

# The influence of sensory marketing on customer satisfaction and its behavioral intention

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**Abstract.** With the rapid development of global tourism, the emergence of hot spring hotels has met the demand for one-stop entertainment pursued by a large number of consumer groups. Therefore, the target customer market of hot spring hotels is broader than that of ordinary hotels. At the same time, sensory marketing, as an emerging marketing strategy, has gradually been favored and applied by first-class enterprises. Therefore, to have a deeper understanding of the impact of sensory marketing on hot spring hotels, this paper analyzes the actual data obtained from the questionnaire survey, that is whether the visual, olfactory, auditory, and tactile experience will have a positive impact on customers' pleasure and satisfaction, so as to affect the subsequent customer behavior intention. By confirming the relationship between sensory marketing and planning behavior theory, this study shows that sensory experience can indeed influence customers. Future behavior intention is influenced the perception of customers' emotional value. This result not only enriches the content of the marketing strategy but also provides the hot spring hotel managers with more effective methods and strategies to improve consumer loyalty.

**Keywords:** sensory marketing, emotional perception, customer behavior intention, hot spring hotel, planning behavior theory, marketing strategy.

## 1. Introduction

With the gradual easing of the global COVID-19 epidemic, the global tourism industry has entered the post-epidemic era and has gradually entered a stage of rapid development [1]. Tourism products have also been constantly innovated and iterated currently and have more fully meet the diversified and personalized consumer needs of customers. For example, Kayotei Ryokan, located in Yamanaka Hot Spring Village in Japan, innovatively integrates the Japanese hotel with the local hot spring culture, and finally realizes the social revitalization of the local hot spring area [1]. With the spread of information on the global Internet, the product concept of hot spring hotel has officially known by public. Hot spring hotels seize the consumers' pursuit of a healthy lifestyle, relying on the hot spring water with health care nature and different forms of water activities, and truly form a unique competitive advantage with other general hotels [2]. The continuous development of the industry has brought a great impact on the potential utilization of facilities and economic development in the local area [2]. From the external perspective, the hot spring hotel attracts many tourists from home and abroad to visit the destination, bringing great economic benefits to the local. Internally, the construction of hot spring hotel also brings the increase of job demand, which promotes local employment and indirectly improves the happiness index of local people. With the continuous expansion of the tourist market of hot spring hotels, many cities have evolved into the tourist-oriented type. For example, Sarein hot spring is one of the most visited places in Iran [3]. After witnessing the considerable profits of hot spring hotels, many countries and individuals have actively invested a large amount of money in the development and construction. The hot spring resort hotel developed in Laguna Province of the Philippines is a typical case [4]. Thus, the hot spring hotel is the general trend of the future tourism development. Therefore, using the characteristics of hot spring hotels to expand the tourism market, so as to drive the sustainable development of tourism economy, has become an important issue today.

Different from the previous general marketing methods adopted by enterprises to the public, according to the local specific situation, the relevant marketing strategy of hot spring hotels has become the top priority. Therefore, the innovative concept of sensory marketing has emerged. The

sensory marketing, proposed by Martin Linzjom (2014), is a novel marketing method designed to influence consumers' feelings and behavior by using their senses. In sensory marketing, the various stimuli sent to the four senses will have an impact on consumer emotions and behavior [5]. In recent years, many enterprises in the world have carried out active attempts to combine sensory marketing with actual enterprise marketing. However, up to now, the systematic application of sensory marketing in the whole process of enterprise marketing is still the goal of enterprise pursuit. In the future, sensory marketing may become an important innovative means for first-class in the market.

With the recovery of the global economy and the rapid development of tourism, the consumption frequency of hot spring hotels is increasing year by year. The use of sensory marketing to bring emotional experience to customers, and every hot spring hotel experience to customers exceeds the original emotional expectation, which has achieved the ideal effect of improving customer satisfaction [6]. The unique mode of creative and organic integration of hot spring hotel and sensory marketing will become an important method for the hot spring hotel industry based on the fierce competition.

Therefore, the main purpose of this study is to explore the relationship between the four perceived stimulation of vision, olfaction, audition and haptics and customer pleasure and experience satisfaction in hot spring hotels. The intensity of the influence of various sensory experiences in different dimensions and the influence of sensory marketing on customers' future behavior intention. In order to solve the above research purposes, there are main research questions as follows: Whether customers can improve their pleasure and experience satisfaction through different sensory experience. The next question is whether the four sensory experiences have the same influence on customers and have a positive influence on customer recommendation and revisit through customer marketing.

On the theoretical level of research significance, marketing strategy is an important issue requiring long-term research in any industry, and novel sensory marketing concept appeared relatively recently, with great potential for innovation and exploration in the future. On the other hand, because the behavior intention of sensory marketing to customers is based on people's perception of emotions and judgment, it is relatively abstract and it is difficult for enterprises to accurately grasp people's inner feelings, it needs to spend more time and energy to explore in this field. Although some experts and scholars have made research in the field of sensory marketing and made some achievements, the academic research on hot spring hotels combined with sensory marketing is still in a blank and scarce state. Therefore, this research can better fill the gap in this field [7]. In the practical sense, as a service industry, the core of hot spring hotel is to meet customer needs and improve customer satisfaction and loyalty. Customer satisfaction and loyalty reflected in the consumption experience of customers in the whole process of consumption. Thus, in addition to the specific provided by the hot spring hotel quality of products and services, sensory marketing is as a different marketing strategy, can more effectively make managers customize more dimensional market plan, in order to enhance the enterprise's core competitiveness.

## **2. literature review**

### **2.1 Hot Spring Hotel**

First of all, compared with the traditional general hotels, the hot spring hotel is the unique health attribute of the hot spring water in the hot spring hotel, which is in line with the consumer needs of modern tourists for physical and emotional health [7]. Among them, visiting the spring hotel is regarded as a form of characteristic hotel. which is a symbol of mass tourism to minority tourism [8]. In addition, the hot spring hotels are better than the traditional general hotels in the diversification of supporting facilities and personalized service for customers. In terms of hardware facilities, hot spring hotels have more extensive entertainment places. In addition to representative hot springs, standardized multimedia lounge, attractive open-air water park and popular sweat steaming area all improve customers' experience comfort. Regarding to service, good working

attitude and efficient reasonable division of labor are also important factors for the success of hot spring hotels. Many countries, after witnessing the dividend growth of the industry, and enterprises have actively invested in the development of the hot spring hotel industry, and thus the hot spring hotel industry is booming around the world. For example, Kayotei Ryokan in Yamanaka Hot Spring Village in Japan, innovatively integrates Japanese hotels with the local hot spring culture, and finally realizes the social revitalization of the local hot spring area [8]; Sarein Hot spring in Ardebil, Iran, gradually becomes one of the most visited places in Iran [9]. Today, the concept of hot spring hotel is gradually known to the public. The definition of hot spring hotel can be roughly divided into two categories. Some scholars, based on historical factors, believe that hot spring hotels are developed based on natural hot springs and mineral water, and their development must rely on appropriate natural resources and attractive landscape or climate [10]. Other scholars advocate that, considering the comfort of consumers, that hotels, as the representative of the service industry, have good accommodation, leisure and entertainment facilities, health facilities and services, which are the main reference indicators of hot spring hotels [10]. In addition, for the functional characteristics of hot spring hotels, in addition to the purpose of bathing and health preservation, the characteristics of hot spring hotels are also reflected in the social contact with family and friends, relaxation from daily life, leisure and entertainment water facilities, hotel characteristic food and service interaction between customers and the hotel, etc [11]. Therefore, according to the needs and preferences of consumers, the forms and styles of hot spring hotels are also diversified [11]. Take a typical Japanese hot spring hotel for example, the Japanese hot spring hotel industry has a strong traditional Japanese hot spring characteristics. From traditional luxury designs to common wooden structures, there are three main functions: bathing, eating and sleeping [12]. Usually, the baths are designed as a common area for multiple people to bathe inside the building or in an outdoor area between rocks and plants. Guests can be relaxing and enjoy interacting with others, while also enjoying traditional Japanese cuisine cooked by professional chefs. These dishes are often served with local seasonal ingredients and served in the bedroom. Second, unlike Western-style carpeted bedrooms, a Japanese hot spring hotel usually has a tatami mat, a traditional mat made of local rice stalks with futons, so customers can take a nap here.

However, the recent rise of hot spring hotels in China is more similar to the basic functions of hotels emphasized by some scholars above, and prefers the commercial characteristics of hotels, and emphasizes the standardization of hot spring hotel products and services [13].

## 2.2 Sensory Marketing

### 2.2.1 the sensory marketing concept

As a marketing strategy emerging in recent years, sensory marketing has been studied by many experts and scholars because of its novel characteristics. As for the definition of sensory marketing, the most common view is that sensory marketing is used to mobilize consumers' senses and influence consumers' perception, judgment and behavior. Just like the analysis of the decoration, background music and smell of hot spring hotels, it is the embodiment of the form of sensory marketing [14]. From a management perspective, sensory marketing is used to create the subconscious trigger to represent the consumer's perception of the abstract concept of a product. Given the daily range of clear marketing appeals to consumers, the subconscious triggers that attract the basic senses may be a more effective way to attract consumers [15]. Therefore, through the characteristics of the products, services, or environment, the perception, judgment and even emotional shape, color, smell, strength, temperature and hardness, and thus affect the consumption behavior of consumers, as well as the subsequent purchase intention and consumption intention.

In the current field of consumer behavior theory, expert research and corporate marketing campaigns over the past 10 years have added sensory stimuli such as vision, olfaction, audition and haptics perception. Some of these studies have explicitly focused on the antecedent causes and consequences of sensory stimulation [15]. For example, Hershey's milk chocolate can be made into a regular chocolate or Hershey's kisses chocolate — has exactly the same formula but very

different personalities (see picture below). Through visual personalized packaging, consumers feel that a drop of tears is melting on the tip of the tongue, thus increasing the consumers' emotional experience [15].



Figure 1 Image source (Krishna, 2012)

In another tactile study, researchers designed a booklet for a children's museum in the Midwest to attract new members. Half of their brochures contain some materials that make the consumers with a soft, pleasant of touch. The other half did not. They found that those who were exposed to touch elements were more positive about brochures and more likely to buy museum membership than those who were not [16]. It can be seen that sensory marketing is reflected in all aspects of today's life, but currently enterprises have not formed a mature and systematic sensory marketing system. At the same time, it can also show that the system and development of sensory marketing are being closely concerned by the majority of scholars and enterprises, and sensory marketing is gradually becoming an indispensable part of enterprise marketing in the future.

Sensory marketing is now used in a variety of disciplines, such as combining sensory marketing with tourism and hospitality. When the tourist destination has a spectacular scene that makes tourists stop, the visual enjoyment brought by the scenery will make consumers tend to go to the destination [16]. Or in a resort, the voice of the service staff is soft and their words are correct, which make customers feel happy and better meet the customers' leisure requirements. Therefore, combining sensory marketing with tourism and hospitality is one of the important ways to effectively increase customer demand. This paper mainly for hot spring hotel, after the above comparison, hot spring hotel and idle mass hotel industry, although there are common on the basic function, but the difference is that, relative to the ordinary hotel, hot spring hotel contains more diversified recreational facilities and health preservation project. The most representative service products namely the spa, achieve customer collateral, health preservation consumption purpose. It is concluded that product diversification can to a certain extent make sensory marketing play a greater positive role in the sensory stimulation of service products themselves.

### 2.2.2 Sensory stimulation

Sensory stimulation is the sensory stimulation of the product itself to the consumer, also known as sensory stimulation, which refers to the stimulation acting on the body's senses [17]. In detail, when the consumer passes through different sensory organs, in the sensory stimulation, the consumer produces the corresponding organ sensation. It is a process of conditioning the human vision, olfaction, audition and haptics when stimulated from the outside world. Sensory sense can be directly obtained from the environment, products and services around them. It is the first channel for consumers to obtain enterprise information, so sensory strategies play an important role in the purchase process [18]. Therefore, more and more scholars and enterprises realize that sensory stimulation is an extremely important research topic, combining sensory stimulation in multiple areas of science. For example, through the combination of psychology, neuroscience and sensory stimulation, the scholars study the autism spectrum disorder adolescent excessive response to sensory stimulation [18]. The most common applications of sensory stimulation are still in the marketing management discipline. For example, when consumers search, buy and consume brands, they are exposed to a variety of specific stimuli related to the brand, such as colors, shapes, product types, background design elements, slogans, mascots and characters [18]. These stimuli emerge is

as part of the brand design and identification, packaging and marketing communications, and the brand marketing or sales environment [19].

In order to understand this definition more intuitively, this paper combines the hot spring hotel with sensory stimulation. First of all, from the visual point of view, the blend of hot spring hotel and vision everywhere, when the moment into the hotel, the interior decoration let consumers have a general understanding of the style and brand of the hotel, but also greatly affect the subsequent consumption intention of consumers. Second, from the sense of smell, olfactory sensory stimulation in sensory marketing, light luxury niche hot spring fragrance has become the high-end marketing highlights of hot spring hotel, with the unique fragrance that can effectively leave customers a unique memory highlights [20]. Thirdly, from the perspective of hearing, creative hot spring hotels often play different background music according to the characteristics and styles of different areas of the hotel. When customers relax themselves, the background music is subtly remembered by customers [20]. When heard again in other time and space, customers will form a conditioned reflex to recall the spa hotels they spent before. Finally, from the perspective of touch, mature hot spring hotels will provide personalized services according to the degree and stage of water temperature adaptation, so as to give customers the best hot spring bath experience. As for customer taste, considering that taste is customers' perception of the food quality of the restaurant, the vast majority of them are applicable to the catering industry, so it is not much described here.

### 2.2.3 Sensory experience

The sensory experience is the use of human vision, olfaction, audition and haptics to build a sensory experience [21]. In order to enhance the core competitiveness of enterprises in the industry, sensory experience is more and more valued by business operators and customers, and it plays an important role in consumer experience [21]. In sensory marketing, sensory experience can effectively explain the quality and interactivity of a product or service, so it can be seen that it is very important to use sensory experience to make customers form a positive emotional pleasure. Therefore, this study makes the following assumptions on the four sensory experiences of hot spring hotels and the pleasure of customers:

H1: The visual stimulation of the hot spring hotel has a positive relationship with the pleasure of the customers.

H2: The olfactory stimulation of the hot spring hotel has a positive relationship with the mood of customers.

H3: The auditory stimulation of the hot spring hotel has a positive relationship with the pleasure of customers.

H4: The tactile stimulation of the hot spring hotel has a positive relationship with the pleasure of customers.

## 2.3 Pleasure and Customer satisfaction

### 2.3.1 Pleasure

Customer pleasure is the key factor that should be considered in the marketing strategy. The pleasure is the result of the positive interaction between customers and enterprises and the basic emotional experience (Russell, 1991). It can be further defined as the sense of satisfaction and reward that customers participate in or performing certain activities. In turn, pleasure is also an important factor in maintaining these activities. Finally, it is a multidimensional variable, including excitation, influence, and ability perception [21].

In addition, pleasure is an extremely complex emotional factor in the human body, so considering the importance of the relationship between emotional variables, consumer satisfaction and behavioral intention, this study decided to use the Pleasure Arousal model for further analysis. The model states that emotions contain two separate dimensions, namely happiness and arousal [21], after which relevant field experts further demonstrate that arousal affects pleasure [21]. Where happiness is the degree to which one feels good or happy, and arousal is the degree to which one

feels stimulated and active. Later, this paper mainly discusses the role of the pleasure produced by sensory stimulation and experience in the subsequent behavior of customers. In the experiment led by Wulf scholars, the study empirically verified the successful process model of websites in the online shopping environment. The mood impact of website evaluation and visual experience brings on customers, which is believed to affect the success of multi-dimensional websites, including satisfaction [22]. In addition, other studies have found that positive feelings about a corporate brand are remembered as pleasant experiences that affect the formation of a positive image of the brand [21]. Accordingly, the following assumptions were set according to the relevant studies described above.

H5: The pleasure degree of sensory experience can positively affect customer satisfaction.

### 2.3.2 Customer satisfaction

Customer satisfaction is a concept that is widely discussed in the literature [22]. When customer satisfaction is applied to tourism and hospitality, the satisfaction can be seen as the evaluation standard of the product or service after customer consumption. It is the result of comparing the subjective experience with the previous reference basis [22]. Specifically, consumer satisfaction can be defined as a cognitive-subjective state resulting from cognitive evaluations and the emotions triggered by those evaluations. Disconfirmation with the service experience that results below or above the consumer's expectations when the consumer decides to buy [23]. This will have a negative or positive impact on the evaluation of the service experience. Consumers choose services in the hope that these services will offer a range of benefits. Therefore, it seems consistent to assume that a product or service that does not meet the customer starts to expect [23].

In addition, there are many types of customer satisfaction internally, including two types: specific transaction satisfaction and overall satisfaction [23]. The former refers to the immediate evaluation of a specific product or service after the customer experience, which can reflect the recent emotional experience of the customer, while the latter refers to the comprehensive evaluation of the enterprise after the consumption of the product or service. The results of the literature show that the overall satisfaction has a direct impact on the intention to repurchase, and also has a regulatory effect on the transaction specific satisfaction. When the overall satisfaction is high, the specific transaction satisfaction has little impact on the repurchase intention, but when the overall satisfaction is low, the specific transaction satisfaction has a positive impact on the repurchase intention [23]. Therefore, compared with the former, the overall satisfaction is more objective and reasonable, and it is a predictive factor that can better reflect customers' future behavior and enterprise development. In addition, sensory marketing is a marketing strategy integrating multiple senses, which is a relatively complex consumption experience for customers. In conclusion, the use of overall satisfaction is more suitable for the current study, so the overall satisfaction is finally selected as the survey index of subsequent customer satisfaction.

## 2.4 Customer behavior intention

### 2.4.1 Revisit intention

In the whole tourism industry and hospitality, consumers' willingness to buy and future behavior are extremely important for enterprises. Therefore, enterprises hold marketing activities, use sensory marketing strategies, and influence customers' evaluation and judgment through sensory experience, so as to change the behavior intention of customers later. According to the above literature, customers' sensory stimulation and sensory experience have a certain impact on customers' subsequent purchase decisions, so many enterprises use sensory strategies to maintain close contact with consumers. Furthermore, the purchasing behavior of the general customer in the literature, is interpreted as the customer search, purchase, use, evaluation and dispose of the product, service or idea to meet their needs. In terms of sensory stimulation and sensory experience behavior, we identified three important stages according to the stages of the traditional customer decision-making process. That is, before, during, and after the visit. This study aims at the behavior

intention of consumers after purchasing products or services, so it belongs to the post-visit stage, that is, the post-purchase behavior. However, the intention to revisit mainly discussed in this section is an important part of the post-purchase behavior, which refers to the intention of consumers to recommend to others and the possibility and willingness of consumers to visit the place again after experiencing the product or service. The willingness to revisit is a hard indicator for enterprises to measure the loyalty and satisfaction of customer behavior. Moreover, there was a significant positive relationship between satisfaction and consumers' willingness to revisit. Therefore, in this study, choosing to revisit willingness as an important outcome factor in consumer behavior intentions conduct the research.

#### 2.4.2 Recommendation willingness

Recommendation willingness belongs to a type of word-of-mouth communication, which is a very important means of marketing and promotion, and has an important influence on the communication and purchasing behavior between consumers. If the enterprise has a better quality of word-of-mouth communication, it will directly drive the recommendation willingness of enterprise consumers. On the contrary, if the enterprise is negative word of mouth communication, the recommendation willingness of consumers will be lower and lower. However, combined with the various studies of Chun and Nyam-Ochird on the customer satisfaction of typical fast-food restaurants [23], in the final analysis, only the level of consumer experience satisfaction has always been an important premise for customers' future behavior intention. Accordingly, the study makes the following hypothesis:

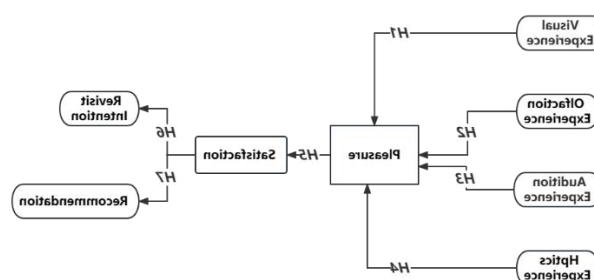
H6: Customer satisfaction has a positive impact on customers' willingness to revisit.

H7: Customer satisfaction has a positive impact on the customer's willingness to recommend it.

### 3. Research Method

#### 3.1 Research Model

Combined with the literature review of the second chapter, we concluded that this study is based on the four senses of marketing value and the influence of consumer mood pleasure of preliminary forecast. The relationship between pleasure and customer satisfaction and the relationship between the customer satisfaction and the behavior of consumer intention are investigated.



#### 3.2 Data Collection

The questionnaire takes hot spring hotels in the public view. The respondents of this study are required to have the experience in hot spring hotels in the past five years, and select the hot spring hotel experience that is the most impressive to consumers to answer this questionnaire. On the sensory marketing strategy of hot spring hotel, namely vision, smell, hearing and touch, and the pleasure, satisfaction and subsequent purchase intention brought to consumers.

The duration of delivering this questionnaire is for 5 days, specifically from 8:00 am on February 9, 2023 to 8:00 am on February 13, 2023. The survey methods were online questionnaires, and a total of 600 questionnaires were distributed, among which 584 questionnaires were collected. As some of the respondents did not have the experience of hot spring hotels, there were 473 valid questionnaires, and the effective rate was about 80.99%.

## 4. Data analysis and hypothesis

### 4.1 A Descriptive Analysis

Table 2 Demographic of the Respondents

| Demographic variable | Descriptions   | Frequency | Percentage% |
|----------------------|----------------|-----------|-------------|
| Gender               | Male           | 239       | 50.5        |
|                      | Female         | 234       | 49.5        |
| Age                  | Below 18       | 33        | 7.0         |
|                      | 18-35          | 287       | 60.7        |
|                      | 35-60          | 94        | 19.9        |
|                      | 60+            | 59        | 12.5        |
| Education background | Junior college | 133       | 28.1        |
|                      | Undergraduate  | 262       | 55.4        |
|                      | Post-graduate  | 28        | 5.9         |
|                      | Doctorate      | 44        | 9.3         |
|                      | Others         | 6         | 1.3         |
| Monthly income (RMB) | <2000          | 155       | 32.8        |
|                      | 2000-3500      | 133       | 28.1        |
|                      | >3500          | 185       | 39.1        |

For the basic information about demographics in the questionnaire, data analysis was performed using SPSS 23 software this study. The frequency and percentage of respondents were analyzed among the 473 validated questionnaires recovered, including gender, age, educational background, and monthly income. The descriptive analysis was performed by convenience sampling and the details are in Table 2.

### 4.2 Reliability Analysis

Reliability refers to the degree of consistency under the study hypothesis [23], which indicates the extent to which errors can be avoided by examining measures of internal consistency [23]. The variable of internal consistency can be achieved via item-to-total correlation and Cronbach's alpha [23] for the evaluation. According to the recommendation of Tavakol and Dennick (2011), the value of Cronbach's alpha is greater than 0.70, indicating good internal agreement. The value of Cronbach's alpha greater than 0.60 is also acceptable. Reliability analysis is an important standard to test the consistency, reliability, and stability of questionnaire data, and the more the Cronbach coefficient tends to 1, the stronger the internal consistency of each data is.

Table 3 Scale Reliability Statistics

| Measures   | Cronbach's Alpha | Compositive Reliability (CR) |
|--|------------------|------------------------------|
| VI_1: The interior of the spring hotel is stylish and high-end                                       | 0.790            | 0.864                        |
| VI_2: The baths of the spring hotel is clean and hygienic  |                  |                              |
| VI_3: The hot spring hotel has a complete range of facilities  |                  |                              |
| VI_4: The hot spring hotel is well-lit inside and outside  |                  |                              |
| OL_1: The aroma of the spa hotel gives a new feeling   | 0.676            | 0.823                        |
| OL_2: The aroma of the spring hotel matches the characteristics of the functional areas of the hotel |                  |                              |
| OL_3: The air in the hot spring hotel is very fresh  |                  |                              |
| AU_1: The background music of the spring hotel matches the scent of the fragrance                    | 0.799            | 0.869                        |
| AU_2: The music of the hot spring hotel makes customers  |                  |                              |



|  |       |       |
|--|-------|-------|
| feel relaxed   |       |       |
| AU_3: The music volume and rhythm of the music at the spring hotel are appropriate   |       |       |
| AU_4: The music of the spring hotel makes dining and socializing more enjoyable  |       |       |
| HA_1: The hot spring water at the hot spring hotel is at a suitable temperature  | 0.715 | 0.840 |
| HA_2: The hot spring hotel's sweat clothes and bath towels are soft and comfortable  |       |       |
| HA_3: The entertainment facilities and interior furniture of the hot spring hotel are of good quality  |       |       |
| PL_1: When I went to the hot spring hotel, I felt happy  | 0.683 | 0.863 |
| PL_2: I felt very pleasant in the spring hotel   |       |       |
| SA_1: The products and services of the spring hotel exceeded my original expectations  | 0.754 | 0.859 |
| SA_2: The relaxing experience of going to the hot spring hotel made me satisfied   |       |       |
| SA_3: Going to an spring hotel was the right decision  |       |       |
| REC_1: I would actively recommend a spring hotel with a good experience to my friends and family   | 0.689 | 0.866 |
| REC_2: If a stranger asks me about a hot spring hotel, I will actively share the positive things about the good experience of the hot spring hotel with the stranger |       |       |
| REV_1: In my free time, I often visit hot spring hotels with good experiences  | 0.684 | 0.863 |
| REV_2: I will plan my trip to the hot spring hotel for the future  |       |       |

VI=vision OL=olfaction AU=audition HA=haptics PL=pleasure SA=satisfaction

REC=recommendation REV=revisit intention

It is obvious from Table 3 that the Cronbach Alpha values of half of the eight variables are above 0.7 and the other half is greater than 0.675 (Fornell & Larcker, 1981). It indicates that the questionnaire data have good internal consistency and scale reliability. Secondly, the combined reliability CR was above 0.8. Considering that the reliability of each construct was satisfactory, all 23 questions were retained for further analysis.

### 4.3 Validity Analysis

Table 4 Scale Validity Statistics of Visual Experience Statistics

| Measures   | Factor Loading | AVE   |
|--|----------------|-------|
| VI_1: The interior of the spring hotel is stylish and high-end | 0.771          | 0.614 |
| VI_2: The baths of the spring hotel are clean and hygienic     | 0.782          |       |
| VI_3: The hot spring hotel has a complete range of facilities  | 0.794          |       |
| VI_4: The hot spring hotel is well-lit inside and outside      | 0.786          |       |

VI=vision

As can be seen from Table 4, there are four questions in the visual experience hypothesis, among which the Factor Loading of each item is greater than 0.7, and the average extraction variable (AVE) of visual experience is greater than 0.5, thus indicating that the aggregate validity of visual experience is excellent.

Table 5 Scale Validity Statistics of Olfaction Experience Statistics

| Measures   | Factor Loading | AVE   |
|--|----------------|-------|
| OL_1: The aroma of the spring hotel gives a new feeling  | 0.761          | 0.607 |
| OL_2: The aroma of the spring hotel matches the characteristics of the functional areas of the hotel | 0.806          |       |
| OL_3: The air in the hot spring hotel is very fresh  | 0.770          |       |

OL=olfaction

As can be seen from Table 5, it is assumed that there are three questions in olfactory experience, in which the Factor Loading of each item is greater than 0.7 and the average extraction variable (AVE) of olfactory experience is greater than 0.5, thus indicating that the aggregate validity of olfactory experience is excellent.

Table 6 Scale Validity Statistics of Audition Experience Statistics

| Measures   | Factor Loading | AVE   |
|--|----------------|-------|
| AU_1: The background music of the spring hotel matches the scent of the fragrance  | 0.749          | 0.624 |
| AU_2: The music of the hot spring hotel makes customers feel relaxed               | 0.807          |       |
| AU_3: The music volume and rhythm of the music at the spring hotel are appropriate | .0.798         |       |
| AU_4: The music of the spring hotel makes dining and socializing more enjoyable    | 0.803          |       |

AU=audition

As can be seen from Table 6, it is assumed that there are four items of auditory experience, in which the Factor Loading of each item is greater than 0.7 and the average extraction variable (AVE) of auditory experience is greater than 0.5, thus indicating that the aggregate validity of auditory experience is excellent.

Table 7 Scale Validity Statistics of Haptics Experience Statistics

| Measures  | Factor Loading | AVE   |
|---|----------------|-------|
| HA_1: The hot spring water at the hot spring hotel is at a suitable temperature                       | 0.807          | 0.637 |
| HA_2: The hot spring hotel's sweat clothes and bath towels are soft and comfortable                   | 0.751          |       |
| HA_3: The entertainment facilities and interior furniture of the hot spring hotel are of good quality | 0.834          |       |

HA=haptics

According to Table 7, it is assumed that there are three questions for a tactile experience, in which the Factor Loading of each item is greater than 0,7 and the average extraction variable (AVE) of tactile experience is greater than 0.5, thus indicating that the aggregate validity of tactile experience is excellent.

Table 8 Scale Validity Statistics of Pleasure Statistics

| Measures  | Factor Loading | AVE   |
|---|----------------|-------|
| PL_1: When I went to the hot spring hotel, felt happy | 0.880          | 0.759 |
| PL_2: I felt very pleasant in the spring hotel        | 0.863          |       |

PL=pleasure

As can be seen from Table 8, there are two questions for the pleasure vacation variable, among which the Factor Loading of each item is greater than 0,7 and the average extraction variable (AVE) of the pleasure vacation variable is greater than 0.5, thus indicating that the aggregate validity of the hypothetical variable is excellent.

Table 9 Scale Validity Statistics of Satisfaction Statistics

| Measures  | Factor Loading | AVE   |
|---|----------------|-------|
| SA_1: The products and services of the spring hotel exceeded my original expectations | 0.810          | 0.670 |
| SA_2: The relaxing experience of going to the hot spring hotel made me                | 0.823          |       |

|  |       |  |
|--|-------|--|
| satisfied  |       |  |
| SA_3: Going to a spring hotel was the right decision | 0.822 |  |

SA=satisfaction

According to Table 9, there are 3 questions in the satisfaction hypothesis variable, in which the Factor Loading of each item is greater than 0,7 and the average extraction variable (AVE) of the satisfaction hypothesis variable is greater than 0.5, thus indicating that the aggregate validity of the hypothesis variable is excellent.

Table 10 Scale Validity Statistics of Recommendation Statistics

| Measures   | Factor Loading | AVE   |
|--|----------------|-------|
| REC_1: I would actively recommend a spring hotel with a good experience to my friends and family   | 0.876          | 0.763 |
| REC_2: If a stranger asks me about a hot spring hotel, I will actively share the positive things about the good experience of the hot spring hotel with the stranger | 0.871          |       |

REC=recommendation

According to Table 10, there are three questions for the hypothesis variable, in which the Factor Loading of each item is greater than 0,7 and the average extraction variable (AVE) of the hypothesis variable is greater than 0.5, indicating that the aggregate validity of the hypothetical variable is excellent.

Table 11 Scale Validity Statistics of Revisit Intention Statistics

| Measures  | Factor Loading | AVE   |
|---|----------------|-------|
| REV_1: In my free time, I often visit hot spring hotels with good experiences | 0.860          | 0.760 |
| REV_2: I will plan my trip to the hot spring hotel for the future             | 0.883          |       |

REV=revisit intention

According to Table 11, there are 3 items in the hypothesis variable of revisit willingness, in which the Factor Loading of each item is greater than 0.7 and the average extraction variable (AVE) of the revisit hypothesis variable is greater than 0.5, thus indicating that the aggregate validity of the hypothetical variable is excellent.

Table 12 The Discriminant Validity

|     | VI    | OL    | AU    | HP    | PL    | SA    | REC   | REV   |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|
| VI  | 0.783 |       |       |       |       |       |       |       |
| OL  | 0.728 | 0.779 |       |       |       |       |       |       |
| AU  | 0.735 | 0.729 | 0.790 |       |       |       |       |       |
| HP  | 0.744 | 0.683 | 0.753 | 0.798 |       |       |       |       |
| PL  | 0.658 | 0.624 | 0.646 | 0.696 | 0.871 |       |       |       |
| SA  | 0.710 | 0.686 | 0.713 | 0.729 | 0.683 | 0.818 |       |       |
| REC | 0.637 | 0.607 | 0.660 | 0.680 | 0.617 | 0.679 | 0.873 |       |
| REV | 0.625 | 0.641 | 0.660 | 0.644 | 0.556 | 0.649 | 0.669 | 0.872 |

Note: V I=vision OL=olfaction AU=audition HA=haptics PL=pleasure SA=satisfaction REC=recommendation REV=revisit intention

Table 12 clearly shows that the square root of the average extraction quantity of the variables is larger than the correlation coefficient between the other variables, so there is a good differential validity among the latent variables.

#### 4.4 Model hypothesis testing

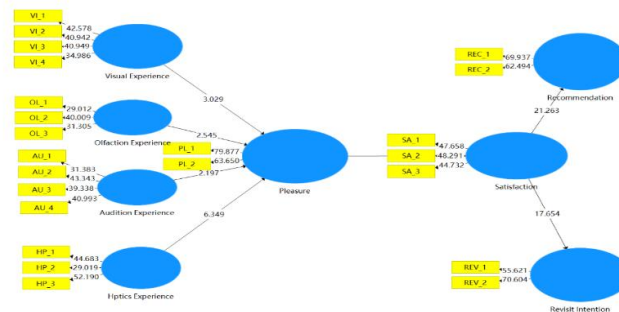


Figure 2 The Direct Path Coefficient of PLS Analysis

Table 13 The Direct Relationship Between the Constructs

| Hypothesis and path | O value | T value | P value | Results  |
|---------------------|---------|---------|---------|----------|
| H1. VI → PL         | 0.189   | 3.029   | 0.003   | Accepted |
| H2. OL → PL         | 0.147   | 2.545   | 0.011   | Accepted |
| H3. AU → PL         | 0.132   | 2.197   | 0.029   | Accepted |
| H4. HP → PL         | 0.355   | 6.349   | 0.000   | Accepted |
| H5. PL → SA         | 0.683   | 25.597  | 0.000   | Accepted |
| H6. SA → REV        | 0.649   | 17.654  | 0.000   | Accepted |
| H7. SA → REC        | 0.679   | 21.263  | 0.000   | Accepted |

Table 13 clearly shows that the path coefficient O value in the model agrees with the T value and P value if  $O > 0.2$ ,  $T > 1.96$ , and  $P < 0.05$ , indicating that the path coefficient within the model is significant. Furthermore,  $P < 0.01$  when  $T > 2.58$  and  $P < 0.001$  when  $T > 3.29$ , fully indicate that the P value changes when T satisfies different values to the corresponding range. We prove that the above assumptions hold and the model fits well.

## 5. Conclusions and Suggestions

### 5.1 Conclusion

This paper mainly explores the sensory marketing of hot spring hotels, the change of pleasure and satisfaction brought to customers, and its influence on customers' subsequent behavior intention. After analyzing the data collected by the questionnaire, it is finally concluded that the sensory experience of hot spring hotels, including vision, smell, hearing and touch, has a positive relationship with customers' pleasure, satisfaction and subsequent consumer behavior intention.

#### 5.1.1 Sensory experience is the impact on customer pleasure

In view of the influence of the sensory experience provided by hot spring hotels on their mood pleasure, according to the above hypothesis verification results, it can be clearly concluded that in the sensory experience of hot spring hotels, visual, smell, auditory and tactile experience can positively affect the mood pleasure of customers.

The conclusion that the sensory experience obtained in this study can positively influence the customer pleasure degree, which coincides with the research conclusion of Cabanac (1979). However, in the research of Strang (2005), it was found that for the visual experience in sensory experience, the visual experience brought by flowing water may not positively affect customer pleasure. The reason is that when observing visual movements, people can produce the same physiological effects as the actual movement, which may produce the vertigo effect in the result of the visual stimulation of water.

Finally, by comparing the path coefficient of the sensory experience of hot spring hotels, the tactile experience has the most significant influence (path coefficient = 0.355), visual experience

(path coefficient =0.189), olfactory experience (path coefficient =0.147) and finally auditory experience (path coefficient =0.132). It can be seen that touch can greatly affect the mood of customers, and will further affect the actual time of customers to stay in hot spring hotels. The above conclusion also appears in Brown (2017) on the tactile experience of ground materials. In terms of vision, high-end hot spring hotels can always bring the right, consumers and greater visual stimulation through architectural characteristics, so as to leave a deep memory highlight for customers. For example, the research of Brett (2005) also illustrates the important role of visual experience in bringing pleasure to consumers. In terms of olfactory experience, the unique smell is also an important way for customers to form memory points. The refreshing smell experience is a plus to customer pleasure. The conclusion about the positive effect of smell on customer pleasure also appears in the findings of Kringelbach(2015). For the auditory experience, the soothing and melodious background music also has a positive influence on the customers' mood that cannot be underestimated. This conclusion is consistent in Jang and Lee (2019) studies on cafes.

#### 5.1.2 The influence of customer pleasure on customer satisfaction

It is obvious from the above study data Table 13 that customer pleasure significantly affects customer satisfaction, where the path coefficient is 0.683. T value is 25.597 and P value is 0. That is to say, the higher the pleasure of customers, the higher the satisfaction with the hot spring hotel. The above conclusion is consistent with the conclusions of Jung and Yoon (2010) on customer pleasure and satisfaction in Korean restaurants, which has a positive effect.

#### 5.1.3 Effect of customer satisfaction on recommendation intention and revisit intention

In the past, many studies on customer satisfaction and customer behavior intention have proved the importance of customer satisfaction for customer satisfaction and customer behavior. In addition, according to the research data, it can also be analyzed that customer satisfaction has a positive impact on customers' willingness to recommend and revisit. For recommendation intention, the path coefficient is 0.679, T value is 17.654, and P value is 0.. The results are consistent with the study of Vigripat and Chan (2007). As for the revisit intention, the path coefficient is 0.649, T value is 21.263 and P value is 0, which meet the coefficient requirements of the model. The results of customer satisfaction having a positive impact on customer willingness to revisit are also consistent with those of Chun and Nyam-Ochir (2020). In other words, the higher the satisfaction of hot spring hotels, the more likely consumers are to revisit the hotel in the future, and the more willing they are to actively recommend hot spring hotels with good experience to others and spread their word of mouth.

## 5.2 Research contributions

This study discusses the influence of sensory experience on customers' future behavior intention by influencing their mood and satisfaction. It includes the relationship between the four experience dimensions, visual experience, olfactory experience, auditory experience and tactile experience, and the pleasure of customers, and the influence of pleasure on satisfaction, as well as the relationship between customer satisfaction on the future customer behavior intention. It mainly consists of recommendation intention and revisit intention. The paper analyzed the above eight variables and draws the conclusions. In the hot spring hotel industry and even the development of tourism, there are the following theoretical contributions and practical contributions.

#### 5.2.1 Theoretical contribution

First of all, the four variable factors of sensory experience belong to an emerging marketing strategy in the past decade, namely sensory marketing. For sensory research, there is a long history of research, and it is not the first achievement in recent years. However, it is indeed a novel research direction to systematize sensory marketing and make it a systematic marketing method. In the past, there has been a lot of literature on sensory marketing in recent years. For example, Taylor and Francis (2020) have conducted a systematic and integrated analysis of sensory marketing. However,

up to now, there are still only a few scholars taking sensory experience as a pre-variable, and even if it appears, it is also aimed at the more macro academic field including the whole tourism industry and the marketing industry and so on. It is rare to focus on the hot spring hotel industry as a research object, so the study fills the gap in the field to some extent.

Finally, the customer behavior intention, namely recommend intention and revisit intention as two outcome variables may be relatively common in tourism, but for the micro hot spring hotel industry, the influence between the visual experience, olfactory experience, auditory experience and tactile experience recommend intention and revisit intention, and the connection between pleasure and customer satisfaction, is a more innovative academic attempt.

### 5.2.2 Practice contribution

First of all, after this research, the author has a more intuitive understanding of sensory marketing, especially for the diverse leisure function areas inside the hot spring hotel. Their rich entertainment activities make the hot spring hotel and the general hotel are significantly different. At the same time, it also provides a huge play space and innovation space for the display of sensory marketing. Different from the traditional marketing means, sensory marketing has a series of initial sensory experience through the sensory experience and stimulation from different channels, especially the tangible and even intangible sensory influence, making customers without being aware of it. For example, uninterrupted background music in the hotel lobby, pleasant hotel fragrance, suitable indoor temperature, etc. For customers, the visual experience is more intuitive, which makes customers have a great impact on the first impression and brand impression of the hotel. Because when customers do not have a deep understanding of the internal products or service quality of the hot spring hotel, they can only rely on the most intuitive visual, auditory, smell and so on to speculate or feel. Therefore, the hot spring hotel managers can properly transform the marketing means through the conclusion of this study, and the reasonable use of sensory marketing may bring unexpected marketing effects.

Secondly, for the conclusion of the research, the government, such as the National Tourism Administration and local scenic spots, will use the creativity of sensory marketing to promote the benign development of hot spring hotels, develop more diversified tourism markets, promote cultural tourism, and rationally apply sensory marketing in more markets.

Finally, the ultimate goal of the analysis results of customers' future behavior intention is to improve customer loyalty, how to maintain and improve customer loyalty, and the most important thing is to do a good job in customer relationship management. In the process of customer relationship management, the theoretical basis depends on the planning behavior theory (Conner & Armitage, 1998). Therefore, through the study of the two behavior intentions of customers, it is more conducive to the maintenance of customer relationship. Before that, Khan and Salamzadeh (2022) have also demonstrated the importance of customer relationship theory to customer loyalty. Therefore, maintaining a good relationship with important customers is a necessary prerequisite for the stable development of enterprises. On the one hand, it can effectively reduce the cost, and the cost of retaining an old customer is far lower than the cost of attracting new customers. Once the cost is reduced, the enterprise income will naturally be effectively increased. On the other hand, this study is conducive to enterprises to establish a good corporate image and enhance social influence. Because hot spring hotels to improve the positive word of mouth or positive evaluation, they will make the enterprise have a certain economic income guarantee. At the same time, they also establish a high-quality corporate image, bring benefits to the future industrial development of enterprises. Therefore, for the hot spring hotel managers, the customer relationship management is a problem worth studying continuously.

### 5.3 Research Limitations and future perspectives

#### 5.3.1 Limitations

First, there are limitations to the study subjects and the study area samples. The samples collected in this study were all sourced from mainland China. Because each research object will be influenced by their own cultural background and values. Thus, the choices made are not sufficiently representative.

Secondly, there is a single nature of customers' emotional perception in the research model. Since the intermediate research value of the model, only the single variable of pleasantness is selected to reflect the emotional influence of sensory experience on customers. However, according to the PAD emotion model of Mehrabian and Russell (1974), this study shows that the way of customers' sensory experience is not only reflected in pleasure, but also affected by sensory experience in arousal and dominance.

#### 5.3.2 Future Direction

First, the huge differences in Chinese and Western culture and geography may give respondents a very different view of the same issue. Therefore, in the future research on sensory marketing and hot spring hotels, the research sample location can be expanded, and the research area can be expanded to regions outside China, such as Europe and the United States or some representative Asian countries. In this way, the study object and study area will be more comprehensive and more representative than before.

In addition, the human brain, one of the most complex human regions, is changed according to its environment. Therefore, the emotions generated by different sensory experiences are also diverse. In view of the single limitation of emotional factors, in the next study, the author will fully refer to the architecture of the PAD model, so as to reasonably increase the variables of emotional factors. In future studies, other emotional variables will also affect customer satisfaction to varying degrees.

Finally, more regulatory variables will be added into the existing models in the future, such as gender, education background, etc. After that, the target customer group will be further segmented, that is, to explore the depth of research, and to further study the sensory experience, emotions and subsequent behavior intentions of the target customer group with different characteristics. Thus, it is conducive to promote the hot spring hotel managers to develop more detailed marketing strategies.

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