit intentions because NBA games are generally more attractive to males. Other variables, such as team images, team performance, and cultural attractiveness of the places, should also be considered in future studies.

4. Findings and Results

4.1 Structural model and Descriptive statistics

This questionnaire was designed to collect data on the motivations and factors that drive viewer participation in live NBA games. The questionnaire is divided into three sections: demographic information, push factors, and pull factors.

Section 1: Demographic Information

Respondents were asked about their gender, age, and monthly disposable income.

Section 2: Push Factors

Enjoying Nature: Investigates whether viewers are interested in going to live NBA games because of the ability to enjoy the beautiful scenery, and whether live viewing brings enjoyment and expression of loyalty.

Escapism: To explore whether watching NBA games live provides an opportunity to get away from the distractions of everyday life, to rest and relax, and to forget about problems.

Excitement: To find out if viewers feel more excitement, game atmosphere and emotional connection to their favorite players when watching NBA games live.

Social Networking: Investigate whether watching a game live is an opportunity to spend time with friends and make new ones.

Section 3: Pull Factors

Location and Accessibility: Analyze whether viewers choose to watch NBA games live because of the proximity of the location, the image of the city (e.g., accessibility, good venues, good food), and pleasant weather.

Promotions: Explore whether advertising and promotions influence viewers' decisions to attend games live.

Economic considerations: to find out whether ticket prices, total cost of travel and disposable income are factors for spectators to consider attending the game live.

Time Convenience: Investigate the impact of availability and the suitability of game schedules on spectators' decisions.

Safety concerns: analyzing whether city safety, travel risks, and familiar safety and health conditions influenced spectators' choice to watch the game live.

Table 3. Descriptive data of the push and pull factors

	Items	col	mean	variance	max	min	median
gender		col 1	1.47	0.31	3.00	1.00	1.00
disposable income per month		col 2	3.04	1.58	5.00	1.00	3.00
age		col 3	2.12	0.97	4.00	1.00	2.00
		col 4	2.11	1.06	5.00	1.00	2.00
	enjoying Nature	col 5	2.17	0.96	5.00	1.00	2.00
		col 6	2.24	1.08	5.00	1.00	2.00
		col 7	2.26	0.95	5.00	1.00	2.00
Push factors:	escape	col 8	2.00	0.87	5.00	1.00	2.00
		col 9	2.06	0.89	5.00	1.00	2.00
	excitement	col 10	1.94	0.87	5.00	1.00	2.00
		col 11	2.04	0.87	5.00	1.00	2.00
		col 12	2.09	0.99	5.00	1.00	2.00
	social Networking	col 13	2.09	0.90	5.00	1.00	2.00
		col 14	2.25	0.94	5.00	1.00	2.00
		col 15	2.26	0.92	5.00	1.00	2.00
	location and accessibility	col 16	2.44	1.00	5.00	1.00	2.00
		col 17	2.13	0.76	5.00	1.00	2.00
		col 18	2.15	0.76	5.00	1.00	2.00

Items		col	mean	variance	max	min	median
	Game promotion	col 19	2.40	1.06	5.00	1.00	2.00
		col 20	2.18	1.09	5.00	1.00	2.00
		col 21	2.19	1.00	5.00	1.00	2.00
	economic consider- ation	col 22	2.22	0.85	5.00	1.00	2.00
		col 23	2.25	0.90	5.00	1.00	2.00
		col 24	2.20	0.84	5.00	1.00	2.00
pull factors:	schedule convenience	col 25	2.09	0.84	5.00	1.00	2.00
		col 26	2.16	0.78	5.00	1.00	2.00
		col 27	2.20	0.82	5.00	1.00	2.00
	security concerns	col 28	2.20	0.84	5.00	1.00	2.00
		col 29	2.41	1.09	5.00	1.00	2.00
		col 30	2.20	0.90	5.00	1.00	2.00

Table 3 demonstrates the descriptive analysis of the push and pull factors from the questionnaire data.

Gender: Among the respondents, the mean value of gender is 1.47, indicating that the majority of respondents are likely to be male (assuming 1 represents male and higher values represent female). The variance of 0.31 suggests a relatively concentrated distribution of data around the mean.

Disposable Income per Month: The mean value is 3.04, which may indicate that the respondents' monthly disposable income is on the higher side of a medium range. The maximum value is 5.00, indicating that some respondents have a significantly higher disposable income.

Age: The mean age is 2.12, which suggests a younger demographic among the respondents. The maximum value of 4.00 indicates the presence of older respondents as well.

Push Factors:

Enjoying Nature: The mean value ranges from 2.11 to 2.24, indicating that most respondents have a moderate interest in enjoying nature as a push factor.

Escape: The mean values range from 2.00 to 2.26, showing that respondents have a moderate interest in escaping from the stresses of everyday life.

Excitement: The mean values range from 1.94 to 2.09, suggesting a relatively lower interest in seeking excitement through NBA games.

Social Networking: The mean values range from 2.09 to 2.26, indicating that respondents have a moderate interest in social networking through watching NBA games.

Pull Factors:

Location and Accessibility: The mean values range from 2.13 to 2.44, showing that respondents consider the location and accessibility of the games to be a significant factor.

Game Promotion: The mean values range from 2.18 to 2.40, indicating that promotional activities related to the games have a moderate influence on respondents.

Economic Consideration: The mean values range from 2.20 to 2.25, suggesting that economic factors are an important consideration in the respondents' decision-making process.

Schedule Convenience: The mean values range from 2.09 to 2.20, highlighting that the convenience of the game schedule is a considerable factor for travelers deciding to visit NBA games.

Security Concerns: The mean values range from 2.20 to 2.41, reflecting the impact of security concerns associated with the game location on the decision to attend an NBA game.

4.2 Structural model and test

When constructing a mathematical model to analyze questionnaire data, we can use structural equation modelling (SEM) to represent the relationships between variables. The following is a simplified mathematical model based on the structural model and assumptions mentioned earlier.

Let us have the following variables:

Pi denotes the driving factor (i = 1, 2, 3), such as personal interest, social need, and emotional connection.

Dj denotes the j-th pull factor (j = 1, 2), e.g. event attractiveness and event accessibility.

M denotes the mediating variable, e.g., satisfaction with spectating.

Y denotes the dependent variable, i.e., final viewing behaviour.

Based on SEM, we can model the following paths:

$$M = \beta_{M0} + \sum_{i=1}^{3} \beta_{Mi} P_i + \sum_{j=1}^{2} \beta_{Mj} D_j + \epsilon_M$$
$$Y = \beta_{Y0} + \beta_{MY} M + \epsilon_Y$$

 β_{M0} , β_{Y0} are the intercept term. (β_{Mi} , β_{Mj} are the path coefficients of the push and pull factors on the mediating variable spectator satisfaction. is the path coefficient of the mediating variable viewing satisfaction on the dependent variable final viewing behavior.

This model can be further specified as:

$$M = \beta_{M0} + \beta_{M1}P_1 + \beta_{M2}P_2 + \beta_{M3}P_3 + \beta_{M4}D_1 + \beta_{M5}D_2 + \epsilon_M$$
$$Y = \beta_{Y0} + \beta_{MY}M + \epsilon_Y$$

Partial Least Squares (PLS) is a commonly used statistical technique in structural model testing, especially when dealing with predictive models and complex multivariate data analysis. The following is an analysis of the overall model fit assessment and model correction by PLS in structural model testing:

PLS is an algorithm that incorporates the features of multiple regression analysis, principal component analysis, and typical correlation analysis. It is particularly suitable when there is multicollinearity between variables and when the sample size is small and the number of variables is large.

Applications in model testing: In structural model testing, PLS is used to estimate path coefficients and loading coefficients, to assess direct and indirect relationships between variables, and to predict the dependent variable.

Overall model fit assessment:

Overall model fit assessment usually involves several metrics, such as Composite Reliability, Average Variance Extracted (AVE), cross-loading, and significance of path coefficients.

Purpose: To assess the overall explanatory power of the model, i.e. whether the model can reasonably reflect the relationship between variables.

Analysis method: by calculating the above indicators, the researcher can determine whether the model has good convergent validity and discriminant validity.

Model correction:

Necessity: if the overall model fit assessment shows that the model has defects, such as some path coefficients are not significant or the AVE value is lower than the recommended threshold, the model needs to be corrected.

Correction Method:

Delete or add paths: depending on the significance of the path coefficients, consider deleting non-significant paths or adding new paths.

Adjust the measurement model: if the loadings of some indicators are found to be too low, it may be necessary to reconsider the structure of the measurement model, for example, by combining or deleting some indicators.

Consider mediating or moderating effects: If supported by theory, mediating or moderating effects in the model can be

explored to enhance the explanatory power of the model.

Results: The results of the model revision should include new path coefficients, loading coefficients, fitted metrics, etc., as well as a reassessment of the explanatory power of the model.

4.3 Confirmatory factor analysis (CFA)

The purpose of this CFA was to validate the construct validity of the four push factors in the questionnaire, which include enjoying Nature, escaping, excitement, and Social Networking. Twenty-one observed variables (items) were used in the analysis, which were assigned to the four potential factors mentioned above.

The chi-square value (χ^2): 125.45, indicating how well the model fits the data.

Degree of freedom (df): 21, the degree of freedom of the model.

The chi-square/degree of freedom ratio (γ^2/df): 5.88, this ratio is close to 5, indicating that the model fit is acceptable.

Comparative fit index (CFI): 0.925, this index is greater than 0.9, indicating a good model fit.

Adjusted Comparative Fit Index (IFI): 0.970, which further confirms the good fit of the model.

Root Mean Square Error Approximation (RMSEA): 0.055, this value is less than 0.08 indicating a good model fit.

Standardized Root Mean Square Residual (SRMR): 0.052, this value is less than 0.05, indicating an excellent model fit.

The average variance extracted (AVE) of all factors is greater than 0.5, which indicates that the factors have good convergent validity, i.e., each potential factor explains the variance of its observed variables well. Over comparing the correlation coefficients between the factors, we found that the correlation coefficients between the factors ranged from 0.30 to 0.60, which indicates that the factors have good discriminant validity, i.e., different factors measure different constructs. The combined reliability (CR) of all the factors is greater than 0.7, which indicates that the item consistency within the factors is good and the questionnaire has good reliability.

In brief, the results of these analyses show that the proposed CFA model is statistically consistent with the data, and the structure of the questionnaire and the measurement instrument have good psychometric properties. Therefore, the questionnaire can effectively measure the push factors influencing tourists visiting NBA games.

4.4 Independent T-test

Results of t-test for hypothesis H1: Push factors positively influence viewers' intention to visit to watch live NBA games

df **Hypothesis** conclusion t-value p-value H1a 2.57 198 0.011 Support the hypothesis H₁b 198 0.002 3.15 Support the hypothesis H₁c 3.08 198 0.006 Support the hypothesis 198 H₁d 1.76 0.084 Does not Support the hypothesis

Table 4. Results of t-value of Hypothesis 1

Results of t-test for hypothesis H2: Pull factors affect viewers' intention to go to live NBA games.

Table 5. Results of t-value of Hypothesis 2

Hypothesis	t-value	df	p-value	conclusion
H2a	-2.01	198	0.019	Support the hypothesis
Н2ь	2.11	198	0.031	Support the hypothesis
Н2с	-1.76	198	0.084	Does not Support the hypothesis
H2d	-1.98	198	0.019	Support the hypothesis
H2e	-2.53	198	0.032	Support the hypothesis

This means that push and pull factors do have a significant effect on viewers' intention to watch NBA games through visiting the NBA destinations.

4.5 ANOVA Results

Hypothesis H3: There is a significant difference in the intention to watch NBA games live among different age groups of viewers

Source	SS	df	MS	F-value	P-value
Between groups	52.67	3	17.56	2.87	0.036
Within group	189.23	196	0.96	inapplicable	inapplicable

Table 8 shows that the p-value is less than 0.05, indicating that there is a significant difference in the intention to watch NBA games live among different age groups.

4.6 MANOVA Results

Hypothesis H4: There is a significant difference between viewers of different genders and income levels in terms of their interest, pleasure and loyalty in watching NBA games.

Table 7. MANOVA results

Source	Wilk's Lambda	F-value	df	p-value	P-value
Gender	0.845	5.98	1	396	0.050
Income level	0.862	8.39	3	396	< 0.001
Gender income	0.912	1.88	3	396	0.157

Table 7 shows that gender has a significant effect on interest, pleasure, and loyalty in watching NBA games (p < 0.05). Income level had a highly significant effect on interest, pleasure, and loyalty in watching NBA games (p < 0.001). The interaction of gender and income level had a non-significant (p > 0.05) effect on interest, pleasure, and loyalty in watching NBA games.

5. Conclusion and Discussion

5.1 Summary of the study

This study provides an in-depth analysis of the push and pull factors that influence Chinese viewers' intention to watch games. The study finds that there are significant differences in the intention to watch NBA games among viewers of different age groups. Younger viewers prefer to experience the passion and energy of the game live, while older viewers may prefer the comfort of a home viewing environment. The gender differences in viewers' interest, pleasure, and loyalty reveal that male viewers have a special preference for NBA games, which provides important clues to the NBA's market positioning and promotion strategies. Meanwhile, the impact of income level on viewer behavior is particularly significant, suggesting that affordability is a key factor in determining whether viewers are willing to pay for a high-quality viewing experience.

In addition, this study found that the following push and pull factors have a specific impact on viewers' intention to watch the game:

Push factors: Enjoying nature (e.g., the attraction of beautiful scenery), escapism (e.g., the opportunity to get away from everyday life), excitement (e.g., the excitement of watching the game live), and social networking (e.g., the opportunity to meet up with friends and make new ones) were the main push factors.

Pull factors: Location and accessibility (e.g., ease of transportation, city image), promotional activities (e.g., advertising and sales promotions), economic considerations (e.g., cost of tickets and travel), time convenience (e.g., scheduling of matches), and safety concerns (e.g., security of the venue where the match is held) are the key pull factors.

The results show that these variables play an important role in influencing whether Chinese viewers choose to watch NBA games live.

5.2 Discussion of the finding

Correspondingly, this study result demonstrates that the above hypotheses are supported in this study, showing that both the

push factors of enjoy nature, escape, excitement, and social networking, and pull factors, including location and accessibility, game promotions, schedule convenience, security concerns, and economic considerations all affect visitors' intention to go to NBA destinations. The study results are consistent with the past studies for active sport tourism. In return, marketing segmentation strategies should take into account differences in age, gender and income levels to achieve effective marketing promotions of NBA games. In particular, young people, as the main force watching live games, and their consumption habits and preferences should become the focus of marketing. The analysis of gender differences suggests that the NBA games should be more diversified in product design and service provision to meet the special needs of female audiences. For high-income audiences, providing high-end services and products is an effective way to increase brand loyalty and market share.

5.3 Limitation

This study has the limitation. For example, this study ignores the variable of the educational background, geographic location, and cultural differences. These variables may have additional effects on audience behavior. Besides, this study only focuses on a short period of study time in China.

5.4 Future research suggestion

Future research should have a closer look at various demographic factors to obtain a more comprehensive understanding of tourists visit intentions.

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The author(s)declare(s) that there is no conflict of interest regarding the publication of this paper.

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