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Examination of Chinese Tourists' Unsustainable Food Consumption: Causes and Solutions

Jianwei Qian ¹, Huawen Shen ^{2,*}, Rob Law ³, Ka Yin Chau ² and Xin Wang ²

¹ Communication University of Zhejiang, 998 Xueyuan Street, Hangzhou 310018, China; 821223168@163.com

² City University of Macau, Avenida Padre Tomas Pereira Taipa, Macau 999078, China; gavinchau@cityu.mo (K.Y.C.); xwang@cityu.mo (X.W.)

³ Hong Kong Polytechnic University, 17 Science Museum Road, Hong Kong 999077, China; rob.law@polyu.edu.hk

* Correspondence: jamesshen@cityu.mo; Tel.: +853-8590-2509

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Abstract: Gastronomic tours have become a prevalent form of travel in many destinations and have boosted the development of destinations' tourism economy. However, unsustainable food consumption, especially the wastage of food by tourists, is severe and has yet to receive sufficient academic attention. Thus, this study aimed to examine this kind of unsustainable behavior from tourists' perspective to help the academia and practitioners to better understand the causes and solutions pertaining to the issue. Participants' demographic information and content data were collected and analyzed. Content analysis was adopted to summarize the major themes emerging from the data. Results indicated that tourists, the industry, and government should be responsible for the issue. The reasons related to each stakeholder are shown together with the countermeasures. This study is among the first to examine the issue, which can lay the foundation for further studies in the same research area and help to address unsustainable food consumption.

Keywords: unsustainable food consumption; causes and suggestions; travel

1. Introduction

Gastronomic travel is a new type of tourism that merges travel with local food in a destination. This type of tourism emerged when the public's living standards reached a certain level, thereby increasing their leisure time [1]. In gastronomic travel, tourists mainly seek and taste authentic local food and participate in food-related activities, such as food festivals and cooking courses. China is widely known for its delicate food, wine, and culinary tradition. Hence, many cities in China have been listed by UNESCO as gastronomic capitals of the world [2], thereby popularizing gastronomic travel in China. According to China's Gastronomic Consumption Report 2018, tourists' food expenses reached RMB 4000 billion and increased by 10.7% compared with the previous year [3]. Chinese food, Western food, snacks, and hot pots are key interests of tourists who visit China [3]. Gastronomic travel is a promising accompaniment to the fast expansion of China's tourism economy.

From a social economic perspective, gastronomic travel has been beneficial. However, drawbacks are inevitable, such as wastage. Tourists in China, on average, waste 109 grams of food, whereas local residents waste 88 grams per meal [4]. Tourists' wastage of food is apparently higher than that of local residents, and this rate should not be ignored. Moreover, foreign tourists on cruises have complained that many Chinese tourists take most of the food at the table and leave a large part of the taken food uneaten [5]. This behavior is not only detrimental to the environment but also worsens Chinese tourists' global image. In the long run, such practices will lead to unsustainable development of China's inbound and outbound tourism. To address the issue better, the current study intends to investigate

the following two research questions: (1) why food wastage frequently occurs among Chinese tourists in travel and (2) what the solutions are to address unsustainable food wastage behavior. This study contributes to the theoretical construction of Chinese tourists' understanding towards food wastage in travel and the managerial implications on how unsustainable food consumption can be tackled from multiple perspectives of different stakeholders.

2. Literature Review

Increasing numbers of tourists design their holiday, regardless of length, to include the local cuisine in their destination [6,7]. Hence, a promising category of tourism, gastronomic tourism, has emerged. Experiencing local cuisines and related activities are entirely or partially the motivation of gastronomic travel tourists [8,9]. Compared with regular tourists, this group of tourists is more motivated to participate in gastronomic activities [1]. Linking gastronomy with tourism and creating a cultural element to form an unforgettable travel experience characterize gastronomic tourism [6]. Hence, gastronomic tourism forms an important niche as a supplement to mass tourism. While taking gastronomic tours, food lovers are deeply attracted to going behind the scenes to try food promoted by different advertisements and learn about the related culture [10]. Hence, the image of the destination is accordingly established based on tourists' motivation or desire to visit [2,6,8]. Such an image enables destinations to differentiate themselves from other locations in a growingly competitive global travel market [11].

A general understanding about gastronomic tourists' behavior and motivation is valuable for the industry and the destination to better design their gastronomic products and marketing endeavors. Different modes have been proposed to segment gastronomic tourists, and the typical classification is based on tourists' lifestyles and attitudes [12]. Hence, gastronomic tourists are divided into existential, experimental, recreational, and diversionary [13]. Each type is identified to have specific features and at times controversial to others' viewpoint of food [13]. However, high-spending tourists are generally identified as an important segment among gastronomic tourists [14]. In addition, existential and experimental tourists are likely to return to the visited place because of the unique gastronomic experience offered by a destination [6]. Hence, they should be the key target to foster loyalty among the massive number of gastronomic tourists. From another perspective, gastronomic tourists generally believe food at a destination to carry four meanings, including social, psychological, cultural, and experiential senses [15]. By savoring the food, tourists can fulfill multiple needs, such as gaining relaxation, achieving excitement and escapism, harvesting social status and education, and finally experiencing a different lifestyle [16]. Though reasons for tasting international and local food may be different, the offer of food with features at a destination can influence tourists' overall visiting experiences and motivation to revisit a destination [17].

It can be a cultural experience and a kind of recreation for tourists to taste food at a destination, because local food is a part of the tradition at the destination which is something new for tourists to experience [18]. In certain studies, some original meanings for consuming local food were discussed, including the sensory appeal, authentic experience, and health concern; both physical and psychological benefits can be achieved in this way [15,19]. Thus, a more comprehensive outline for tourists' motivation to taste local food was presented, which lays a foundation for future studies about gastronomic tourism to be conducted.

The economic aspect should be the foremost consideration in terms of food consumption and keeping the sustainability of a destination. Food is a strong selling point to raise tourists' expenditure in a destination and helps to address the seasonality issue faced by many destinations [12]. Gastronomic travel can increase food production, generate revenues, and create job opportunities to sustain a destination's economic development. Food can also contribute to the sustainable development of a destination. After food demand is created in gastronomic tourism, a diversification of local agriculture is cultivated and supported [20]. Thus, this type of tourism helps to preserve traditional farmlands and the related environment as well as stimulates sustainable agriculture. The cultural and social sustainability of a destination can be guaranteed as well. Indigenous food is commonly considered the

authentic representation of destination's culture [21]. Through tourists' consumption of local food, a destination's identity and tourists' experience can be enhanced together with the involvement of local residents [22]. Thus, this practice contributes to the cultural and social sustainability of a destination. Many studies confirm that this contribution may be direct and/or indirect [20,23].

In contrast to the sustainability that gastronomic tourism can bring to a destination, unsustainable food consumption has become an explicit issue that destinations must address with the development of such tourism. Literature has indicated scant studies that address the unsustainable issue of gastronomic tourism [24,25]. Hence, this important research area has received insufficient attention. For the academia and practitioners, focusing on the benefits of gastronomic tourism without the consideration of unsustainable food consumption is not a good decision. Thus, this study aimed to identify the reasons leading to major unsustainable food consumption, specifically the food wastage of tourists, and to pinpoint feasible solutions to the issue.

3. Method

3.1. Description of the Survey Method

Although this study aimed to seek tourists' perception towards unsustainable food consumption in travel, young tourists were specifically chosen as the research subject, because many studies have confirmed that a large number of gastronomic tourists are young, which is especially true in China [2,26]. Hence, young tourists' perception on this issue is widely representative despite differences between young and middle-aged senior tourists. Given the exploratory nature and the convenience of collecting data, researchers invited university students from a higher education zone in Hangzhou, China to distribute the invitation letter among students to participate in the study. To seek students' honest opinion and to avoid researchers' influence on participants' answers, all qualified students were sent an online questionnaire to complete. The questionnaire was divided into two parts. The first part is mainly about participants' demographic information as well as their travel experiences and preferences. In the second part, they were asked to write their (1) perception on food wastage in travel and (2) suggestions on how to solve the issue. The survey was written in Chinese because participants can express their ideas better in their native language. In the results, all excerpts were translated into English by the researcher, who can speak Chinese and English. The investigation period was from April 15 to April 30, 2019. A total of 133 university students finished the survey, and all data were validated. Table 1 briefly presents the profile of all participants.

Table 1. Respondents' demographics.

Item	Category	Number	Percentage
Gender	Male	31	23.3%
	Female	102	76.7%
Grade	Year 1	87	65.4%
	Year 2	36	27.1%
	Year 3	7	5.3%
	Year 4	3	2.3%
Hometown	Northeast	9	6.8%
	Northwest	17	12.8%
	Southwest	17	12.8%
	North China	15	11.3%
	East China	46	34.6%
	Middle China	14	10.5%
Monthly expenses (in RMB)	South China	15	11.3%
	0–1000	8	6.0%
	1001–2000	68	51.1%
	2001–3000	39	29.3%
	3001–4000	11	8.3%
	4001–5000	2	1.5%
	Above 5000	5	3.8%

3.2. Characteristics of the Research Sample

More female students participated in the survey, which was almost four times as many as male students. Lower-grade students were more willing to give their opinions than higher-grade students. Students in lower grades have more time for extracurricular activities, whereas junior and senior students are preoccupied with job-hunting and preparation for important exams. The geographical distribution used in the questionnaire is based on the classical classification of China [27]. Participants were given clear instructions on how to select correct locations. Most participants hail from East China because this higher education zone is located in East China. Other participants come from other parts of China, indicating the representativeness of the current study. More than half of participants' monthly expenses ranged from RMB 1001 to RMB 2000, and expenses of 30% of participants ranged from RMB 2001 to RMB 3000, which was relatively clustered.

Table 2 exhibits participants' past travel experiences and preferences. Unlike participants' distribution of monthly expenses, their yearly travel budget is scattered. Twenty-five percent of participants can allocate more than RMB 5000 to travel. Almost 45% can spend more than RMB 3000 every year for traveling. Compared with the average Chinese citizen, (nearly RMB 7000 in 2011), their budget is limited because they are still students who rely on parents for travel expenses. Most participants enjoy traveling. Nearly 75% took domestic travels within a year, and almost 25% even took more than four domestic trips. Participants' international travel experiences were limited. More than half did not have international travel experience. Independent travel was their first choice, indicating they have a considerable amount of time to arrange their itinerary, including things to see, do, and eat. Independent travel does not mean a person does everything by himself or herself. In fact, most participants are willing to travel with a partner, as is indicated by the next item in the questionnaire. Food has become an important reason to travel, and 72.18% participants expressed that food was a key factor in their travel decisions. This finding also confirms the validity of the current research to choose students as subjects.

Table 2. Respondents' travel experience and preference.

Item	Category	Number	Percentage
Yearly travel budget (in RMB)	0–500	20	15.0%
	501–1000	17	12.8%
	1001–1500	12	9.0%
	1501–2000	7	5.3%
	2001–2500	8	6.0%
	2501–3000	11	8.3%
	3001–3500	6	4.5%
	3501–4000	7	5.3%
	4001–4500	6	4.5%
	4501–5000	5	3.8%
Frequency of domestic travel in the past year	Above 5000	34	25.6%
	0	32	24.1%
	1–3	71	53.4%
	4–6	10	7.5%
	7–9	12	9.0%
	10 and above	8	6.0%
Frequency of international travel in the past year	0	77	57.9%
	1–3	48	36.1%
	4–6	6	4.5%
	7–9	1	0.8%
	10 and above	1	0.8%
Preferred travel mode	Package tour	8	6.0%
	Independent tour	125	94.0%
Preferred number of travel partner	Alone	9	6.8%
	2	73	54.9%
	3	19	14.3%
	4	23	17.3%
	5 and above	9	6.8%
Whether food is important in planning a trip	Yes	96	72.2%
	No	23	17.3%
	Not sure	14	10.5%

3.3. Description of the Method for Processing the Results

Content analysis was the chosen method of analysis for two reasons. Firstly, content analysis is powerful in exploring unstructured content to identify major themes or topics in constructing new theories or frameworks [28]. In this study, research data were the content written by participants without any purposeful control. The written content meets the basic condition to utilize content analysis to conduct the specific investigation. Secondly, content analysis by nature involves subjective and objective elements in research, which construct a system to interpret the result better [29]. Concerning objectivity, the interpretation is based on real collected data, whereas researchers' subjective participation is a necessary supplement to reveal fully the meaning behind the data [28]. The exploratory nature of this study is completely in accordance with the features of content analysis. This method is popular in tourism studies, and many articles in top-tier tourism journals utilize such a method [30–32]. Therefore, content analysis is the proper method to be adopted in the current study.

4. Results and Discussions

After data collection, two researchers read and reread the text data independently to get familiarity with the content written by the participants before the coding process. Then the researchers systematically coded the data by themselves to reduce the large quantity of information to smaller meaningful units. This was followed by the step of grouping common codes to a specific them when major dimensions involved in unsustainable food consumption in travel and related measures to address the issue were identified. The coding results from both researchers were compared, and if discrepancies emerged, another researcher was invited to discuss the difference and help to finalize the coding. Thus, research validity can be reached. Finally, the dimensions presented in the study were written together with the related illustration and quotation. In all, the processing of the data involved the aforementioned 5 distinctive steps. Figure 1 presents the final results of the study. Based on participants' opinions, three stakeholders, namely, tourists, industry, and government, all contribute to major attributes, leading to unsustainable food consumption in travel. Meanwhile, countermeasures are suggested as well after the coding process is used to code the major dimensions.



Figure 1. Causes of unsustainable food consumption and the proposed countermeasures.

4.1. Causes of Unsustainable Food Consumption

4.1.1. Tourist

As the top reason stated by Generation Y, 'face' is the dominant attribute that compels young Chinese tourists to waste food during travel. In the Chinese context, face refers to a person's social image, and it has aroused wide academic attention in sociology and psychology [33]. In the process of eating, two facets may make young Chinese tourists lose face, as indicated in the subsequent excerpt.

Young people generally think that packaging is a very shameful matter.

Leaving unfinished food at the table is a normal practice in China.

Ordering plenty of food means I am generous.

Some travelers may think that as long as we have a rare opportunity to travel, we must make the most out of it by spending as much money as we can on food, which in turn causes a considerable amount of wasted food.

On the one hand, if all the food is eaten or the remaining food is packed and taken away, a person is considered greedy. Thus, to avoid such an image, the young person will choose not to finish the food even though they can really finish it. On the other hand, Chinese tradition dictates that when a person invites guests to a meal, the host should order more food than the amount that people can eat [34]. Otherwise, the guests may consider the host selfish, thereby making the host lose face. Young people prefer to treat one another when they eat while traveling. Whenever it is their turn, they must show their generosity to their peers to keep face. Therefore, ordering an excessive amount of food becomes a common practice. Sometimes, tourists have controversial feelings. They know that they should not waste food, but they cannot resist the temptation to buy more and waste some in the end.

The next attribute is habit. Based on the excerpts, two types of habits can be identified and contribute to unsustainable food consumption. One originates from parents' long-term spoiling of their children, and the other comes from young people's own outlook on food. The excerpts below exemplify these habits.

When I was a child, my parents always bought something delicious for me. The food was usually big and I could not finish it.

In travel, some agencies organize buffets, in which we take a large amount of food that we cannot finish.

Travel is about relaxing, so we don't have to discipline ourselves.

After the implementation of the one-child policy in China, a large number of parents gave all their love to their only child and providing their child's needs and wants was a typical way to show their love [35]. In most occasions, parents do not merely provide their children's necessities; they give even give what children fancy. Giving an excessive amount of food is among these behaviors. However, most children fail to finish the food. Children keep this habit when they become adults. Most people also believe that they do not get their money's worth if they do not consume enough food in buffet restaurants. Thus, people may overindulge and take excessive food when they travel. A large amount of food is wasted in this way.

Authenticity seeking is the third attribute, which frequently triggers tourists' waste of food in travel. In modern travel, tasting the local cuisine has become one way for tourists to experience the authenticity of a destination [9]. This notion is especially true among young tourists, because many of them regard themselves as 'foodies', and they will not give up the rare opportunity to savor local food [36]. Some of the study subjects mentioned:

I once went to Tibet and tasting the local delicacy was an important activity for me. However, I realized that Tibetan food was not my type, so I threw away the food that I bought after trying just a small amount.

In Xiamen were many net red (wang hong) foods, but after eating some, we found out that most of the food were not delicious at all. So, we threw away a lot.

In both cases, young tourists have high expectations in seeking authenticity by eating local delicacies. Unfortunately, the food cannot fulfill such expectations. Not all the local food is preferred

by tourists because food categories in China are divergent, and some are not acceptable to tourists from other regions [37]. Nevertheless, young tourists still try local food, which is wasted to a large extent. In a market report, tourists' food waste in Tibet is substantially more than wastes in other tourist areas. Meanwhile, net red food is currently popular in China, and many destinations utilize it to expand tourists' consumption [38]. In reality, food quality is not guaranteed, and such travel experiences have become one-time consumption.

Our guides always told us that this food was quite good and that food was delicious. So, we bought them, but the actual taste was far from the guides' description.

Guidance from the tour guide plays a vital role in food wastage among tourists. Tour guides, as important informants for tourists, strongly influence tourists' behavior while traveling [39]. Guides often earn from tourists' purchase of local food; hence, many guides do not care about the taste and suitability of the food and simply use sales strategies to persuade tourists to buy [40]. Truthfully, local food may taste terrible or may simply not meet tourists' preferences, thereby triggering food wastage. Guides influence the purchase of local food as gifts for tourists' families and friends [41]. When tourists take local food back home, a new round of wastage may be caused, as the receiver may not enjoy the food and throw it away.

4.1.2. Industry

At least one commercialized food court is found in every destination in China [42]. A wide range of snacks is offered at these food courts, and most tourists cannot resist the delicacies [11]. Participants in the study experienced the same scenario. They usually go to such places but leave disappointed.

I tried xiaolongbao in the food court of Chenghuang Temple, Shanghai. However, what the food court sold was not only expensive but also tasted bad. I never want to go there again.

In my trip to Xinjiang, I was unfamiliar with the weighting method of the local flavor, qiegao. After the stand owner weighed the food and told me the price, I thought it was too expensive so I did not want to buy it. However, he said something threatening to force me to buy.

Shanghai is a window to China's modernization. Hence, the travel industry creates commercial opportunities and maximizes their advantage in the local market. As a result, prices in Shanghai are raised irrationally because of the tight competition in scenic areas, which leads to tourists' extreme dissatisfaction. If food quality can be ensured in restaurants, tourists' dissatisfaction can be relieved to a certain extent and vice versa. In this study, the worsening food quality intensified young tourists' perception on unsustainable market behavior. The subsequent excerpt describes how businessmen in certain destinations used threatening words to force tourists to buy. However, such cases are rare in modern China.

The food was acceptable, but too many people were eating in the restaurant. Imagine, we needed to finish our food within five minutes. Can this still be called food tasting?

After chatting with the stand owner who was also the chef, we found out he was not a local; he simply rented the stand to cook local dishes. The food was bad, but what we wanted to savor was more than that.

In the second case, businesses can prepare acceptable food, but dining ambience is ignored. In Chinese culture, ambience is an important element of the overall dining experience [43]. However, in over-commercialized food courts, businessmen merely want to sell without establishing a good image. Hence, ambience does not enhance the overall image of the local delicacy but creates serious harm instead. Such an operation of food businesses contributes to the unsustainable development of the destination.

In the following case, the industry does not establish authenticity for tourists but actually causes counter-effects. Strangely, non-natives make and sell local food to non-native tourists who seek authenticity, which has become a common practice in China's food courts [44]. Although local food cooked by outsiders does not taste bad, most tourists think that authentic local food should be made by locals. Otherwise, their satisfaction towards a destination may be lowered.

When I bought a local fruit, I felt the owner cheated me in terms of the weight. However, I did not argue with him because keeping a good mood while traveling was important.

Vendors also deliberately adjust their scales to cheat tourists. Tourists may know the truth, but they do not care much about that cheating because normally the lacking amount is minimal and does not cost a substantial value. Nonetheless, this memory contributes to the unsatisfactory perception of their overall travel experience. The lacking amount may be trivial, but when similar instances frequently occur, an unsatisfactory travel experience will be created.

Clearly, the industry has enabled tourists to waste and improperly use food, thereby damaging the image of destinations among gastronomic tourists. This result is a long-term effect, and many of these tourists with negative food experiences may never consider returning to such destinations. They may even comment negatively about the destination online and offline.

4.1.3. Government

In China, almost every government has realized the importance of tourism in developing the local economy [45]. However, for several places, the lack of attractions restricts the development of local tourism. The development of a culinary tour has become the first choice of authorities to boost local tourism because the overall cost of developing food tours is low, and the process is easy compared to the construction of amusement parks or other cultural attractions [45]. However, the effect is not beneficial all the time.

I am a travel enthusiast and have been to many places in China. I find that many food streets in China that have been developed are too similar to one another. This similarity is not what travel should give us.

Local governments organize many food festivals to attract tourists. However, almost all festivals sell the same types of food, including sausages, octopus pellets and wonton, which is disappointing. As tourists, we seldom participate in such activities.

In Lanzhou, I ate a bowl of authentic lamian, which was just a little bit better than the one I tasted in my hometown. It made me realize that I could taste most delicious food just in my hometown.

Tourists with limited experience may be impressed by the food offered in food streets. However, the construction of such streets causes the opposite effect for experienced tourists, especially when food is the major attraction. Tourist satisfaction and willingness to recommend may be reduced when tourists find nothing unique about a place. The same problem occurs in food festivals. Similar to ambience, food presentation and promotions make tourists fail to savor new and interesting experiences. This situation cannot sustain tourism development in a particular destination. Local governments also encourage people who can cook traditional food to create businesses across China. As more job opportunities are created from food businesses, job competition can be fierce. As a result, people do not need to leave their hometowns to taste local cuisine. Although flavor can be better when eating a dish in its place of origin because of local ingredients, ambience, and sense of authenticity, the taste is similar. Thus, the development of such a food industry creates a dilemma for the local tourism.

4.2. Countermeasures to Address Unsustainable Food Consumption

Participants of the study proposed strategies to address unsustainable food consumption in travel. In Section 4.1., tourists' understanding was relatively concentrated and representative excerpts were

selected to indicate key ideas. However, the proposed solutions were dispersed. Therefore, the key ideas from participants are summed up and shown in this section.

Firstly, from tourists' perspective and most importantly, their awareness about gastronomic travel should be changed. Tourists should learn to buy only the sufficient amount of food and not use eating as a way to show off their generosity. If some food is left, packing it should be encouraged. Although food shortage may not be a serious problem in China, it is a global problem. Food waste is not trivial, and everyone should take an active part in the conservation of food. Next, tourists should find out basic information, such as prices and the flavors, about local cuisines before trying them. By doing so, they can avoid purchasing food that they do not like. Reading online comments and seeking ideas from friends who have tasted the local cuisine are highly recommended to give tourists an idea of food that they may prefer in a specific destination. Finally, tourists can report to the appropriate government office whenever they encounter poor food quality or unfair practices while consuming food in tourist areas. Modern tourists should learn to protect their rights as travelers.

Based on tourists' perceptions, the tourism industry can play their role in tackling unsustainable food consumption in travel. The industry should change its mindset and think beyond commercial benefits when doing business. Firstly, the industry can implement measures to remind customers to purchase appropriate amounts of food, including displaying related slogans in restaurants, reducing the serving size of dishes, and encouraging diners to try a small amount first before ordering a large serving. Secondly, the industry can establish distinctive food brands and offer more services for customers. For example, the industry can improve food quality and dining ambience in restaurants, which will allow tourists to enjoy the food and avoid wastage. In this way, the industry can guarantee the long-term development of gastronomic travel and create a win-win situation for tourists and the industry.

Finally, the government can improve the situation by creating regulations to manage restaurants in tourist areas. Three aspects should be considered, namely, regulating the construction of food streets to ensure tourists' satisfaction in consuming local food, monitoring food prices in restaurants in tourist areas to avoid tourists' dissatisfaction, and charging fines to restaurants that take advantage of tourists and damage the image of a destination. Lastly, the government may create a blacklist and publish the names of tourists who get caught wasting food. Thus, tourism operations and tourists in a destination can be regulated, and a sustainable image may be formed. Further, every government should gradually enhance citizens' environmental responsibility, thereby fundamentally addressing unsustainable food consumption by tourists.

5. Conclusions

This study took young tourists with their distinct representativeness to examine the issue of unsustainable food consumption in travel. Demographic information and the collected content data were utilized to present the full research issue. Three stakeholders were identified to contribute to the issue, namely, tourists, the industry, and the government. Firstly, the industry and the government should not be responsible for causing unsustainable food consumption because they want to gain long-term benefits from the consumption of food. However, they play an important role in aggravating the issue by what they have promoted at destinations. Tourists themselves are an important force leading to the examined phenomenon because of their long-standing cognition and travel habits. Accordingly, measures to tackle the issue were suggested from these three perspectives.

This study contributes to the understanding of unsustainable food consumption in travel by the academia and practitioners. On the one hand, these parties can fully understand the issue to reflect past developments in gastronomic tourism. Thus, a foundation can be laid for further use of gastronomic resources in maintaining the sustainable development of a destination. On the other hand, tourists' suggestion on how to deal with the issue should be considered by other stakeholders because tourists are the most important contributors to the industry; thus, their opinions merit special attention.

This study is among the initial explorations on unsustainable food consumption in travel, which lays a foundation for further theoretical and practical studies.

The current study has limitations. Firstly, only young tourists from a university were chosen as subjects, which may cause certain biases despite the research sample being representative of the population. In fact, the 133 students in the current sample comprised a convenient one; accordingly, it may not be representative of the students' population or of the Chinese tourists' population. Thus, future studies can extend the scope of the subject to examine whether other attributes can be identified and to infer on a wider population of Chinese tourists. Secondly, a limitation of stakeholders' participation exists. If stakeholders, such as the industry and the government, can be invited to confirm tourists' opinion or supplement what tourists have offered, the validity and reliability of the study can be further improved. The implications are also limited to China's tourism market because of the sample population. Hence, samples from different countries may be explored to examine the difference of attributes that cause unsustainable food consumption in travel. Finally, this study utilized a questionnaire survey distributed online to collect more authentic opinions from participants and has answered the research question raised in the beginning. However, if a semistructured interview can be used to supplement or confirm what the study has found out, the validity of the study can be further improved.

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