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## Perceptions of Chinese restaurants in the U.S.: What affects customer satisfaction and behavioral intentions?

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## ABSTRACT

This study investigates American customers' perceptions of Chinese restaurants in the U.S., using the Importance–Performance Analysis (IPA) approach. This study also examines which attributes of Chinese restaurants influence American customers' satisfaction and behavioral intentions. The IPA shows that environmental cleanliness and attentive service are two important areas where Chinese restaurateurs can make improvements. In addition, food taste and service reliability appear to be key attributes for Chinese restaurants' success. Overall, this study indicates that food quality, service reliability and environmental cleanliness are three pivotal attributes to create satisfied customers and positive post-dining behavioral intentions. Chinese restaurant managers should reasonably allocate their limited resources to restaurant attributes based on their contributions to customer satisfaction and behavioral intentions.

### 1. Introduction

The United States is a multicultural and multiethnic nation and this national trend of diversity is expected to consistently increase (Josiam and Monteiro, 2004; Sukalakamala and Boyce, 2007). One reflection of this cultural and ethnic diversity is the variety and prosperity of ethnic restaurants in the American foodservice market. The U.S. ethnic food market generates \$75 billion in annual sales, around 65% of which is attributed to the foodservice industry (US ethnic food market, 2005). Yet, the fast growth of ethnic restaurants is not driven entirely by the growing number of new immigrants. In fact, 75% of ethnic food consumption comes from non-ethnic customers (US ethnic food market, 2005). As lifestyles change and dining out becomes more and more commonplace, many customers desire new flavors and experiences.

Along with this popularity is the rapid development of Chinese restaurants. According to *Chinese Restaurant News* (2007), there are about 43,139 Chinese restaurants in the United States, which is more than the total number of all McDonald's, Wendy's and Burger King domestic outlets combined. Chinese restaurants generate over \$17.5 billion annual sales, accounting for about one fourth of overall annual sales generated by ethnic restaurants in the U.S. (*Chinese Restaurant News*, 2007). Known for its good taste and

great value for the price, Chinese cuisine is among the “big three” most popular ethnic cuisines in the U.S. foodservice market (National Restaurant Association, 1995). It is estimated that 90% of the American population has tried Chinese food and 63% of Americans eat Chinese food each month (George, 2001). Facing more sophisticated American consumers and increasing competition in the restaurant industry, Chinese restaurants can no longer succeed by depending on good taste or low price alone. According to National Restaurant Association (2000a,b), due to an increased familiarity with ethnic food, American customers' attitudes toward ethnic cuisine have recently changed. Today, an exotic experience is not enough to attract consumers to an ethnic restaurant. Customers are no longer willing to trade off inferior service or atmosphere for an opportunity to try new flavors. They prefer an excellent overall dining experience. Moreover, Chinese restaurants are facing increasing challenges from other emerging Asian restaurants and from the changing tastes of American customers who prefer healthy or spicy food. Therefore, a better understanding of the key attributes influencing customer satisfaction and post-dining behavioral intentions in Chinese restaurants will provide important practical implications for Chinese restaurant operators.

From an academic perspective, despite the importance and popularity of ethnic restaurants in the foodservice industry, this area has received little research attention. Among the few studies of ethnic restaurants, topics focused on customers' motivations, selection criteria for eating at an ethnic restaurant, and the role of authenticity in ethnic restaurants (Qu, 1997; Josiam and Monteiro, 2004; George, 2001; Ebster and Guist, 2004; Sukalakamala and

Boyce, 2007). There has been no research exploring the key attributes affecting customer satisfaction and behavioral intentions in ethnic restaurants, which are of central interest to restaurant operators. Often, perceived quality has been seen as one of the most important antecedents of customer satisfaction and behavioral intentions in the service industry (Namkung and Jang, 2007). For a restaurant, perceived quality mainly consists of food quality, service quality and atmospheric quality. Based on the linkage of perceived quality, customer satisfaction and behavioral intentions, the overall purpose of this study is to identify the key attributes affecting customer satisfaction and behavioral intentions in Chinese restaurants. More specifically, the research objectives are: (1) to identify American customers' perceived importance of restaurant attributes when selecting Chinese restaurants; (2) to examine American customers' perceptions regarding the performance of Chinese restaurants; (3) to discover the restaurant attributes that influence American customers' satisfaction with Chinese restaurants; and (4) to identify the attributes affecting post-dining behavioral intentions toward Chinese restaurants.

## 2. Literature review

### 2.1. Ethnic cuisine development and Chinese restaurants in the U.S.

In the past few decades, with the influx of new immigrants as well as the diversifying tastes of Americans, ethnic foods have become widely available and increasingly popular in the U.S. foodservice market (Josiam and Monteiro, 2004). Traditional ethnic cuisines such as Italian, Mexican and Cantonese Chinese have become so familiar to American customers that they are perceived as mainstream American foods (Mills, 2000). In the meanwhile, many emerging ethnic cuisines such as Caribbean, Mediterranean and Pan-Asian have also gained wide acceptance in recent years (US ethnic food market, 2005).

Chinese cuisine arrived in the U.S. with the first railroad-construction workers brought over to the west coast of the U.S. in the nineteenth century (Freeman, 2008). From the first Cantonese style Chinese restaurant opened in San Francisco in 1849, it rapidly penetrated towns and cities all over the U.S. and became part of the American experience (Chen and Bowen, 2001). Cantonese style cuisine, characterized by its light sweet and sour flavors, is the most popular Chinese cuisine in the U.S. In recent years, other styles of Chinese cuisine have also become familiar to American customers, such as Szechwan, Hunan and Mandarin styles. The first two styles are famous for their hot and spicy flavors, while the last one is characterized by light, elegant and mildly seasoned foods (George, 2001). According to the National Restaurant Association (1995), customers perceived Chinese cuisine as a great value for the price, good for carryout, rich in flavor and difficult to prepare at home.

Although there are a few Chinese restaurant chains operating in the U.S., such as P.F. Chang's China Bistro and Panda Express, most Chinese restaurants are family-owned or single shop restaurants. A typical Chinese restaurant has a Chinese name outside, is decorated with Chinese-styled pictures and artifacts, such as Chinese Brush Landscape Paintings and red lanterns, offers a menu printed in both Chinese and English, and provides Chinese-characterized tableware, such as chopsticks and Chinese teakettles and cups. In the last twenty years, Chinese restaurants have been facing intense competition among themselves due to fast development and expansion in the U.S., as well as from other emerging Asian restaurants such as Indian, Japanese, Korean, Thai, and Vietnamese (Jang and Ha, in press; Jang et al., 2009). Thus, maintaining customer satisfaction and repeat patronage may be more important for Chinese restaurants than ever before.

### 2.2. Customer satisfaction and related theories

The topic of "customer satisfaction" has held a significant position in the marketing literature over the decades since satisfied customers can generate long-term benefits for companies, including customer loyalty and sustained profitability (Homburg et al., 2006). Researchers have explained the mechanism of customer satisfaction with a number of distinct theories, such as expectancy-disconfirmation theory (Oliver, 1981), contrast theory (Howard and Sheth, 1969), assimilation or cognitive dissonance theory (Anderson, 1973), equity theory (Oliver and Swan, 1989), and value-percept theory (Westbrook and Reilly, 1983). Among them, the most widely accepted theory is the expectancy-disconfirmation theory. According to this theory, customers' satisfaction judgments are the results of comparisons between customers' expectations and perceived performance. If the perceived performance exceeds the expectation, the expectation is positively disconfirmed and the customer is satisfied. On the contrary, if the perceived performance falls short of the expectation, the expectation is negatively disconfirmed and the customer is dissatisfied. Another influential theory for customer satisfaction is the equity theory. This theory suggests that satisfaction occurs when customers perceive that they have obtained more benefits compared to their cost (e.g. money, time and effort) and perceived value is an appropriate factor in measuring satisfaction (Oliver and Swan, 1989; Yuan and Jang, 2008).

Another commonly used theory, the three-factor theory, provides a basic explanation for the structure of customer satisfaction. This theory claims that three independent satisfaction factors influence customer satisfaction in different ways (Kano, 1984; Matzler and Sauerwein, 2002). Basic factors (dissatisfiers) are minimum requirements for satisfaction. Failure to fulfill the minimum requirements causes dissatisfaction, whereas fulfilling or exceeding them does not necessarily lead to satisfaction. Excitement factors (satisfiers) increase customer satisfaction if delivered but do not cause dissatisfaction if not delivered. Performance factors (hybrids) lead to satisfaction if performance is high and to dissatisfaction if performance is low (Fuller and Matzler, 2008). This theory has been validated by empirical studies (e.g. Fuchs, 2004; Matzler et al., 2006) and could provide an additional perspective for understanding the effects of restaurant attributes on customer satisfaction. Basic factors can be seen as the prerequisites for satisfaction, signifying that customers take them for granted. Performance factors are a critical competitive area and directly related to customers' explicit needs and wants. Excitement factors are unexpected by customers, so they can be a "surprise gift" that generates extra delight (Fuller and Matzler, 2008).

### 2.3. Behavioral intention

Behavioral intention can be defined as the degree to which a person has formulated conscious plans to perform or not perform some specified future behavior (Ajzen and Fishbein, 1980). According to the theory of reasoned action (Fishbein and Ajzen, 1975), behavioral intention is the motivational component of a volitional behavior and is highly correlated with the behavior itself (Jang and Feng, 2007). Although there are still arguments about the level of correlation between behavioral intentions and actual action, it seems to be generally agreed that behavioral intention is a reasonable variable for predicting future behavior (Quelette and Wood, 1998). Thus, a good understanding of the determinants of favorable post-dining behavioral intentions such as saying positive things about the restaurant, recommending the restaurant to others, and repeat purchasing can provide practical guidance for restaurant practitioners.

Another construct that is highly related to behavioral intentions is customer satisfaction. It is regarded as one of the key antecedents of post-purchase behavioral intentions because customer satisfaction has a positive effect on the customer's attitude towards the product or service and can reinforce the customer's conscious effort to purchase the product or service again in the future (Oliver, 1980, 1999). However, previous studies have also suggested that factors that influence customer satisfaction are not always in accordance with factors influencing customer behavioral intention. For example, Sulek and Hensley (2004) found that food, atmosphere and fairness of the seating order were all significant predictors of a customer's overall dining satisfaction, but only food quality predicted post-dining behavioral intention. In examining food quality in restaurants, Namkung and Jang (2007) reported that food temperature had a significant effect on customer satisfaction but no effect on behavioral intention. Conversely, healthy options were a direct determinant of behavioral intentions but did not influence customer satisfaction. Therefore, there is a practical need to investigate the effects of restaurant attributes on both customer satisfaction and behavioral intention.

#### 2.4. Factors influencing customer satisfaction and behavioral intentions in restaurants

Reuland et al. (1985) suggested that hospitality services consist of a harmonious mixture of three elements: the material product, the behavior and attitude of the employees, and the environment. Berry et al. (2002) also proposed three categories of cues that present themselves in the service experience: functional cues (technical quality of the service), mechanic cues (nonhuman elements in the service environment) and humanic cues (behavior of service employees). Based on these propositions, the basic restaurant attributes can be said to include food, service and environment. Through a literature review of dining satisfaction and behavioral intention, all three basic elements were found to directly or indirectly contribute to customers' overall satisfaction with a restaurant experience and their post-dining behavioral intentions.

##### 2.4.1. Food quality

As the core product of a restaurant, food plays a pivotal role in the restaurant experience. Food quality has been generally accepted as a major factor influencing customer satisfaction and post-dining behavioral intention. For example, Dube et al. (1994) measured the relative importance of seven restaurant attributes in repeat-purchase intention in an upscale restaurant setting and found that food quality was far more important to restaurant customers than all other attributes. Sulek and Hensley (2004) investigated the relative importance of food, physical setting, and service in a full-service restaurant and found that food quality was the most important factor influencing satisfaction and the only factor predicting behavioral intention. Namkung and Jang (2007) evaluated the relationships of individual attributes that constitute food quality (e.g. food presentation, menu variety, healthy options, taste, food freshness and temperature) with customer satisfaction and behavioral intentions. The findings indicated that food presentation, taste and temperature were significantly related to customer satisfaction whereas food presentation, taste and healthy options (instead of temperature) were significant predictors of behavioral intention. Besides the above-mentioned six individual attributes, "food safety" is also an important cue for evaluating food quality. "Although food-safety defects are not always immediately apparent, customers do tend to notice undercooked food, food with an off taste, or foreign material in their food" (Sulek

and Hensley, 2004). Thus, food safety may serve as the most basic and lowest standard when judging quality.

##### 2.4.2. Service quality

In the service literature, perceived service quality is defined as the customer's judgment of the overall excellence or superiority of the service (Zeithaml, 1988). It is the customer's subjective evaluation, resulting from a comparison of expectations and perceived performance. SERVQUAL (Parasuraman et al., 1988) is the instrument most often used for measuring perceived service quality in the marketing literature. It consists of five service dimensions, namely, tangibles (physical facilities, equipment, and appearance of personnel), reliability (ability to perform the promised service dependably and accurately), responsiveness (willingness to help customers and provide prompt service), assurance (knowledge and courtesy of employees and their ability to inspire trust and confidence) and empathy (caring, individualized attention the firm provides its customers). To adapt SERVQUAL to the restaurant industry, Stevens et al. (1995) modified several items from the original SERVQUAL and developed DINESERV to measure perceived service quality in restaurants.

In the restaurant industry, since customers not only evaluate the quality of food but also the service encounters during their dining experience, perceived service quality is seen as another core determinant of customer satisfaction and behavioral intention. For example, Kivela et al. (1999, 2000) proposed a comprehensive model for dining satisfaction and return patronage. Their study indicated that the probability of return patronage was dependent on customers' satisfaction with five aspects of a restaurant: first and last impressions, service quality, ambience quality, food quality and feeling comfortable eating there, and reservations and parking. Ladhari et al. (2008) investigated determinants of dining satisfaction and post-dining behavioral intentions, and concluded that perceived service quality influenced customer satisfaction through both positive and negative emotions. Customer satisfaction, in turn, influenced recommendation, customer loyalty and willingness to pay more. Some studies even found that service quality was more important than food quality in explaining dining satisfaction. For instance, Yuksel and Yusel (2002) suggested that service quality had the most significant effect on dining satisfaction at an aggregate market level, and particularly for adventurous or healthy food seekers. Andaleeb and Conway (2006) examined the factors that explained customer satisfaction in the full-service restaurant segment. Their results suggested that compared with food quality/reliability, physical design and price, service responsiveness was the most important contributor to customer satisfaction.

##### 2.4.3. Atmospherics

Atmospherics is perceived as the quality of the surrounding space. According to Kotler (1973), it is the conscious designing of space to produce specific emotional effects in buyers that enhance their purchase probability. Atmospherics is made up of a set of elements, such as music, lighting, color and scent.

Research in environmental psychology has suggested that atmospherics has a powerful impact on people's emotions, attitudes and behavior. Mehrabian and Russell (1974) first introduced a theoretical model to explain the impact of environmental stimuli on individual behavior. The model claims that the physical environment could influence people's emotional responses (such as pleasure and arousal), which in turn elicits approach or avoidance behavior toward the environment. This model has gained consistent support from numerous empirical studies in different service settings, such as retail stores and hotels (Baker and Cameron, 1996; Chebat and Michon, 2003). In the

restaurant context, [Ryu and Jang \(2007\)](#) explored the combined effect of multiple atmospheric variables on behavioral intentions in upscale restaurants. Their findings supported that ambience (e.g. music, aroma and temperature) and employee appearance had the most important influence on customers' emotional responses, which in turn affected customers' post-dining behavioral intentions.

#### 2.4.4. Other factors—price fairness and authenticity

Besides food, service and atmospherics, perceived price fairness could be another factor that influences customer satisfaction and behavioral intentions ([Bei and Chiao, 2001](#); [Xia et al., 2004](#); [Andaleeb and Conway, 2006](#)). Perceived price fairness is often defined as whether the price is seen by consumers as reasonable, acceptable, and just ([Bolton et al., 2003](#)). It is based on consumers' internal reference prices, which could be generated by the last price paid, the price most frequently paid and market prices in similar transactions ([Kahneman et al., 1986a,b](#)). [Kimes and Wirtz \(2002\)](#) suggested that customers might view the price as unfair if it is not justified by prevailing market conditions. In addition, perceived price fairness can also be explained by the principle of dual entitlements ([Kahneman et al., 1986a,b](#)). This principle posits that firms are entitled to a reasonable profit and customers are entitled to a reasonable price. An increase in price is perceived to be fair if it is due to a cost increase. Otherwise, it is perceived to be unfair if the price is increased without any underlying cost increase. Perceived fairness of price is found to be positively related to customer satisfaction and loyalty ([Bei and Chiao, 2001](#)), whereas perceived unfairness of price can lead to immediate negative attitudinal and behavioral responses such as dissatisfaction, complaining and switching to other providers ([Xia et al., 2004](#)).

Authenticity is an attribute that could be specifically relevant to ethnic restaurants. Authenticity refers to whether the food and environment reflect the genuine or 'real' taste and culture of the ethnic origin. In other words, the environment and cuisine are not adjusted to meet local tastes and customers who are familiar with the culture of the ethnic origin can judge its authenticity ([Ebster and Guist, 2004](#)). Compared with American restaurants, ethnic restaurants usually make use of ethnic art, décor, music and various signals to create an "authentic" dining experience for customers. Some scholars even describe ethnic restaurants as cultural ambassadors of the home country and the dining experience in an ethnic restaurant as "culinary tourism" ([Wood and Munoz, 2006](#)).

Based on the literature review, this study investigated customers' perceptions of Chinese restaurants in terms of food-related attributes, service-related attributes, atmosphere-related attributes and other attributes (price and authenticity), and identified the key attributes affecting customer satisfaction and behavioral intentions.

### 3. Method

#### 3.1. Measurement

Based on a thorough literature review, we developed a self-administered questionnaire. The questionnaire was comprised of four sections. The first section asked respondents to rate the importance of each restaurant attribute when considering Chinese restaurants, using a 7-point Likert-type scale, where 1 = not important at all and 7 = extremely important. A total of 24 restaurant attributes were identified based on the relevant literature and classified into four categories: food-related attributes, service-related attributes, atmosphere-related attributes and other attributes. Food-related attributes included seven items: food

presentation, variety, healthy options, taste, freshness, temperature and safety ([Namkung and Jang, 2007](#); [Sulek and Hensley, 2004](#)). Service-related attributes consisted of seven items: (1) employees are friendly and helpful; (2) employees are attentive; (3) employees have knowledge of the menu; (4) service is prompt; (5) service is dependable and consistent; (6) employees serve food exactly as ordered; and (7) employees provide an accurate guest check. These items were selected based on previous studies ([Kivela et al., 1999](#); [Andaleeb and Conway, 2006](#)) and identified through an expert review. They reflected the four dimensions, excluding the tangible dimension, of the original DINESERV scales ([Stevens et al., 1995](#)). Atmosphere-related attributes, based on [Ryu and Jang \(2007, 2008\)](#), included internal design and décor, lighting, music, temperature, odors, cleanliness and employee appearance. Price was measured in terms of the perceived fairness of price and authenticity was measured in terms of food authenticity and environmental authenticity ([George, 2001](#)).

The second section measured respondents' perceived performance of the same 24 restaurant attributes based on their dining experience in the surveyed restaurants using a 7-point Likert-type scale, where 1 = very poor and 7 = excellent. The third section asked the respondents to reflect on their overall satisfaction with the surveyed restaurant and post-dining behavioral intentions. Satisfaction was measured using two items based on [Oliver's \(1997\)](#) study: "I am satisfied with this restaurant" and "I am pleased to have visited this restaurant." Behavioral intention was measured using three items that were modified from [Zeithaml et al. \(1996\)](#): "I would like to come back to this restaurant in the future," "I would recommend this restaurant to my friends or others," and "I would say positive things about this restaurant to others." All of these items were measured by a 7-point Likert-type scale, where 1 = strongly disagree and 7 = strongly agree. The final section of the questionnaire concerned respondents' relevant personal information, such as age, gender, household income and dining-out frequency.

#### 3.2. Data collection

The data for this study was collected from three casual dining Chinese restaurants that offered full table service in a mid-western city in the United States. The average guest check of all the selected restaurants was approximately \$11. The questionnaires were randomly distributed by the investigators in each restaurant to customers who were waiting for checks after dinner. Customers were asked to fill out a survey questionnaire on a voluntary basis. A total of 315 questionnaires were collected and 284 were used for analysis after excluding 31 due to a high percentage of incomplete responses. Among the 284 questionnaires, 92 were collected in a restaurant where there was no background music during the survey period. This might influence the average importance and performance scores of music at an aggregate level.

#### 3.3. Analysis

An importance–performance analysis (IPA) tool and multiple regressions were used to analyze the data. In essence, IPA integrates measures of attribute importance and performance into a two-dimensional grid. It provides an attractive snapshot of the importance of a set of selected attributes in customers' purchase decision processes and how well the products/services met consumer expectations. Thus, it can provide a clear direction for a company's future resource allocation decisions ([Martilla and James, 1977](#); [Oh, 2000](#)). In our study, the median values, rather than the grand means of the importance and performance ratings, were used as the crossing point to separate the IPA grid into four

quadrants. Martilla and James (1977) pointed out that as a measure of central tendency, median values are theoretically preferable to means because a true interval scale may not exist. In addition, “positioning the vertical and horizontal axes on the grid is a matter of judgment. The value of this approach lies in identifying relative, rather than absolute levels of importance and performance” (Martilla and James, 1977).

Before multiple regression analysis, this study checked reliability and validity of constructs using a confirmatory factor analysis (CFA). Subsequently, stepwise multiple regression analyses were then performed to test the effects of food, service, atmospherics and other attributes on customer satisfaction and behavioral intentions via SPSS 15.0. Customer satisfaction and behavioral intentions were regressed separately against food performance, service performance, atmospherics performance and ‘other’ performance. The examples of the tested models (food quality) were expressed as follows:

$$Y_{cs} = \beta_0 + \beta_1X_1 + \beta_2X_2 + \dots + \beta_7X_7 + \epsilon$$

$$Y_{bi} = \beta_0 + \beta_1X_1 + \beta_2X_2 + \dots + \beta_7X_7 + \epsilon$$

where  $Y_{cs}$  is customer satisfaction, measured by the mean of the two-item measurement scores;  $Y_{bi}$  is customer behavioral intention, measured by the mean of the three-item measurement scores;  $X_1$ – $X_7$  are independent variables, representing the individual food-related attributes;  $\beta_0$  is the constant,  $\beta_0$ – $\beta_7$  are the regression coefficients of independent variables; and  $\epsilon$  is the random error.

The assumptions of regression such as normality, constant variance and linearity were checked before the regression analyses. Attribute correlations (Appendix A) and multicollinearity were also checked in the analysis.

#### 4. Results

##### 4.1. Demographic profile of respondents

Table 1 shows the results of the respondents’ demographic and dining profiles. Among the 284 valid respondents, females accounted for 52.5% of diners. The average respondent was 37 years old. The majority of respondents were Caucasian (60.2%), followed by Asian (32%) and other (7.8%). Respondents were most likely to go to a Chinese restaurant with their family (47.6%), followed by friends (27.1%) and relatives (15.2%), and were less likely to dine with business colleagues (2.1%) or by themselves (4.6%).

The above customer profile information indicates that the majority of Chinese restaurant customers are Caucasian, and the main reason for dining at Chinese restaurants is social occasions (family and friends). These results are consistent with findings of National Restaurant Association (2000a,b), which revealed that Chinese cuisine represents “basic family appeal” and attracts almost all consumers (Mills, 2000).

##### 4.2. Importance–performance analysis

###### 4.2.1. Importance of attributes

Table 2 reports the attribute importance ranks and scores. Except music, all other attributes have average scores above four, indicating that these attributes are important when customers select a Chinese restaurant. The five most important attributes were taste, food safety, food freshness, environmental cleanliness and appropriate food temperature. These rankings show the salient positions of food quality and environmental sanitation in customers’ decision-making regarding Chinese restaurants. The five least important attributes were healthy food options, atmo-

**Table 1**  
Demographic profile of respondents.

Items	Percentage
Gender	
Male	52.5
Female	47.5
Ethnicity	
Caucasian	60.2
Native American	1.4
Hispanic	2.5
Asian	32.0
Two or more races	1.4
Other	2.5
Education level	
Less than high school	2.5
High school	17.4
Some college, but no degree	23.1
Bachelor’s degree	25.3
Graduate degrees	31.7
Annual income	
Less than \$40,000	42.1
\$40,000–59,999	15.5
\$60,000–79,999	16.3
\$80,000–99,999	9.1
\$100,000–149,000	9.9
\$150,000 or above	7.1
Dining companion	
Alone	4.6
Family (spouse, parents or children)	47.6
Relatives	15.2
Friends	27.1
Business colleagues	2.1
Others	3.4

spheric authenticity, lighting, interior design and décor, and music. Atmospheric attributes account for four of the five least important factors, indicating that customers do not expect much from the dining environment in Chinese restaurants. However, it is important to keep in mind that the IPA approach identifies relative, rather than absolute, levels of importance. Therefore, when explaining the results of importance ranking, one should not conclude that the dining environment is not important to

**Table 2**  
Importance of Chinese restaurant attributes.

Rank	Attributes	Mean	Std. Dev.
1	Food taste	6.64	.62
2	Food safety	6.58	.84
3	Food freshness	6.55	.75
4	Environmental cleanliness	6.43	.86
5	Appropriate food temperature	6.33	.91
6	Serve food as you ordered	6.19	.94
7	Accurate guest check	6.19	1.02
8	Dependable and consistent service	6.11	.88
9	Prompt service	6.07	.91
10	Fair price	6.05	.93
11	Friendly and helpful employees	6.04	.92
12	Attentive employees	5.93	.99
13	Employees have knowledge of the menu	5.76	1.19
14	Food authenticity	5.74	1.03
15	Variety of menu items	5.56	1.06
16	Neat and well-dresses employees	5.51	1.20
17	Aroma	5.42	1.23
18	Food presentation	5.42	1.18
19	Appropriate room temp	5.38	1.14
20	Healthy options	5.27	1.41
21	Atmosphere authenticity	5.10	1.30
22	Lighting	4.82	1.12
23	Interior design and décor	4.72	1.21
24	Music	3.97	1.48

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