Contents lists available at ScienceDirect

Heliyon

journal homepage: www.cell.com/heliyon

Research article

The effect of food tourism experiences on tourists' subjective well-being

Sen Yang^a, Yi Liu^{a, b, *}, Liping Xu^c

^a School of Management, Jinan University, Guangzhou, 510632, People's Republic of China

^b Shenzhen Tourism College, Jinan University, Shenzhen, 518053, People's Republic of China

^c School of Marxism, Guangdong University of Finance & Economics, 510320, People's Republic of China

ARTICLE INFO

Keywords: Sensory experience Service experience Environmental experience Tourist attitude Tourist satisfaction Subjective well-being

ABSTRACT

Food has become a crucial factor in attracting tourists to destinations. Providing tourists with satisfying food experiences has become a significant concern for tourist destinations. This study examines how tourists' food experiences contribute to their subjective well-being. After conducting a questionnaire survey of 360 tourists who experienced Zibo barbecue food, and analyzing the data using structural equation modeling, it was found that: tourists' food sensory experience, service experience, and environmental experience positively affect their satisfaction and subjective well-being; The effect of these experiences on tourists' satisfaction is mediated by tourist attitude; Tourist attitude and satisfaction play a chain mediating role in the effect of sensory experience, service experience, and environmental experience on tourists' subjective well-being. The research findings help to deepen the understanding of the relationship between food tourism experience and subjective well-being, enrich the theoretical research on food experience and tourists' well-being, and have insightful significance for the development and construction of other tourist destinations.

1. Introduction

During this year's May Day holiday, Zibo, Shandong Province, China, became a popular destination for tourists seeking to taste its barbecue food. According to data from "Travel China", during the "May Day" period, the number of accommodation bookings in Zibo increased by 800 % compared to the same period in 2019, and the number of travel orders increased by more than 2000 % compared to the same period in 2019. During the first day of the May Day holiday, tickets for the high-speed train from Beijing South to Zibo sold out in just 1 min. As a result, Zibo has quickly become one of the most of popular scenic spots in China. Zibo, a national historical and cultural city and old industrial base in China, has a long history. In response to resource depletion, it is striving to change its economic development model and achieve sustainable growth. The Zibo Municipal Government has identified tourism as a key driver for development [1]. Zibo has average tourism resources, yet it attracts a higher number of tourists compared to cities with richer tourism resources. This issue has been a long-standing and highly debated topic in the academic community. This phenomenon has prompted the academic community to consider what has made Zibo so appealing to tourists and what lessons can be learned from its success. Can the Zibo model be replicated in other cities with limited tourism resources? This raises the questions of what the Zibo barbecue food experience can offer tourists. Can it enhance their quality of life and subjective well-being? Researching the subjective well-being of

Corresponding author. School of Management, Jinan University, Guangzhou, 510632, People's Republic of China. E-mail address: tliuyi@jnu.edu.cn (Y. Liu).

https://doi.org/10.1016/j.heliyon.2024.e25482

Received 20 October 2023; Received in revised form 24 January 2024; Accepted 29 January 2024 Available online 1 February 2024

2405-8440/© 2024 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).







tourists and its influencing factors is a scientific issue worthy of attention. This is because the well-being of tourists is a crucial factor in promoting sustainable tourism development.

Food is a key element of tourism destination marketing strategies [2-6]. It has a significant influence on tourists' choice of destination [7-9] and often the primary attraction for tourists [5,10-12]. As a result, many destinations strive to offer unique food experiences to gain a competitive advantage [13-15]. Consequently, food tourism research focuses on the impact of food tourism experiences on tourist behavior [16-18], which is a critical aspect of tourism destination marketing [19,20].

The study of tourists' well-being or quality of life is also an important trend in tourism and hospitality research that is increasingly gaining more attention [21–23]. Tourism researchers have actively promoted research related to subjective well-being. Studies have shown that tourists' satisfaction increases through the realization of tourism goals, thus ensuring a positively impactful experience in the targeted life domain, i.e., subjective well-being [24]. According to research, subjective well-being is directly related to the tourism experience and its positive impacts [21,22]. Both the demand and supply side of tourism activities and their consequences can affect subjective well-being [21]. Tourism activities affect the tourism experience of tourists and the lives of residents, influencing the quality of life and well-being of tourists and residents [25]. It has also been shown that tourists' well-being is significantly associated with the environment in which they live [26,27]. Subjective well-being was found to be positively related to overall memorability, enduring involvement, and authentic food experiences [28,29].

Although important advances have been made in research related to food tourism and tourists' subjective well-being, food tourism has not received as much attention as other areas of study [30]. Consequently, few studies have focused on the impact of tourists' food tourism experience on their subjective well-being. Björk et al. suggest that a destination's gastronomy can contribute to holiday well-being [31]. A study on slow food tourism experiences showed that the slow food experience elicits a positive impact on the tourists' quality of life [23]. Additionally, food experience has a significant impact on improving tourists' subjective well-being and quality of life. However, the study identifies three key research gaps in understanding the impact of food tourism experiences on subjective well-being.

First, research on tourists' subjective well-being in the context of food tourism has not received enough attention. From the destination perspective, current food tourism research focuses on the impact of food tourism on the competitiveness and attractiveness of tourist destinations [5,10–15], maintaining food authenticity and local identity [3,18,32], and promoting local economic development [17,33], and enhance future sustainable development [34]. From the perspective of tourists, previous studies have examined tourists' motivation to consume local food [35], their perceptions of local food [36], and the factors that affect tourists' food experience [32,37], and more studies focus on tourist behavior [16–18].

Second, it has not yet been clarified which food tourism experiences have the most critical impact on tourists' subjective well-being. According to research, tourists' food tourism experiences are mainly influenced by push and pull factors, of which, three push factors include the taste of food, socialization and cultural experiences; and three pull factors include the core food-tourism appeals, traditional food appeals and local destination appeals [38]. Additionally, research has shown that individual, food, and environment are the three main factors that influence food consumption experience [35]. Studies on the development of food consumption scales have revealed that cultural experience, excitement, interpersonal relationship, sensory appeal, and health concern are five crucial factors that affect the food experience of tourists [39]. Therefore, the important core factors influencing food tourists have not yet been identified and are in urgent need of this study to sort out and determine them.

Third, there is a lack of empirical testing of the mechanisms by which the food tourism experience influences tourists' subjective well-being. A study on psychosocial benefits of food tourism festival visitors revealed that the most important benefit factors, as judged from average mean score values, were food enjoyment and atmosphere, buying and tasting, and tradition and celebration [19]. Satisfaction with food is an important way to alleviate sadness and enhance well-being [40,41]. Similarly, s factors such as sensory experience, excellent service, and quality food and beverage offerings are crucial in shaping customers' well-being perception [42,43]. Lifestyles associated with food have a positive impact on attitudes and contribute to satisfaction with experiences and overall life satisfaction [44,45]. Tourists' attitudes towards local food can explain the mechanisms behind their affective, psychological, and subjective well-being [7,35,46]. However, there is a lack of explicit and systematic research on the mechanisms by which tourists' attitudes and satisfaction are affected by the food tourism experience on tourists' subjective well-being requires empirical studies for explicit analysis.

Considering the aforementioned research gaps, based on the cognitive theory of emotion, we aim to explore the influence of food tourism experiences on tourists' subjective well-being in the context of Zibo barbecue's local specialty, and examine the mediating role of tourists' attitude and satisfaction. Thus, the research goals are as follows: (1) to identify the dimensions of tourists' food tourism experience based on relevant literature and tourists' experience; (2) to explore the influence of food tourism experience on tourists' subjective well-being; and (3) to reveal the mediating role of tourists' attitude and satisfaction in the influence of food tourism experience on subjective well-being.

This study makes the following three major theoretical contributions to research related to food tourism and subjective well-being. First, it clarifies the key variables of the influence of food tourism experience on tourists' subjective well-being, and food tourism experience is comprised of three dimensions: sensory experience, service experience and environmental experience; second, the study utilizes the cognitive theory of emotion to analyze the impact of food tourism experience on tourists' subjective well-being, which provides a new research perspective for food tourism and expands the application scope of cognitive theory of emotion; thirdly, the mechanism between food tourism experience and tourists' subjective well-being is identified, in which tourists' attitudes and satisfaction play a mediating role.

The remainder of this study is organized as follows. Part 2 reviews the literature related to the cognitive theory of emotion,

subjective well-being, food tourism experience, and the interaction between food tourism experience and tourists' subjective wellbeing. This review is used to formulate the research hypotheses. In addition, a theoretical research framework is proposed based on the above research foundation. Then, Part 3 is the research design, which focuses on the description of the research methods, and Part 4 presents the process of analyzing and testing, as well as the research results. Finally, Part 5 is the discussion and conclusion, which focuses on the research conclusions, theoretical contributions and managerial implications, followed by the research limitations and further research directions.

2. Literature review and theoretical hypothesis

2.1. Cognitive theory of emotion

According to the cognitive theory of emotions, emotions arise from evaluations of stimuli from various things or situations, which are mainly influenced by physiological conditions, environmental events, and cognitive processes [47]. Human emotions are the result of interaction between the person and the environment, a process that can be described as the reception of external environmental stimuli, as well as the need to regulate one's response to various stimuli in this process, in which emotional activity is mainly guided by cognitive activity. Cognition means that when an individual is stimulated by external stimuli, the brain will process the information of these external stimuli, and this process is the process of individual cognition, which includes the individual's sensation, perception, memory, thinking, imagination, and language. For the external information received by the human brain, it will be processed by the brain into an internal mental activity, which will govern human behavior, this process is called user cognition, and the processed mental evaluation is called user emotion [48].

Emotions arise from the organism's evaluation of external stimuli, and the process of cognition plays a crucial role in determining the nature of emotions [49]. When an individual experiences an external stimulus, the brain's perception and perceptual system will organize, compile, and process it to generate user cognition, and the user cognition will also make an evaluation of the external stimulus, which is referred to as an emotion. Environmental events (stimuli), physiological states (physiological factors), and cognitive processes (cognitive factors) all impact an individual's emotions [50].

Based on this, this study uses cognitive theory of emotion as the theoretical basis to explore the effect of food tourism experience on tourists' subjective well-being. When tourists are subjected to external stimuli of food sensory experience, service experience and environmental experience, tourists will organize and compile the received stimuli to form cognition, which turns into tourists' attitude and satisfaction, and tourists' cognition can trigger tourists' emotions, i.e., tourists produce positive emotions - subjective well-being.

2.2. Subjective well-being

Subjective well-being has received significant attention in various fields, including psychology, sociology, and management. However, academic discourse slightly varies in defining subjective well-being, which includes concepts such as happiness, well-being, quality of life, and life satisfaction [51]. For example, happiness refers to a momentary feeling of delight and excitement that reflects an individuals' current state of affairs [52]. Shin et al. [53] defined subjective well-being as a state of happiness resulting from positive evaluations of life situations and favorable comparisons with others and the past. According to the authors, subjective well-being is a thorough evaluation of an individual's quality of life based on their chosen criteria. It encompasses both cognitive and affective assessments of life satisfaction. This assessment is based on a variety of criteria, including positive emotions, negative emotions, life evaluation, satisfaction in specific areas, and other elements [54,55].

According to Sirgy et al. [56], subjective well-being captures tourists' experiences that produce long-term effects, instead of only their immediate satisfaction. Additionally, Sirgy [57] explains that well-being can be both objective and subjective in nature. Objective studies use social indicators, such as income or crime rates, to measure mental health. In contrast, subjective studies measure mental health based on individuals' perceived satisfaction with their lives. McLean et al. [58] studied well-being from an objective standpoint, defining subjective well-being as an individual's satisfaction with life.

Although researchers may have slightly different definitions of subjective well-being, the underlying meanings are essentially the same. Researchers have varying definitions of subjective well-being, but they generally share similar connotations. This study adopts Diener's perspective [54,55], which is widely accepted, and defines subjective well-being as tourists' comprehensive perception and evaluation of their satisfaction with their own lives after experiencing food in tourist destinations.

2.3. Food tourism experiences

Tourists often travel to experience local food, making food an important motivation for travel [59]. Many tourist destinations rely on food tourism to gain core competencies and promote sustainable development [10]. Food tourism refers to the sum of behaviors and feelings caused by tourists who go to the place to participate in food-related activities, experience local food customs, or conduct food inspections, with the unique food and food culture as the attraction, it is a special tourism product with a rich and profound food culture as its foundation and soul [60].

As tourists have higher demands and expectations of tourism and its products in the experience economy, food tourism has become increasingly popular. The value of tourism is no longer limited to products and services, but rather the experience it provides. Experience is defined as the personalized feeling that an individual has in response to certain stimuli through the senses or the mind. Food experience is a fundamental need and desire of tourists [9], and it is also the most direct way to experience a city's culture and

connotation through sensory contact and visual communication. Nowadays, due to the easy access to resources and abundant materials, food tourism has become a new tourism trend in the tourism industry [61].

The traditional food experience space comprises three main components: food, food experiencers, and places. A qualitative analysis has revealed that certain specific elements contribute to memorable food tourism experiences, as opposed to a broad range of elements. The analysis identified five general factors that contribute to such experiences: food or drink consumed, place/environment, companions, occasion, and tourism elements (e.g., novelty, authenticity). Although these elements are often mentioned together, a single element (e.g., an extraordinary landscape or main course) is sufficient to create a memorable experience [62]. Tsai et al. [63] studied Taiwanese street food from four experience dimensions: consumer return on investment (CROI), service excellence, aesthetics, and playfulness. CROI mainly focuses on the perceived value of tourists, including the return of time, money, behavior, and psychological resources invested in the experience process. Service excellence refers to the customer's perception of the service experience. Aesthetics refers to the customer's perception of the consumption environment experience from the perspective of food tourism. Playfulness emphasizes the inner enjoyment of tourists, that is, the emotional experience or entertainment experience of tourists. Björk and Kauppinen-Räisänen's findings [2] demonstrate that tourists' food-related experience is structured into three dimensions: what is served, the restaurant environment, and food-related behavior. 'What is served' refers to the food offered to tourists by the destination restaurant and the manner in which it is presented. The 'restaurant environment' encompasses both the external environment and the interior design of the restaurant, 'Food-related behavior' pertains to the conduct of the tourists themselves. As the food experience is subjective and tourists have varying expectations, tourists' perception of the experience may differ. Tsaur and Lo [64] developed the memorable dining experience (MDE) scale, which includes excellent service behavior, exquisite and delicious cuisine, amazing physical environment and unique atmosphere, and high perceived value. Local food culture, freshness of food, and homemade food are crucial for tourists' dining experience, and the food and the dining location, such as restaurants, are significant aspect of a tourists' food experience [10].

Similarly, before commencing the study, a small interview survey was conducted to gather information on relevant food tourism experiences. The survey aimed to evaluate the research value of the study and assess the dimensions of tourists' food tourism experience. Tourists who reported a positive food tourism experience consistently mentioned the taste, color, and flavor of the food, as well as good service and eating environment of the destination. This indicates that the sensory, service, and environmental experiences all contribute to a high-quality food tourism experience.

Referring to the above research results and a small interview survey of tourists, this study defines food tourism experience as the synthesis of sensory and psychological feelings related to factors such as food, service, and environment during the entire process of ordering, eating and paying after tourists enter a certain eating place (here refers to barbecue food stores/stands). Food tourism experience includes three dimensions: sensory experience, service experience and environmental experience. Food sensory experience is the bodily experience based on specific senses such as touch, smell and taste when tourists experience food in the food environment. Food service experience is the service that tourists receive or perceive when tourists experience food in the food environment. Finally, food environment experience is the overall consumption environment experience perceived by tourists when experiencing food.

2.4. The impact of food tourism experience on tourists' subjective well-being

In the field of tourism, tourism experience is considered a prerequisite for tourists to achieve well-being, and the positive effect of tourism activities on tourists' quality of life and well-being has been widely verified [58,65–67]. Subjective well-being places more emphasis on individual experience [51]. Tourist well-being is the process of interaction between tourists and tourist destinations. Tourists' experiences in tourist destinations often affect tourists' perceptions and evaluations. Tourism satisfies various sensory needs and helps achieve travel goals, leading to enjoyment, self-development, and meaning of life are experienced [66]. Kim et al. [65] pointed out that tourism fulfills tourists' motivational needs and provides relief from work-related stress, allowing them to escape the fast-paced city life and purify their minds and souls, ultimately promoting subjective well-being.

Food is a crucial tourism resource and product in any tourist destination [68], it serves as the material foundation for tourists' activities [9]. Tourists' food experiences are highly related to tourists' satisfaction and subjective well-being [59]. Tourists' well-being is derived from their high-quality food experiences [16,29,31,69] and memories of related food experiences [28,45,70]. Liu et al. [71] conducted a survey of 497 tourists in Guangzhou, China and found that tourists' perceived value of destination food has a significant positive effect on tourists' subjective well-being. Additionally, it has an important effect on tourist loyalty, with tourists' well-being playing a mediating role. Local food, in particular, is an effective means to achieve well-being, as it can stimulate sensory pleasure and even have entertainment effects [72,73]. The value of Taiwanese food differs for mainland Chinese individuals, and this food experience affects the well-being of food enthusiasts [73]. The effect of local food on well-being is influenced by factors such as local eating habits, traditions, safety, and culturally appropriate food and beverages (such as wine, beer, and juice) that are produced locally at the destination [31]. Memorable local food consumption experiences (MLFCEs) significantly explain international diners' attitudes toward local food, subjective well-being, intention to recommend, and attitude loyalty toward local food [70]. During the COVID-19 pandemic, all five dimensions of the memorable dining experience (MDE) contributed to the overall food experience memory, and the overall memory was positively correlated with subjective well-being and actual eWOM behavior [28]. The study on tourists who participated in Korean temple food cooking classes revealed that four dimensions of food experience had a strong and positive effect on satisfaction, and it was also discovered that experience satisfaction indirectly affects the quality of life through subjective well-being [59].

Therefore, the following hypothesis was proposed.

- H1. Food tourism experience has a positive influence on tourists' subjective well-being.
- H1a. Food sensory experience has a positive influence on tourists' subjective well-being.
- H1b. Food service experience has a positive influence on tourists' subjective well-being.
- H1c. Food environmental experience has a positive influence on tourists' subjective well-being.

2.5. The impact of food tourism experience on Tourist satisfaction

In the field of tourism, the quality of tourist experience is considered as one of the important attributes that affect tourist satisfaction and revisit [8,74,75]. Satisfaction is a psychological experience that refers to the emotional state of tourists after service contact [14,76], and it is the overall satisfaction of tourists with the service experience [77]. The satisfaction of customers is influenced by service quality, which in turn affects their behavioral intention. Additionally, tourist satisfaction is significantly influenced by the quality of their experience [8]. Prebensen and Xie's [78] conducted a study on the impact of participation, specifically co-creation and mastering, on the perceived value of consumers' experiences and satisfaction. The participation of tourists enhances their satisfaction by creating value for their overall experience. Furthermore, tourist satisfaction is influenced by their participate in creating value for their experiences. Bae et al.'s [79] study on solitary diners in the United States discovered that food quality, service quality, and physical environment quality positively affected customer satisfaction. Some studies differentiate between food satisfaction and overall satisfaction. A comparison was conducted to determine the satisfaction levels of four local food options in Macau: Portuguese, buffet, Michelin and street snacks. The study found that food satisfaction significantly impacts overall satisfaction, which in turn influences customer word-of-mouth [80]. Ali et al. [81] used Pakistani food tourism tourists as an example. The research findings indicate that food quality, perceived environmental quality, perceived value, and service quality significantly affect tourist satisfaction. The quality of food experience at a destination is a crucial factor that influences both tourist satisfaction and overall vacation experience [4,74]. Enjoyment of food tourism consumption experiences has a significant impact on satisfaction, life domain outcomes, life satisfaction, and autobiographical memories of tourism [44]. The perceived quality and perceived value of local food have a positive impact on satisfaction, which in turn evokes food tourists' revisit and recommendation intentions [75,82], and these post-food tourism behavioral intentions are crucial for tourism destination development [81].

Therefore, the following hypothesis was proposed.

- H2. food tourism experience has a positive influence on tourist satisfaction.
- H2a. food sensory experience has a positive influence on tourist satisfaction.
- H2b. food service experience has a positive influence on tourist satisfaction.
- H2c. food environmental experience has a positive influence on tourist satisfaction.

2.6. The mediating role of Tourist attitude and satisfaction

Consumer attitude theory has confirmed that customer behavior originates from customer cognition, attitude, and behavioral intention. Attitude refers to an individual's persistent overall feelings of emotion, perception, and movement towards certain things in the environment, which can be used to predict individual behavior to some extent [83]. This kind of overall feeling will make individuals produce a tendentious view, which often has long-term stability, and represents a mental state that is an emotional reaction of people to some external stimulus, with bipolarity (like or dislike).

Tourists' food experiences in tourist destinations influence tourists' cognition and shape tourists' attitudes toward food tourism destinations. Tourists' attitudes toward food generally refer to tourists' inclination toward the food they experience [84,85]. Harrington et al. [86] verified that food or drink quality, service quality, staff friendliness, restaurant atmosphere, service speed, and cleanliness are the primary attributes that influence the positive and negative experiences of Gen Y consumers. Food quality, staff service, and information strongly determine attendees' attitudes toward local festivals and their intention to return [87]. Quintal et al. [88] utilized the theory of planned behavior (TPB) to investigate the decision-making behavior of wine tourists. they classified winery attributes and examined their effect on tourists' attitudes, revisit intentions, and recommendation intentions. The study found that winery service personnel and supporting products significantly influence wine tourists' attitudes toward wineries, making them crucial factors in wine tourists' decision-making process. The environment of tavern and the value of wine are important factors that influence the attitudes of wine tourists. The TPB posits that attitudes are determined by customers' expectations of behavioral outcomes, specifically the comparison between their post-experience and initial expectations, but it has also been found to be shaped by a person's sociocultural and economic background [89]. As a result, Ting et al. [90] believe that tourists from different countries or regions may hold varying attitudes towards the ethnic food of the destinations they visit. A study conducted on street food in Phuket, Thailand found that among the factors that make up consumers' attitudes towards street food, emotions, perceived service quality, and satisfaction had the highest predictive power for tourists' future behavior, and changes in hygiene, value for money, and food quality could still lead to changes in tourists' overall attitudes [91].

Customers' consumption experience is a phenomenon that involves pursuing fantasy, feeling and pleasure [92]. Tourists' food experiences in a destination can affect their attitudes and satisfaction, and the quality of experiences in the destination can have an important impact on tourists' subjective well-being. The co-creation of tourist experiences affects satisfaction with the vacation

experience, which is a predictor of perceived overall life satisfaction [93]. The study's results suggest that food tourism consumption experiences significantly affects satisfaction, life domain outcomes, and life satisfaction. Food-related lifestyle and leisure attitudes are significant determinants of food tourism well-being and have a considerable influence on consumption experiences. Satisfaction with consumption experience, whether intentional or accidental, contributes to life satisfaction [44].

A study in the United States found that older adults consider restaurants, such as coffee shops and fast food restaurants, to be a popular community destination and source of well-being for [94]. Additionally, research has shown that food is a crucial factor for tourists when selecting a destination. They value originality, novelty and locality, authenticity, and uniqueness of local food, which can significantly impact their overall travel satisfaction. Tourists often research food options in their travel destinations prior to their trip. However, tourists' attitudes towards food can be casual and varied, and their behavior may change depending on their attitude [10]. In a separate study, it was concluded that food experiences have an impact on travel satisfaction and overall vacation experience. Consumers' attitudes toward food affect their behavior as travelers, which in turn affects travel motivation and destination choice, ultimately influencing travel satisfaction and vacation experience [74]. Tourists' experiences of street food quality in Korea significantly affects tourists' experience, destination image, life satisfaction, and word-of-mouth [95]. A study on tourists' slow food experiences have a positive impact on tourists' quality of life [23]. Badu-Baiden and Kim [46] developed the memorable local food consumption experiences (MLFCEs) scale and verified through structural equation modeling that the scale has strong explanatory power concerning local food attitudes, subjective well-being, and destination loyalty.

In summary, the following hypothesis was proposed.

H3. Tourist attitude mediates the influence of food tourism experience on tourists' subjective well-being.

H3a. Tourist attitude mediates the influence of food sensory experience on tourists' subjective well-being.

H3b. Tourist attitude mediates the influence of food service experience on tourists' subjective well-being.

H3c. Tourist attitude mediates the influence of food environmental experience on tourists' subjective well-being.

H4. food tourism experience influence tourists' subjective well-being through the chain mediating effects of tourist attitude and satisfaction.

H4a. food sensory experience influence tourists' subjective well-being through the chain mediating effects of tourist attitude and satisfaction.

H4b. food service experience influence tourists' subjective well-being through the chain mediating effects of tourist attitude and satisfaction.

H4c. food environmental experience influence tourists' subjective well-being through the chain mediating effects of tourist attitude and satisfaction.

Based on the above analysis, this study constructed a theoretical model framework as shown in Fig. 1.

3. Research design

3.1. Measurement scales and questionnaire design

To enhance the reliability and validity of the questionnaire, this study utilized a well-established scale with a high citation rate in the field of food tourism. The food tourism experience comprises three dimensions: sensory, service, and environmental experience. The sensory experience scale items are mainly derived from Choe and Kim [7], Santa Cruz et al. [8], and Jeaheng et al. [96], totaling 4 items. The items of the service experience scale mainly refer to the scales developed by Jeaheng et al. [96], Su et al. [97], and Moon and Han [98], comprising a total of 5 items. The items of the environmental experience scale mainly refer to the scales developed by Tsai et al. [63], Soltani et al. [99], and Tsaur and Lo [64], comprising a total of 4 items. The items of the tourist attitude scale mainly refer to the scales developed by Ting et al. [90], Su et al. [100], and Soltani et al. [99], comprising a total of 4 items. The items of the tourist attitude scale mainly refer to the scales developed by Ting et al. [90], Su et al. [100], and Soltani et al. [99], comprising a total of 4 items. The items of the tourist attitude scale mainly refer to the scales developed by Ting et al. [90], Su et al. [100], and Soltani et al. [99], comprising a total of 4 items. The items of the tourist attitude scale mainly refer to the scales developed by Ting et al. [90], Su et al. [100], and Soltani et al. [99], comprising a total of 4 items. The items of the tourist attitude scale mainly refer to the scales developed by Ting et al. [90], Su et al. [100], and Soltani et al. [99], comprising a total of 4 items. The items of the tourist attitude scale mainly refer to the scales developed by Ting et al. [90], Su et al. [100], and Soltani et al. [99], comprising a total of 4 items. The items of the tourist attitude scale mainly refer to the scales developed by Ting et al. [90], Su et al. [100], and Soltani et al. [90], comprising a total of 4 items. The items of the tourist attitude scale mainly refer to the scales developed by Ting

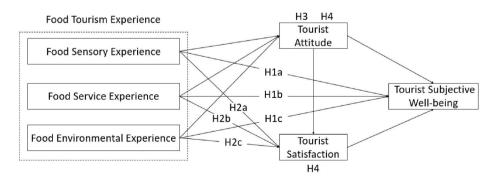


Fig. 1. Theoretical model.

satisfaction scale are primarily based on the scales developed by Su et al. [97], Su et al. [77], and Moon and Han [98], totaling 3 items. The items of the subjective well-being scale are mainly based on the scales developed by Kim et al. [65], Su et al. [97], and Su et al. [101], totaling 3 items. Both scales are measured using the 5-point Likert scoring method, with scores ranging from 1 (strongly disagree) to 5 (strongly agree). The specific measurement items are listed in Table 1. In addition, the questionnaire also captures the demographics information of the tourist, including gender, age, education level, and income.

3.2. Data Collection

Our research obtained informed consent from all participants. First of all, when we hand out questionnaires to tourists, we will ask tourists whether they are willing to accept the survey, and then we will send out the questionnaire to tourists after getting a positive answer; secondly, the purpose of the survey was explained to the interviewees at the beginning of the questionnaire.

The questionnaire items were primarily in English. To ensure the reliability of the measurement scale, it underwent translation into Chinese and back-translation into English using the back-translation method. The semantic expressions of the questionnaire items were compared for consistency. We conducted the survey using convenience sampling and the respondents were tourists excluding local residents. A pre-test was conducted before the formal investigation to confirm the validity of the scale's content. In mid-May 2023, a pre-test was conducted via the questionnaire survey platform Credamo (credamo.com). One hundred questionnaires were distributed and subsequently analyzed. The Cronbach's alpha values of each scale were greater than 0.7, indicating good internal consistency of the questionnaire's variable measurement items. Therefore, all items from the pre-test scales for food tourism experience, tourist attitude, tourist satisfaction, and subjective well-being were retained to form the formal questionnaire.

The questionnaire survey was conducted from late May to early June 2023, both online and offline, and offline. Data research companies assisted in collecting the offline questionnaire, while the online questionnaire was distributed through the questionnaire research platform Credamo (credamo.com).

To enhance the quality of questionnaire completion and increase the response rate, participants will receive small gifts or monetary rewards upon completion. Out of the 400 questionnaires distributed, 360 were deemed valid, resulting in an effective rate of 90 %. Invalid questionnaires were excluded due to incomplete, insufficient length, or failure to pass the attention test.

4. Research results

4.1. Sample Profile

In the sample of tourists who visited to Zibo for barbecue food tourism, women slightly outnumbered men, accounting for 53.3 % of the total. The sample is predominantly young, with 45.6 % aged between 21 and 30 and 35.3 % aged between 31 and 40. This may be attributed to the fact that people in these age groups have savings, are easily influenced by social media, and have a high willingness to travel. In terms of educational level, junior college or bachelor's degree accounts for 68.3 %, which has an absolute advantage, which may be related to the expansion of higher education in China [9]. The majority of respondents (46.1 %) reported an income between 6001 and 9000 yuan, which may be due to the rapid economic development in China and the resulting increase in the number of

| Table 3 | 1 |
|---------|---|
|---------|---|

Scale items and sources.

| Latent Variables | | Observed Variables | References |
|-----------------------|--------------------|--|------------|
| Food Tourism | Sensory Experience | Zibo's barbecue food smells nice | [7,8,96] |
| Experience | | Zibo's barbecue food looks nice | |
| | | Zibo's barbecue food tastes good | |
| | | Zibo's barbecue food has a pleasant texture | |
| | Service Experience | The staff at Zibo's barbecue food stores/stands is friendly | [96–98] |
| | | The staff at Zibo's barbecue food stores/stands is helpful | |
| | | The staff at Zibo's barbecue food stores/stands is kind | |
| | | The staff at Zibo's barbecue food stores/stands is courteous | |
| | | Zibo's barbecue food staff provided prompt service | |
| | Environmental | The dining environment of Zibo's barbecue food stores/stands are aesthetically | [63,64,99] |
| | Experience | appealing | |
| | | Decorations of Zibo's barbecue food stores/stands are attractive | |
| | | The style of Zibo's barbecue food stores/stands is very impressive | |
| Tourist Attitude | | I feel good about Zibo's barbecue food | [90,99, |
| | | I enjoy Zibo's barbecue food | 100] |
| | | Zibo's barbecue food can satisfy my needs | |
| | | The tourist experience of Zibo's barbecue food is interesting | |
| Tourist Satisfaction | | Overall, I was satisfied with my visit to Zibo | [77,97,98] |
| | | Compared to my expectations, I am satisfied with my visit to Zibo | |
| | | Compared to the ideal situation, I am satisfied with my visit to Zibo | |
| Subjective Well-Being | | In general, I consider myself a very happy person | [65,97, |
| | | Compared to most of my peers, I consider myself more happy | 101] |
| | | I am generally very happy and enjoy life | |

middle-income groups. Occupational distribution is relatively even, dominated by company employees, accounting for 25.8 %. See Table 2 for details.

4.2. Common method bias

As all items in the questionnaire were completed by tourists, there may be a common method bias. To address this issue, this study utilized Harman's single factor test, exploratory factor analysis and principal component method were extract factors. The results indaicate that the variance explanation rate of the first factor reached 48.279 %, but it did not reach 50 % [102,103]. Therefore, it can be considered that the common method bias will not have a serious impact on the research results.

4.3. Reliability and validity analysis

The data analysis part of this study was conducted using SPSS27.0 and AMOS28.0 software. The maximum likelihood estimation is used for the confirmatory factor analysis of the measurement model of the conceptual model. The goodness of model fit indices were: $\chi 2 = 560.153$, df = 194, p < 0.001, $\chi 2/df = 2.887$, RMSEA = 0.073, CFI = 0.931, IFI = 0.931, TLI = 0.918, SRMR = 0.056. All model fit indicators are good, indicating that the measurement model of the conceptual model fits the actual data well. Composite reliability (CR) and average variance extracted (AVE) are generally used to test the reliability of the scale [90]. As shown in Table 3, the factor loading values of all items are greater than 0.5; Cronbach's alpha is greater than 0.8, which meets the standard of greater than 0.7, indicating that the scale has good internal consistency; CR values all exceed 0.8, which is greater than the standard of 0.7 [9]; therefore, it can be judged that the measurement scale has high reliability.

In terms of validity testing, this study ensures content validity by selecting relatively mature scales with high citation and recognition rates, translating the scales from English to Chinese and from Chinese to English, inviting experts to read the questionnaires, and conducting a pre-test. As shown in Table 3, the range of AVE is 0.553–686, all of which are greater than 0.5 [9,104], indicating that the convergent validity of the scale is acceptable.

The discriminant validity is presented in Table 4. The correlation coefficients of each dimension of food tourism experience, tourist attitude, tourist satisfaction, and subjective well-being range from 0.403 to 0.719, which are all smaller than the threshold standard of 0.8. The square root of the average extraction variance of each dimension and each variable is also greater than each correlation coefficient, which shows that the discriminant validity among variables is good [105].

In summary, the measurement model has good convergent validity and discriminat validity, and the model quality is high.

4.4. Hypothesis testing

The results of structural model analysis showed that the conceptual model fit the data well ($\chi 2 = 484.367$, df = 193, p < 0.001, $\chi 2/df = 2.510$, RMSEA = 0.065, CFI = 0.945, IFI = 0.946, TLI = 0.934, SRMR = 0.056). It can be seen from Table 5 that tourists' sensory experience has a significant positive effect on tourists' subjective well-being ($\beta = 0.195$, p < 0.001); tourists' service experience has a significant positive effect on tourists' subjective well-being ($\beta = 0.107$, p < 0.01); tourists' environmental experience has a significant

| Table 2 |
|---------------------------------------|
| Demographics of sample ($n = 360$). |

| Demographics | | n | % |
|--------------|-------------------------------------|-----|------|
| Gender | Male | 168 | 46.7 |
| | Female | 192 | 53.3 |
| Age | Below 20 years old | 18 | 5.0 |
| | 21-30 years old | 164 | 45.6 |
| | 31–40 years old | 127 | 35.3 |
| | 41–50 years old | 35 | 9.7 |
| | 51–60 years old | 6 | 1.7 |
| | above 61 years old | 10 | 2.8 |
| Education | High school and below | 9 | 2.5 |
| | Junior college or Bachelor's degree | 246 | 68.3 |
| | Master's degree | 86 | 23.9 |
| | Doctor's degree | 19 | 5.3 |
| Income | Under 3000 yuan | 65 | 18.1 |
| | Between 3001 yuan to 6000 yuan | 43 | 11.9 |
| | Between 6001 yuan to 9000 yuan | 166 | 46.1 |
| | Between 9001 yuan to 12,000 yuan | 62 | 17.2 |
| | Above 12,000 yuan | 24 | 6.7 |
| Occupation | Company employees | 93 | 25.8 |
| | Public institution personnel | 56 | 15.6 |
| | Government workers | 46 | 12.8 |
| | Military personnel | 21 | 5.8 |
| | Freelancers | 69 | 19.2 |
| | Student | 66 | 18.3 |
| | Retirees | 9 | 2.5 |

Table 3

Confirmatory factor analysis results (n = 360).

| Dimensions | Items | Mean | SD | Factor Loading | Cronbach's Alpha | CR | AVE |
|------------|-------|------|-------|----------------|------------------|-------|-------|
| FTE | | | | | 0.899 | 0.955 | 0.642 |
| Sen | Sen 1 | 3.97 | 1.004 | 0.897 | 0.832 | 0.845 | 0.585 |
| | Sen 2 | 4.00 | 0.943 | 0.862 | | | |
| | Sen 3 | 3.83 | 0.967 | 0.551 | | | |
| | Sen 4 | 3.79 | 0.962 | 0.699 | | | |
| Ser | Ser 1 | 3.24 | 1.054 | 0.846 | 0.905 | 0.906 | 0.660 |
| | Ser 2 | 3.29 | 1.039 | 0.864 | | | |
| | Ser 3 | 3.24 | 1.061 | 0.839 | | | |
| | Ser 4 | 3.28 | 1.152 | 0.736 | | | |
| | Ser 5 | 3.18 | 1.147 | 0.770 | | | |
| Env | Env 1 | 3.89 | 0.961 | 0.817 | 0.864 | 0.867 | 0.686 |
| | Env 2 | 3.94 | 0.887 | 0.869 | | | |
| | Env 3 | 3.97 | 0.895 | 0.797 | | | |
| Att | Att 1 | 3.87 | 0.847 | 0.767 | 0.832 | 0.832 | 0.553 |
| | Att 2 | 3.74 | 0.888 | 0.727 | | | |
| | Att 3 | 3.89 | 0.798 | 0.751 | | | |
| | Att 4 | 3.92 | 0.865 | 0.729 | | | |
| Sat | Sat 1 | 3.67 | 0.848 | 0.864 | 0.850 | 0.855 | 0.663 |
| | Sat 2 | 3.64 | 0.907 | 0.816 | | | |
| | Sat 3 | 3.67 | 0.882 | 0.759 | | | |
| SWB | SWB1 | 3.79 | 0.860 | 0.788 | 0.803 | 0.808 | 0.584 |
| | SWB2 | 3.87 | 0.877 | 0.775 | | | |
| | SWB3 | 3.63 | 0.924 | 0.729 | | | |

Note: FTE=Food Tourism Experience, Sen = Sensory Experience, Ser = Service Experience, Env = Environmental Experience, Att = Tourist Attitude, Sat = Tourist Satisfaction, SWB = Subjective Well-Being.

Table 4

Discriminant validity.

| | Sen | Ser | Env | Att | Sat | SWB |
|-----|---------|---------|---------|---------|---------|-------|
| Sen | 0.765 | | | | | |
| Ser | 0.421** | 0.812 | | | | |
| Env | 0.687** | 0.403** | 0.828 | | | |
| Att | 0.699** | 0.526** | 0.659** | 0.744 | | |
| Sat | 0.581** | 0.693** | 0.579** | 0.674** | 0.814 | |
| SWB | 0.670** | 0.583** | 0.638** | 0.709** | 0.719** | 0.764 |

Note: Sen = Sensory Experience, Ser = Service Experience, Env = Environmental Experience, Att = Tourist Attitude, Sat = Tourist Satisfaction, SWB = Subjective Well-Being; below the diagonal is the Pearson correlation coefficient; the square root of AVE is shown in bold on the diagonal of the matrix; ** Significant at p < 0.01.

Table 5

Hypotheses tests (n = 360).

| Hypothesis | Path | Path Standard Path Loadings T-value Standard Error | | р | Hypothesis Test Outcome | |
|------------|---------|--|--------|-------|-------------------------|-----------|
| H1 | FTE→SWB | | | | | |
| H1a | Sen→SWB | 0.195 | 4.276 | 0.046 | *** | Supported |
| H1b | Ser→SWB | 0.107 | 3.059 | 0.035 | ** | Supported |
| H1c | Env→SWB | 0.129 | 3.029 | 0.043 | ** | Supported |
| H2 | FTE→Sat | | | | | |
| H2a | Sen→Sat | 0.097 | 2.028 | 0.048 | * | Supported |
| H2b | Ser→Sat | 0.372 | 11.943 | 0.031 | *** | Supported |
| H2c | Env→Sat | 0.146 | 3.297 | 0.044 | *** | Supported |

Note: FTE=Food Tourism Experience, Sen = Sensory Experience, Ser = Service Experience, Env = Environmental Experience, Sat = Tourist Satisfaction, SWB = Subjective Well-Being; ***Significant at p < 0.001, **Significant at p < 0.01, *Significant at p < 0.05.

positive impact on tourists' subjective well-being ($\beta = 0.129$, p < 0.01), that is, H1a, H1b, H1c were verified, so H1 hypothesis is supported. Tourists' sensory experience has a significant positive impact on tourist satisfaction ($\beta = 0.097$, p < 0.05); tourists' service experience has a significant positive impact on tourist satisfaction ($\beta = 0.372$, p < 0.001); tourists' environmental experience has a significant positive impact on tourist satisfaction ($\beta = 0.146$, p < 0.001), that is, H2a, H2b, H2c are verified, so H2 hypothesis is supported.

To verify hypotheses H3 and H4, this study uses the process plug-in in SPSS to process mediation and chain mediation tests. As shown in Table 6, the direct effect of sensory experience on tourists' subjective well-being is 0.2396, and the confidence interval is

[0.1548, 0.3244]; the direct effect of service experience on tourists' subjective well-being is 0.0954, and the confidence interval is [0.0228, 0.1681]; the direct effect of environmental experience on tourists' subjective well-being is 0.1979, and the confidence interval is [0.1179, 0.2780]; the confidence intervals of all direct effects do not include 0, and H1a, H1b, and H1c are retested.

In addition, tourist attitude in sensory experience has a significant mediating effect on tourists' subjective well-being, with an effect value of 0.1787 and a confidence interval of [0.1049, 0.2538]; tourist attitude in service experience has a significant mediating effect on tourists' subjective well-being, with an effect value of 0.1685 and a confidence interval of [0.1189, 0.2264]; tourist attitude in environmental experience has a significant mediating effect on tourists' subjective well-being, with an effect value of 0.1685 and a confidence interval of [0.1232, 0.2588]. Similarly, all confidence intervals do not contain 0. Therefore, H3a, H3b and H3c are verified, so H3 is supported.

Finally, the chain mediation effect of tourist attitude and tourist satisfaction in the influence of food tourism experience on tourists' subjective well-being is tested. The effect value of tourist attitude and tourist satisfaction in the chain mediation effect of sensory experience on tourists' subjective well-being is 0.1378, and the confidence interval is [0.0942, 0.1901]; the chain mediation effect of tourist attitude and tourist satisfaction in the influence of service experience on tourists' subjective well-being is 0. 0667, and the confidence interval is [0.0407, 0.0984]; the effect value of tourist attitude and tourist satisfaction in the chain mediation effect of environmental experience on tourists' subjective well-being is 0.1240, and the confidence interval is [0.0853, 0.1670]. Similarly, all the confidence intervals do not include 0, that is, H4a, H4b and H4c are verified, so H4 is supported.

5. Discussions

Tourism management organizations and scholars have acknowledged the crucial role of food tourism in sustainable development and attracting tourists [60,69,106,107]. However, there is a dearth of research on the impact of food tourism experiences on tourists' subjective well-being. This study employs the cognitive theory of emotion as the theoretical basis to investigate the effect of food tourism experiences on tourists' subjective well-being, including the mediating role of tourists' attitudes and satisfaction. The main research findings are as follows:

First, food tourism experiences can positively predict tourists' subjective well-being. Empirical research results demonstrate a significant positive effect of food tourism experiences on tourists' subjective well-being. The level of tourists' subjective well-being is positively correlated with the quality of their food sensory, service, and environmental experiences at the tourist destination. Furthermore, tourists' attitude and satisfaction mediate the relationship between food tourism experiences and subjective well-being. As suggested by the cognitive theory of emotion, tourists' subjective well-being is considered a positive emotion, tourists are easily affected by tourists' attitudes and satisfaction with food when experiencing food in food tourism destinations, and the level of tourists' attitudes and satisfaction play a crucial role in the influence of tourists' subjective well-being.

5.1. Theoretical implications

This study explores the influence of tourists' food tourism experience on their subjective well-being and its mediating mechanism. The research is based on the recent food tourism trend in Zibo, Shandong, China, where a large number of tourists visited for barbecue food check-ins in May of this year. Studies have shown that the food tourism experience can be categorized into three dimensions: sensory experience, service experience and environmental experience. This categorization is supported by Jeaheng et al. [96], Tsaur and Lo [64], Badu-Baiden et al. [70]. Tourist satisfaction and subjective well-being are significantly influenced by sensory, service, and environmental experiences. This is supported by various studies, including Stone et al. [108], Rousta and Jamshidi [109], Yoo et al. [59]. Tourist attitude plays a mediating role in the influence of sensory experience, service experience and environmental experience on tourist satisfaction and is consistent with previous research of Ali et al. [81], Su et al. [100], Lai [80], and Yoo et al. [59].

Table 6

Mediating effect test results.

| | Path | Path | Path Effect SE 95 % CI | | Effect size % | Hypothesis | Hypothesis Test Outcome | |
|-----------------|---|--------|------------------------|----------|---------------|------------|-------------------------|-----------|
| | | | | Lower UI | Upper | | | |
| Direct effect | Sen→SWB | 0.2396 | 0.0431 | 0.1548 | 0.3244 | 37.80 | H1a | Supported |
| Indirect effect | Sen→Att→SWB | 0.1787 | 0.0377 | 0.1049 | 0.2538 | 28.20 | H3a | Supported |
| | Sen→Sat→SWB | 0.0777 | 0.0243 | 0.0336 | 0.1283 | 12.26 | | |
| | $Sen \rightarrow Att \rightarrow Sat \rightarrow SWB$ | 0.1378 | 0.0245 | 0.0942 | 0.1901 | 21.74 | H4a | Supported |
| Direct effect | Ser→SWB | 0.0954 | 0.0370 | 0.0228 | 0.1681 | 20.27 | H1b | Supported |
| Indirect effect | $Ser \rightarrow Att \rightarrow SWB$ | 0.1685 | 0.0270 | 0.1189 | 0.2264 | 35.80 | H3b | Supported |
| | Ser→Sat→SWB | 0.1401 | 0.0255 | 0.0905 | 0.1894 | 29.76 | | |
| | $Ser \rightarrow Att \rightarrow Sat \rightarrow SWB$ | 0.0667 | 0.0146 | 0.0407 | 0.0984 | 14.17 | H4b | Supported |
| Direct effect | Env→SWB | 0.1979 | 0.0407 | 0.1179 | 0.2780 | 33.36 | H1c | Supported |
| Indirect effect | $Env \rightarrow Att \rightarrow SWB$ | 0.1869 | 0.0346 | 0.1232 | 0.2588 | 31.51 | H3c | Supported |
| | $Env \rightarrow Sat \rightarrow SWB$ | 0.0844 | 0.0248 | 0.0400 | 0.1386 | 14.23 | | |
| | Env→Att→Sat→SWB | 0.1240 | 0.0209 | 0.0853 | 0.1670 | 20.90 | H4c | Supported |

Note: Sen = Sensory Experience, Ser = Service Experience, Env = Environmental Experience, Att = Tourist Attitude, Sat = Tourist Satisfaction, SWB = Subjective Well-Being.

Additionally, tourist attitude and tourist satisfaction have a chain mediating role in the impact of sensory experience, service experience and environmental experience on tourists' subjective well-being.

This study makes a theoretical contribution by addressing the concerns raised by Sthapit et al. [45], Pourfakhimi et al. [29], and Jiang et al. [9]. The purpose of this study is to further explore the dimensions of food tourism experience and food satisfaction to gain a better understanding of their influence on tourists' subjective well-being. Additionally, this study aims to build upon the research conducted by Stone et al. [108], Badu-Baiden et al. [70] and Kesgin et al. [44]. Specifically:

First, the study expands the research framework of the influence of food tourism on tourists by examining its impact on subjective well-being. Previous research has primarily focused on the antecedent and outcome variables of tourists' food tourism, such as tourists' motivation for food tourism and their behavioral intention after engaging in food tourism [63,96,100,101]. In this study, we expand the scope of food tourism's influence on tourists by examining its impact on their subjective well-being. Researchers generally believe that food is an important aspect of tourists' experience [10]. It has become an important factor in attracting tourists [4,63,75]. However, the effects of food on tourists vary at different stages of travel [110]. Additionally, the academic community has not given enough attention to the impact of food tourism on tourists' physical health.

Second, this study identifies the mediating mechanism of the subjective well-being chain through which a food tourism experience affects tourists. Tourists experience a good food tourism experience in the destination, which helps them change their attitude toward the destination, thereby promoting the improvement of tourists' satisfaction [9,74,81,98], which ultimately leads to an increase in tourists' subjective well-being [70] and influences tourists' future behavioral intentions [63,96,101], such as revisit [109,111], word-of-mouth [80,81], and recommendation intentions [70,108]. This study examines the psychological mechanism behind the relationship between tourists' food tourism experience and their tourists' subjective well-being through a structural equation model. The research contributes to the understanding of the antecedents of subjective well-being.

Third, the study finds that the three dimensions of food tourism experience have varying degrees of impact on tourists' subjective well-being. The effect size of service experience on their subjective well-being accounted for 20.27 %, while the effect size of environmental experience accounted for 33.36 %. Tourists' sensory experience has the greatest influence on their subjective well-being, accounted for 37.80 % of the effect size. Tourists can enhance their subjective well-being by engaging in a variety of sensory experiences, such as watching the barbecue food and the barbecue food process, smelling the barbecue food smell and feeling the atmosphere, and tasting the barbecue food.

5.2. Practical implications

Based on a large number of tourists flocking to experience the barbecue food in Zibo, Shandong Province, China, this study explores the impact of this special phenomenon on tourists' subjective well-being, and also has relevant enlightenment and suggestions for tourist destinations.

First, developing food tourism can be a viable option for destinations lacking high-quality tourism resources but seeking to promote tourism [10,15,112]. At the same time, developing food tourism and attracting tourists is expected to enhance tourists' food tourism experience. Tourists' sensory experience is particularly important, especially with the rapid spread of short videos. It is crucial to maintain objectivity and avoid subjective evaluations. Short videos made by tourists that capture the sensory experience of food color and fragrance, the quality of service at destinations, and the environmental experience of food can attract a large number of tourists.

Second, tourist destinations should focus on improving tourists' sensory, service, and environmental experience, with particular attention to the sensory experience [113]. Tourist destinations should aim to enhance tourists' subjective well-being by satisfying their experiences, which are the basis of their attitude, satisfaction, and behavioral intention. Tourists' experiences are enhanced, making it is easier to capture photos for word-of-mouth advertising and recommendation [99], which further motivates potential tourists to visit Zibo or other destinations to experience food and form a positive interaction.

Third, we can learn from the success of Zibo's barbecue food and prioritize the communication effect of "short video + food" [114, 115]. The popularity of Zibo barbecue food has been greatly enhanced by the proliferation of short videos featuring it. These videos have resonated with young people who seek novelty and social validation through taking pictures and checking in. As a result, a large number of tourists have been attracted to Zibo to experience this unique food [116]. Similarly, the Zibo government has implemented measures that could serve as a reference for other tourist destinations. For instance, they have organized the Zibo Barbecue Food Festival [89], established the Zibo Barbecue Food Award, opened a special barbecue food train, and promoted various promotions. These measures can improve tourists' experience, attitude, satisfaction, and subjective well-being.

5.3. Study limitations and future research directions

There are the following limitations of this study: (1) The research relies on convenience sampling to investigate tourists who have experience barbecue food in Zibo, Shandong Province, China. Therefore, the applicability of the research findings to other food tourism destinations requires further verification. (2) The study examines tourists' experience from three perspectives: sensory experience, service experience, and environmental experience. The measurement does not include subjective evaluations of tourists' emotional, entertainment, and cultural experiences. Additionally, it does not take into account the impact of factors such as staff-tourist interaction and tourist-tourist interaction on tourists' mental health and behavior in the service environment. To ensure comprehensive conclusions, it is important to conduct a thorough examination of the tourist experience and analyze the impact of interaction between tourists and staff, as well as between tourists themselves, on their subjective well-being. (3) This study solely focuses on tourists' subjective well-being as the outcome variable and does not discuss any potential benefits. In the future, we can

enhance the outcome model of tourists' subjective well-being and investigate the benefits that it brings to both tourists and tourist destinations. This includes examining tourists' creative behaviors, revisit intentions, and recommendation intentions. In addition, the cross-sectional survey design can only demonstrate correlation between variables, not causation. If a follow-up research can be conducted, it will better explain the mechanism of tourists' subjective well-being.

6. Conclusion

This study aims to fill the gaps in previous research by focusing on tourists who experience Zibo barbecue food tourism. The study uses the cognitive theory of emotion as the theoretical basis to examine and test the effect of food tourism experience on their subjective well-being, and proves the mediating role of tourists' attitude and satisfaction. Therefore, this study yielded the following research results: Firstly, based on the related literature of food tourism and preliminary tourist experience surveys, it was determined that tourists' food tourism experience has three dimensions, which are sensory experience, service experience, and environmental experience. Additionally, the food tourism experience has an important predictive effect on tourists' subjective well-being, and the subjective well-being level of tourists can be evaluated based on their food tourism experience. Finally, this study provides evidence for the mediating role of tourists' attitude and satisfaction in the impact of food tourism experience on subjective well-being. The impact of tourists' food tourism experience on subjective well-being is conveyed primarily through tourists' attitude and satisfaction.

Therefore, this research contributes to the field of food tourism and subjective well-being by establishing theoretical connections. First, the study identified the key variables that influence tourists' subjective well-being in food tourism experiences: sensory experience, service experience, and environmental experience. This research provides a foundation for future studies on the impact of food tourism experience on tourists' subjective well-being and behavior. Second, the study applies the cognitive theory of emotion to examine the effect of food tourism experience on tourists' subjective well-being for the first time, which offers a new perspective for food tourism research and expands the scope of the cognitive theory of emotion, and broadens the theoretical basis for future research in this area. Third, the study determined the mechanism conditions between food tourism experience and tourists' subjective well-being. Tourists' attitude and satisfaction were found to play a mediating role.

Additional information

No additional information is available for this paper.

Data availability statement

Data will be made available on request.

Funding statement

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

CRediT authorship contribution statement

Sen Yang: Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Yi Liu:** Writing – review & editing, Validation, Supervision, Methodology, Conceptualization. **Liping Xu:** Resources, Project administration, Investigation, Conceptualization.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.heliyon.2024.e25482.

References

- R. Baral, D.P. Rijal, Visitors' impacts on remote destinations: an evaluation of a Nepalese mountainous village with intense tourism activity, Heliyon 8 (8) (2022), https://doi.org/10.1016/j.heliyon.2022.e10395.
- [2] P. Björk, H. Kauppinen-Räisänen, Exploring the multi-dimensionality of travellers' culinary-gastronomic experiences, Curr. Issues Tour 19 (2016) 1260–1280, https://doi.org/10.1080/13683500.2013.868412.
- [3] A. Ellis, E. Park, S. Kim, et al., What is food tourism? Tour. Manag. 68 (2018) 250–263, https://doi.org/10.1016/j.tourman.2018.03.025.

- [4] D. Mora, M.A. Solano-Sanchez, T. Lopez-Guzman, et al., Gastronomic experiences as a key element in the development of a tourist destination, Int. J. Gastron. Food Sci. 25 (2021) 100405, https://doi.org/10.1016/j.ijgfs.2021.100405.
- [5] M.R. Jerez, Tourism marketing of the Autonomous Communities of Spain to promote gastronomy as part of their destination branding, Int. J. Gastron. Food Sci. 32 (2023) 100727, https://doi.org/10.1016/j.jigfs.2023.100727.
- [6] J. Lin, B. Zhang, J. Feng, et al., Determining food tourism consumption of wild mushrooms in Yunnan Provence, China: a projection-pursuit approach, Heliyon 9 (3) (2023), https://doi.org/10.1016/j.heliyon.2023.e14638.
- [7] J.Y.J. Choe, S.S. Kim, Effects of tourists' local food consumption value on attitude, food destination image, and behavioral intention, Int. J. Hosp. Manag. 71 (2018) 1–10, https://doi.org/10.1016/j.ijhm.2017.11.007.
- [8] F.G. Santa Cruz, J.C. Tito, J.C. Pérez-Gálvez, et al., Gastronomic experiences of foreign tourists in developing countries. The case in the city of Oruro (Bolivia), Heliyon 5 (7) (2019), https://doi.org/10.1016/j.heliyon.2019.e02011.
- [9] F. Jiang, R. Huang, Q. Chen, J. Zhang, Brand Equity, tourist satisfaction and travel intentions in a UNESCO creative city of gastronomy: a case study of Yangzhou, China, Foods 12 (2023) 2690, https://doi.org/10.3390/foods12142690.
- [10] P. Björk, H. Kauppinen-Räisänen, Local food: a source for destination attraction, Int. J. Contemp. Hosp. Manag. 28 (2016) 177–194, https://doi.org/10.1108/ IJCHM-05-2014-0214.
- [11] G. Richards, Evolving research perspectives on food and gastronomic experiences in tourism, Int. J. Contemp. Hosp. Manag. 33 (2021) 1037–1058, https://doi. org/10.1108/IJCHM-10-2020-1217.
- [12] E. Savelli, D. Gregory-Smith, F. Murmura, T. Pencarelli, How to communicate typical-local foods to improve food tourism attractiveness, Psychol. Mark. 39 (2022) 1350–1369, https://doi.org/10.1002/mar.21668.
- [13] E. Cohen, N. Avieli, Food in tourism: attraction and impediment, Ann. Tour. Res. 31 (2004) 755–778, https://doi.org/10.1016/j.annals.2004.02.003.
- [14] Y. Durmaz, F. Çayırağası, F. Çopuroğlu, The mediating role of destination satisfaction between the perception of gastronomy tourism and consumer behavior during COVID-19, Int. J. Gastron. Food Sci. 28 (2022) 100525, https://doi.org/10.1016/j.ijgfs.2022.100525.
- [15] A. Soroka, A. Mazurek-Kusiak, S. Chmielewski, A. Godlewska, Polish-Lithuanian border cuisine as an idea for the promotion and expansion of the region's tourist attractiveness, Foods 12 (2023) 2606, https://doi.org/10.3390/foods12132606.
- [16] C.H. Lin, Effects of cuisine experience, psychological well-being, and self-health perception on the revisit intention of hot springs tourists, J. Hosp. Tour. Res. 38 (2014) 243–265, https://doi.org/10.1177/1096348012451460.
- [17] J.A. Levitt, P. Zhang, R.B. DiPietro, F. Meng, Food tourist segmentation: attitude, behavioral intentions and travel planning behavior based on food involvement and motivation, Int. J. Hosp. Tour. Adm. 20 (2) (2019) 129–155, https://doi.org/10.1080/15256480.2017.1359731.
- [18] B. Lin, S. Wang, X. Fu, X. Yi, Beyond local food consumption: the impact of local food consumption experience on cultural competence, eudaimonia and behavioral intention, Int. J. Contemp. Hosp. Manag. 35 (1) (2023) 137–158, https://doi.org/10.1108/IJCHM-01-2022-0099.
- [19] A.R. Meretse, R.J. Mykletun, K. Einarsen, Participants' benefits from visiting a food festival-the case of the Stavanger food festival (Gladmatfestivalen), Scand. J. Hosp. Tour. 16 (2) (2016) 208–224, https://doi.org/10.1080/15022250.2015.1108865.
- [20] B. Okumus, G. Cetin, Marketing Istanbul as a culinary destination, J. Destin. Mark. Manag. 9 (2018) 340–346, https://doi.org/10.1016/j.jdmm.2018.03.008.
- [21] M. Uysal, M.J. Sirgy, Quality-of-life indicators as performance measures, Ann. Tour. Res. 76 (2019) 291–300, https://doi.org/10.1016/j.annals.2018.12.016.
- [22] M.J. Sirgy, Promoting quality-of-life and well-being research in hospitality and tourism, J. Travel Tour. Mark. 36 (1) (2019) 1–13, https://doi.org/10.1080/ 10548408.2018.1526757.
- [23] T.Y. Huang, J.S. Chen, W.D. Ramos, Slow tourism: the relationship between tourists' slow food experiences and their quality of life, Tour. Rev. 78 (1) (2023) 159–176, https://doi.org/10.1108/TR-02-2022-0053.
- [24] M.J. Sirgy, Towards a quality-of-life theory of leisure travel satisfaction, J. Trav. Res. 49 (2010) 246–260, https://doi.org/10.1177/0047287509337416.
- [25] M. Uysal, M.J. Sirgy, E. Woo, H.L. Kim, Quality of life (QOL) and well-being research in tourism, Tourism Manag. 53 (2016) 244–261, https://doi.org/ 10.1016/j.tourman.2015.07.013.
- [26] H. Han, H. Moon, S.S. Hyun, Indoor and outdoor physical surroundings and guests' emotional well-being: a luxury resort hotel context, Int. J. Contemp. Hosp. Manag. 31 (7) (2019) 2759–2775, https://doi.org/10.1108/IJCHM-10-2018-0852.
- [27] H. Han, B. Koo, B.L. Chua, H.K. Sul, J.J. Kim, Travelers' intentions for green behaviors at airports: exploring the effect of green physical surroundings using mixed methods, J. Hosp. Tour. Manag. 45 (2020) 569–579, https://doi.org/10.1016/j.jhtm.2020.10.005.
- [28] F. Ma, R.B. DiPietro, J. Li, et al., Memorable dining experiences amidst the COVID-19 pandemic, Int. J. Contemp. Hosp. Manag. 35 (2023) 871–892, https:// doi.org/10.1108/IJCHM-01-2022-0117.
- [29] S. Pourfakhimi, Z. Nadim, G. Prayag, et al., The influence of neophobia and enduring food involvement on travelers' perceptions of wellbeing—evidence from international visitors to Iran, Int. J. Tour. Res. 23 (2021) 178–191, https://doi.org/10.1002/jtr.2391.
- [30] B. Okumus, M.A. Koseoglu, F. Ma, Food and gastronomy research in tourism and hospitality: a bibliometric analysis, Int. J. Hosp. Manag. 73 (2018) 64–74, https://doi.org/10.1016/j.ijhm.2018.01.020.
- [31] P. Björk, H. Kauppinen-Räisänen, A destination's gastronomy as a means for holiday well-being, Br. Food J. 119 (2017) 1578–1591, https://doi.org/10.1108/ BFJ-09-2016-0394.
- [32] J.H. Kim, S. Jang, Determinants of authentic experiences: an extended Gilmore and Pine model for ethnic restaurants, Int. J. Contemp. Hosp. Manag. 28 (10) (2016) 2247–2266, https://doi.org/10.1108/IJCHM-06-2015-0284.
- [33] A.H. Mak, M. Lumbers, A. Eves, Globalisation and food consumption in tourism, Ann. Tour. Res. 39 (1) (2012) 171–196, https://doi.org/10.1016/j. annals 2011 05 010
- [34] İ.T. Gürsoy, Slow food justice and tourism: tracing Karakılçık bread in Seferihisar, Turkey, J. Sustain. Tourism 29 (2–3) (2021) 467–487, https://doi.org/ 10.1080/09669582.2020.1770772.
- [35] A.H. Mak, M. Lumbers, A. Eves, R.C. Chang, The effects of food-related personality traits on tourist food consumption motivations, Asia Pac. J. Tour. Res. 22 (1) (2017) 1–20, https://doi.org/10.1080/10941665.2016.1175488.
- [36] S. Kim, J.Y. Choe, Testing an attribute-benefit-value-intention (ABVI) model of local food consumption as perceived by foreign tourists, Int. J. Contemp. Hosp. Manag. 31 (1) (2019) 123–140, https://doi.org/10.1108/IJCHM-10-2017-0661.
- [37] J.A.C. Santos, M.C. Santos, L.N. Pereira, G. Richards, L. Caiado, Local food and changes in tourist eating habits in a sun-and-sea destination: a segmentation approach, Int. J. Contemp. Hosp. Manag. 32 (11) (2020) 3501–3521, https://doi.org/10.1108/IJCHM-04-2020-0302.
- [38] D.N. Su, L.W. Johnson, B. O'Mahony, Analysis of push and pull factors in food travel motivation, Curr. Issues Tour. 23 (5) (2020) 572–586, https://doi.org/ 10.1080/13683500.2018.1553152.
- [39] Y.G. Kim, A. Eves, C. Scarles, Empirical verification of a conceptual model of local food consumption at a tourist destination, Int. J. Hosp. Manag. 33 (2013) 484–489, https://doi.org/10.1016/j.ijhm.2012.06.005.
- [40] T. van Strien, E.L. Gibson, R. Baños, A. Cebolla, L.H. Winkens, Is comfort food actually comforting for emotional eaters? A (moderated) mediation analysis, Physiol. Behav. 211 (2019) 112671, https://doi.org/10.1016/j.physbeh.2019.112671.
- [41] J. Chang, A.M. Morrison, S. Chen, S.H.H. Lin, Soothing the taste buds and the soul? An exploratory analysis of consumption of comfort foods in international travel, Food Cult. Soc. 26 (2) (2023) 479–500, https://doi.org/10.1080/15528014.2021.2015942.
- [42] S.H. Kim, D.H. Jeon, H.M. Jeon, Well-being perception and lovemarks formation through experiential value in the context of the eco-friendly restaurant, Brit. Food J 123 (12) (2021) 4264–4283, https://doi.org/10.1108/BFJ-02-2021-0136.
- [43] J.J. Kim, H. Han, Redefining in-room amenities for hotel staycationers in the new era of tourism: a deep dive into guest well-being and intentions, Int. J. Hosp. Manag. 102 (2022) 103168, https://doi.org/10.1016/j.ijhm.2022.103168.
- [44] M. Kesgin, İ. Önal, İ. Kazkondu, M. Uysal, Gastro-tourism well-being: the interplays of salient and enduring determinants, Int. J. Contemp. Hosp. Manag. 34 (2022) 3253–3277, https://doi.org/10.1108/IJCHM-09-2021-1132.

- [45] E. Sthapit, D.N. Coudounaris, P. Björk, Extending the memorable tourism experience construct: an investigation of memories of local food experiences, Scand. J. Hosp. Tour. 19 (2019) 333–353, https://doi.org/10.1080/15022250.2019.1689530.
- [46] F. Badu-Baiden, S. Kim, Is local food consumption memorable? Exploration of a multidimensional measurement scale to explain tourists' memorable local food consumption experiences, Int. J. Tour. Res. 24 (2022) 739–758, https://doi.org/10.1002/jtr.2536.
- [47] G. Martínez-Sierra, Y. Arellano-García, A. Hernández-Moreno, Which situations trigger emotions of secondary school mathematics teachers? Int. J. Sci. Math. Educ. 20 (2022) 575–595, https://doi.org/10.1007/s10763-021-10158-1.
- [48] T. Verhagen, W. Van Dolen, The influence of online store beliefs on consumer online impulse buying: a model and empirical application, Inf. Manage. 48 (8) (2011) 320–327, https://doi.org/10.1016/j.im.2011.08.001.
- [49] M.D. Habib, A. Qayyum, Cognitive emotion theory and emotion-action tendency in online impulsive buying behavior, J. Manag. Sci. 5 (1) (2018) 86–99, https://doi.org/10.20547/ims.2014.1805105.
- [50] A.J. Holmstrom, B.R. Burleson, An initial test of a cognitive-emotional theory of esteem support messages, Commun. Res. 38 (3) (2011) 326–355, https://doi. org/10.1177/0093650210376191.
- [51] D. Gilbert, J. Abdullah, Holidaytaking and the sense of well-being, Ann. Tour. Res. 31 (2004) 103–121, https://doi.org/10.1016/j.annals.2003.06.001.
- [52] A. Campbell, Subjective measures of well-being, Am. Psychol. 31 (1976) 117–124, https://doi.org/10.1037/0003-066X.31.2.117.
- [53] D.C. Shin, D.M. Johnson, Avowed happiness as an overall assessment of the quality of life, Soc. Indic. Res. 5 (1978) 475–492, https://doi.org/10.1007/ BF00352944.
- [54] E. Diener, Subjective well-being: the science of happiness and a proposal for a national index, Am. Psychol. 55 (2000) 34–43, https://doi.org/10.1037/0003-066X.55.1.34.
- [55] E. Diener, New findings and future directions for subjective well-being research, Am. Psychol. 67 (2012) 590–597, https://doi.org/10.1037/a0029541.
- [56] M.J. Sirgy, D.J. Lee, F. Kressmann, A need-based measure of consumer well being (CWB) in relation to personal transportation: nomological validation, Soc. Indic. Res. 79 (2006) 337–367, https://doi.org/10.1007/s11205-005-4920-1.
- [57] M.J. Sirgy, Macromarketing metrics of consumer well-being: an update, J. Macromarketing 41 (2021) 124–131, https://doi.org/10.1177/ 0276146720968096
- [58] G. McLean, M. AlYahya, J.B. Barhorst, et al., Examining the influence of virtual reality tourism on consumers' subjective wellbeing, Tour. Manag. Perspect. 46 (2023) 101088, https://doi.org/10.1016/j.tmp.2023.101088.
- [59] J.J.E. Yoo, J. Park, M. Cho, Cocreation of gastronomy experience through cooking classes, Int. J. Contemp. Hosp. Manag. 34 (2022) 3230–3252, https://doi. org/10.1108/IJCHM-09-2021-1152.
- [60] G. Pavlidis, S. Markantonatou, Gastronomic tourism in Greece and beyond: a thorough review, Int. J. Gastron. Food Sci. 21 (2020) 100229, https://doi.org/ 10.1016/j.ijgfs.2020.100229.
- [61] E.J. Sabina del Castillo, R.J. Díaz Armas, D. Gutiérrez Taño, An extended model of the theory of planned behaviour to predict local wine consumption intention and behaviour, Foods 10 (2021) 2187, https://doi.org/10.3390/foods10092187.
- [62] M.J. Stone, J. Soulard, S. Migacz, E. Wolf, Elements of memorable food, drink, and culinary tourism experiences, J. Trav. Res. 57 (2018) 1121–1132, https:// doi.org/10.1177/0047287517729758.
- [63] C.T.S. Tsai, Y.C. Wang, Experiential value in branding food tourism, J. Destin. Mark. Manage 6 (2017) 56–65, https://doi.org/10.1016/j.jdmm.2016.02.003.
- [64] S.H. Tsaur, P.C. Lo, Measuring memorable dining experiences and related emotions in fine dining restaurants, J. Hosp. Market. Manag. 29 (2020) 887–910, https://doi.org/10.1080/19368623.2020.1748157.
- [65] H. Kim, S. Lee, M. Uysal, et al., Nature-based tourism: motivation and subjective well-being, J. Travel Tour. Mark. 32 (2015) S76–S96, https://doi.org/ 10.1080/10548408.2014.997958.
- [66] S. Filep, J. Laing, Trends and directions in tourism and positive psychology, J. Trav. Res. 58 (2019) 343–354, https://doi.org/10.1177/0047287518759227.
- [67] C.C. Chen, J.F. Petrick, M. Shahvali, Tourism experiences as a stress reliever: examining the effects of tourism recovery experiences on life satisfaction, J. Trav. Res. 55 (2016) 150–160, https://doi.org/10.1177/0047287514546223.
- [68] M. Chang, J.-H. Kim, D. Kim, The effect of food tourism behavior on food festival visitor's revisit intention, Sustainability 10 (2018) 3534, https://doi.org/ 10.3390/su10103534.
- [69] M.-P. Lin, E. Marine-Roig, N. Llonch-Molina, Gastronomy tourism and well-being: evidence from taiwan and catalonia michelin-starred restaurants, Int. J. Environ. Res. Public Health 19 (2022) 2778, https://doi.org/10.3390/ijerph19052778.
- [70] F. Badu-Baiden, S.S. Kim, H. Xiao, et al., Understanding tourists' memorable local food experiences and their consequences: the moderating role of food
- destination, neophobia and previous tasting experience, Int. J. Contemp. Hosp. Manag. 34 (2022) 1515–1542, https://doi.org/10.1108/JJCHM-06-2021-0709.
 [71] S. Liu, S. Li, Y. Chen, T. Zheng, Examining relationships among food's perceived value, well-being, and tourists' loyalty, J. Vacat. Mark. 29 (2023) 161–174, https://doi.org/10.1177/13567667221080569.
- [72] T. López-Guzmán, S. Sánchez-Cañizares, Culinary tourism in Córdoba (Spain), Br. Food J. 114 (2012) 168–179, https://doi.org/10.1108/ 00070701211202368
- [73] J. Chang, A.M. Morrison, S.H.H. Lin, et al., How do food consumption motivations and emotions affect the experiential values and well-being of foodies? Br. Food J. 123 (2021) 627–648, https://doi.org/10.1108/BFJ-04-2020-0355.
- [74] P. Björk, H. Kauppinen-Räisänen, Interested in eating and drinking? How food affects travel satisfaction and the overall holiday experience, Scand. J. Hosp. Tour. 17 (2017) 9–26, https://doi.org/10.1080/15022250.2016.1215871.
- [75] A. Tarinc, A. Aytekin, O.T. Ozbek, G.S. Ergün, A. Keles, F. Uslu, H. Keles, O. Yayla, How do food neophobia and neophilia moderate the effect of local food quality on dining satisfaction and post-dining behavioral intention in the perspective of sustainable gastronomy tourism? Sustainability 15 (2023) 9510, https://doi.org/10.3390/su15129510.
- [76] B.E. Bayih, A. Singh, Modeling domestic tourism: motivations, satisfaction and tourist behavioral intentions, Heliyon 6 (9) (2020), https://doi.org/10.1016/j. heliyon.2020.e04839.
- [77] L. Su, S.R. Swanson, S. Chinchanachokchai, et al., Reputation and intentions: the role of satisfaction, identification, and commitment, J. Bus. Res. 69 (2016) 3261–3269, https://doi.org/10.1016/j.jbusres.2016.02.023.
- [78] N.K. Prebensen, J. Xie, Efficacy of co-creation and mastering on perceived value and satisfaction in tourists' consumption, Tour. Manag. 60 (2017) 166–176, https://doi.org/10.1016/j.tourman.2016.12.001.
- [79] S. Bae, L. Slevitch, S. Tomas, The effects of restaurant attributes on satisfaction and return patronage intentions: evidence from solo diners' experiences in the United States, Cogent Bus. Manag. 5 (2018) 1493903, https://doi.org/10.1080/23311975.2018.1493903.
- [80] I.K.W. Lai, An examination of satisfaction on word of mouth regarding Portuguese foods in Macau: applying the concept of integrated satisfaction, J. Hosp. Tour. Manag. 43 (2020) 100–110, https://doi.org/10.1016/j.jhtm.2020.02.011.
- [81] M. Ali, C.-H. Puah, N. Ayob, S.A. Raza, Factors influencing tourist's satisfaction, loyalty and word of mouth in selection of local foods in Pakistan, Br. Food J. 122 (2020) 2021–2043, https://doi.org/10.1108/BFJ-11-2018-0728.
- [82] G. Angelakis, Y. Vecchio, C. Lemonakis, G. Atsalakis, C. Zopounidis, K. Mattas, Exploring the behavioral intentions of food tourists who visit crete,
- Sustainability 15 (2023) 8961, https://doi.org/10.3390/su15118961. [83] R.L. Oliver, A cognitive model of the antecedents and consequences of satisfaction decisions, J. Mark. Res. 17 (1980) 460–469, https://doi.org/10.1177/ 002224378001700405.
- [84] K. Bu, D. Kim, J. Son, Is the culture-emotion fit always important?: self-regulatory emotions in ethnic food consumption, J. Bus. Res. 66 (2013) 983–988, https://doi.org/10.1016/i.jbusres.2011.12.021.
- [85] K. Wu, C. Raab, W. Chang, et al., Understanding Chinese tourists' food consumption in the United States, J. Bus. Res. 69 (2016) 4706–4713, https://doi.org/ 10.1016/j.jbusres.2016.04.018.

- [86] R.J. Harrington, M.C. Ottenbacher, A. Staggs, F.A. Powell, Generation Y consumers: key restaurant attributes affecting positive and negative experiences, J. Hosp. Tour. Res. 36 (2012) 431–449, https://doi.org/10.1177/1096348011400744.
- [87] M. Vesci, A. Botti, Festival quality, theory of planned behavior and revisiting intention: evidence from local and small Italian culinary festivals, J. Hosp. Tour. Manag. 38 (2019) 5–15, https://doi.org/10.1016/j.jhtm.2018.10.003.
- [88] V.A. Quintal, B. Thomas, I. Phau, Incorporating the winescape into the theory of planned behaviour: examining 'new world'wineries, Tour. Manag. 46 (2015) 596–609, https://doi.org/10.1016/j.tourman.2014.08.013.
- [89] K. Organ, N. Koenig-Lewis, A. Palmer, et al., Festivals as agents for behaviour change: a study of food festival engagement and subsequent food choices, Tour. Manag. 48 (2015) 84–99, https://doi.org/10.1016/j.tourman.2014.10.021.
- [90] H. Ting, K.S. Fam, J.C.J. Hwa, et al., Ethnic food consumption intention at the touring destination: the national and regional perspectives using multi-group analysis, Tour. Manag. 71 (2019) 518–529, https://doi.org/10.1016/j.tourman.2018.11.001.
- [91] L.C.T. Chavarria, P. Phakdee-Auksorn, Understanding international tourists' attitudes towards street food in Phuket, Thailand, Tour. Manag. Perspect. 21 (2017) 66–73, https://doi.org/10.1016/j.tmp.2016.11.005.
- [92] M.B. Holbrook, E.C. Hirschman, The experiential aspects of consumption: consumer fantasies, feelings, and fun, J. Consum. Res. 9 (1982) 132–140, https:// doi.org/10.1086/208906.
- [93] E.F. Mathis, H.L. Kim, M. Uysal, et al., The effect of co-creation experience on outcome variable, Ann. Tour. Res. 57 (2016) 62–75, https://doi.org/10.1016/j. annals.2015.11.023.
- [94] J. Finlay, M. Esposito, S. Tang, et al., Fast-food for thought: retail food environments as resources for cognitive health and wellbeing among aging Americans? Health Place 64 (2020) 102379 https://doi.org/10.1016/j.healthplace.2020.102379.
- [95] S. Lee, H. Park, Y. Ahn, The influence of tourists' experience of quality of street foods on destination's image, life satisfaction, and word of mouth: the moderating impact of food neophobia, Int. J. Environ. Res. Public Health 17 (2020) 163, https://doi.org/10.3390/ijerph17010163.
- [96] Y. Jeaheng, A. Al-Ansi, B.L. Chua, et al., Influence of Thai street food quality, price, and involvement on traveler behavioral intention: exploring cultural difference (eastern versus western), Psychol. Res. Behav. Manag. 16 (2023) 223–240, https://doi.org/10.2147/PRBM.S371806.
- [97] L. Su, S. Huang, X. Chen, Effects of service fairness and service quality on tourists' behavioral intentions and subjective well-being, J. Travel Tour. Mark. 32 (2015) 290–307, https://doi.org/10.1080/10548408.2014.896766.
- [98] H. Moon, H. Han, Destination attributes influencing Chinese travelers' perceptions of experience quality and intentions for island tourism: a case of Jeju Island, Tour. Manag. Perspect. 28 (2018) 71–82, https://doi.org/10.1016/j.tmp.2018.08.002.
- [99] M. Soltani, N. Soltani Nejad, F. Taheri Azad, et al., Food consumption experiences: a framework for understanding food tourists' behavioral intentions, Int. J. Contemp. Hosp. Manag. 33 (2021) 75–100, https://doi.org/10.1108/IJCHM-03-2020-0206.
- [100] D.N. Su, L.W. Johnson, B. O'Mahony, Will foodies travel for food? Incorporating food travel motivation and destination foodscape into the theory of planned behavior, Asia Pac. J. Tour. Res. 25 (2020) 1012–1028, https://doi.org/10.1080/10941665.2020.1805475.
- [101] L. Su, S.R. Swanson, X. Chen, The effects of perceived service quality on repurchase intentions and subjective well-being of Chinese tourists: the mediating role of relationship quality, Tour. Manag. 52 (2016) 82–95, https://doi.org/10.1016/j.tourman.2015.06.012.
- [102] P.M. Podsakoff, S.B. MacKenzie, J.-Y. Lee, N.P. Podsakoff, Common method biases in behavioral research: a critical review of the literature and recommended remedies, J. Appl. Psychol. 88 (2003) 879–903, https://doi.org/10.1037/0021-9010.88.5.879.
- [103] L.J. Williams, N. Hartman, F. Cavazotte, Method variance and marker variables: a review and comprehensive CFA marker technique, Organ. Res. Methods 13 (2010) 477–514, https://doi.org/10.1177/1094428110366036.
- [104] J. Henseler, C.M. Ringle, R.R. Sinkovics, The use of partial least squares path modeling in international marketing, in: R.R. Sinkovics, P.N. Ghauri (Eds.), New Challenges to International Marketing (Advances in International Marketing, 20), Emerald Group Publishing Limited, Bingley, 2009, pp. 277–319, https://doi. org/10.1108/S1474-7979(2009)000020014.
- [105] C. Fornell, D.F. Larcker, Structural equation models with unobservable variables and measurement error: algebra and statistics, J. Mark. Res. 18 (1981) 382–388, https://doi.org/10.1177/002224378101800313.
- [106] M. Estrada, M.Á. Moliner, D. Monferrer, L. Vidal, Sustainability and local food at tourist destinations: a study from the transformative perspective, J. Sustain. Tourism (2023) 1–19, https://doi.org/10.1080/09669582.2023.2195594.
- [107] F.(S. Li, Q. Su, J. Ma, How do food authenticity and sensory appeal influence tourist experience? The moderating role of food involvement, Int. J. Tour. Res. 25 (1) (2023) 109–122, https://doi.org/10.1002/jtr.2552.
- [108] M.J. Stone, S. Migacz, E. Wolf, Beyond the journey: the lasting impact of culinary tourism activities, Curr. Issues Tour. 22 (2019) 147–152, https://doi.org/ 10.1080/13683500.2018.1427705.
- [109] A. Rousta, D. Jamshidi, Food tourism value: investigating the factors that influence tourists to revisit, J. Vacat. Mark. 26 (2020) 73–95, https://doi.org/ 10.1177/1356766719858649.
- [110] Q. Chen, R. Huang, Understanding the importance of food tourism to Chongqing, China, J. Vacat. Mark. 22 (2016) 42–54, https://doi.org/10.1177/ 1356766715589427.
- [111] M.E. Mohamed, D.C. Kim, X. Lehto, C.A. Behnke, Destination restaurants, place attachment, and future destination patronization, J. Vacat. Mark. 28 (2022) 20–37, https://doi.org/10.1177/13567667211014947.
- [112] G.M.K. Kumar, Gastronomic tourism—a way of supplementing tourism in the Andaman & Nicobar Islands, Int. J. Gastron. Food Sci. 16 (2019) 100139, https://doi.org/10.1016/j.ijgfs.2019.100139.
- [113] B.-K. Liou, Y.-M. Jaw, G.C.-C. Chuang, N.N.J. Yau, Z.-Y. Zhuang, L.-F. Wang, Important sensory, association, and postprandial perception attributes influencing young Taiwanese consumers' acceptance for Taiwanese specialty teas, Foods 9 (2020) 100, https://doi.org/10.3390/foods9010100.
- [114] S. Hays, S.J. Page, D. Buhalis, Social media as a destination marketing tool: its use by national tourism organisations, Curr. Issues Tour 16 (2013) 211–239, https://doi.org/10.1080/13683500.2012.662215.
- [115] G. Ouvrein, S. Pabian, D. Giles, et al., The web of influencers. A marketing-audience classification of (potential) social media influencers, J. Mark. Manage. 37 (2021) 1313–1342, https://doi.org/10.1080/0267257X.2021.1912142.
- [116] C. Seçilmiş, C. Özdemir, İ. Kılıç, How travel influencers affect visit intention? The roles of cognitive response, trust, COVID-19 fear and confidence in vaccine, Curr. Issues Tour. 25 (2022) 2789–2804, https://doi.org/10.1080/13683500.2021.1994528.