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### Fine-Dining Restaurant Selection: Direct and Moderating Effects of Customer Attributes

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## Fine-Dining Restaurant Selection: Direct and Moderating Effects of Customer Attributes

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*This study examined the relationship among six restaurant attribute factors and three consumer characteristics/behaviors in fine-dining restaurant choice selections. The six factors are described as promotion, price/value, quality expectation, setting, dietary, and variety/innovative characteristics. Gender, age, and dining frequency were shown to impact the strength of the relationship with these six factors. The results of this study provide valuable information for practitioners and future research. Practitioners should consider key target market characteristics to ensure a fit between restaurant attributes and expectations of targeted customers. The findings provide support for the need for researchers to evaluate and control for key customer variables in service encounter research. Age, gender, and dining frequency proved to be important variables in this regard. It should be noted that communications need to identify the attributes (benefits) that are important to diners, but it is the classification variables that allow companies to better identify and reach these consumers.*

**KEYWORDS** fine-dining restaurants, restaurant selection attributes, gender, age, dining frequency

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## INTRODUCTION

In today's competitive marketplace, restaurant customers have a plethora of restaurant choices. In order to survive in this environment, restaurateurs need to practice a strong customer-driven orientation and satisfy customer's needs more effectively than the competition. Restaurant customers often make dining decisions by simultaneously evaluating several criteria. For example, customers might consider food quality, price, promotions, and recommendations, among other benefits desired. Thus, the central questions for restaurant managers are: what are the needs of their targeted consumers and what are the major attributes that influence their fine-dining restaurant choice? It is critical that managers understand customer preferences so that they can integrate these demands into their product and service attributes to gain a competitive edge. Unfortunately, a high percentage of restaurants fail because their management does not understand, appreciate, adapt to, or expect changing market trends (Parsa, Self, Njite, & King, 2005).

Over the past decade, the concept of fine dining has changed substantially in the global market. Traditionally, fine dining was most closely associated with French cuisine. More recently, the Spanish food revolution has created a stir with its groundbreaking scientific cooking style, often associated with molecular gastronomy. Further, what could be described as nontraditional food cities have emerged over the past decade. For instance, in 2007, the world famous Michelin Guide awarded Tokyo more stars than any other city in the world, including Paris. Devoted chefs in the United States and elsewhere are looking to their roots when creating their menu. Fine-dining cuisine, inspired by different ethnic cuisines, has not only become more international but also lighter and more innovative. In today's successful fine-dining restaurants, the stiff formality of the past has decreased significantly; the interior design is more contemporary, and the clientele has become younger.

Thus, each restaurant experience can be thought of as a unique bundle of tangible and intangible products and services provided to the consumer. This unique bundle is no more apparent than in the fine-dining restaurant segment, with many factors impacting customer satisfaction including atmosphere, service, and image. Since all businesses have scarce resources and aim to maximize the value for its customers, leaders and managers in the foodservice field must allocate resources to create a "bundle" that increases guest satisfaction and, hopefully, provides a competitive advantage so that consumers come back or new potential customers are attracted. This process seems increasingly relevant in an era of target marketing techniques and an intensely competitive marketplace. It is assumed that the restaurant industry would want to know what drives customers' choices for fine dining and how they process their decision to choose a specific fine-dining establishment. By understanding which attributes have the most significant

impact on fine-dining customers' purchase decisions, managers can effectively offer products and services that better satisfy their targeted customers' needs. Successful restaurants develop and offer services and products that are valued in the market.

Therefore, this study investigates the attribute contribution for a variety of factors impacting customer restaurant choice decisions in the fine-dining segment and compares the preferences by gender, age group, and dining frequency. Given the increasingly competitive and turbulent nature of the current restaurant environment, this issue is a primary one for business success and survival.

## LITERATURE REVIEW

Over the past few years, some research has been directed toward evaluating a relationship among restaurant attributes and consumer purchase or restaurant satisfaction. This relationship appears to relate to the overall customer experience and ultimately restaurant success. As an example on predicting the future of restaurants, Muller (1999) considered restaurants, first and foremost, as retailers that offer time savings and customer experience. Furthermore, he suggested that restaurant organizations are consumer-driven brands that have systems to support knowledge-based managers so that they can find their competitive edge, which is based on finding a point of differentiation for the consumer (Muller, 1999). The study of Parsa et al. (2005) indicated that successful restaurant owners have a well-defined, distinctive concept that has been conscientiously researched. In the highly competitive and saturated restaurant industry, understanding targeted consumer needs and wants is critical for successful management.

Indeed, it might not be surprising that good food is the basic criteria for choosing a restaurant, but good service and a pleasant setting are also important attributes in a full-service restaurant (Susskind & Chan, 2000). Food quality is the most important factor influencing repeat purchase intentions in full-service restaurants (Sulek & Hensley, 2004), while waiting time is the most critical attribute in quick-service restaurants (Davies & Vollmann, 1990). In general, the most critical factors determining restaurant customers' repeat visits are food quality, appropriate cost, and attentive service (Gupta, McLaughlin, & Gomez, 2007). While taste and presentation are the most important aspects of consumer satisfaction, Namkung and Jang (2007) showed that, overall, food quality significantly impacts customer satisfaction and behavioral intentions.

When consumers evaluate food quality, they judge it on food safety, appeal, and dietary acceptability (Sulek & Hensley, 2004). Food safety relates to such issues as undercooked food and food-borne illnesses. Restaurant customers are more and more aware of and concerned about the safety of

the food they consume in restaurants and the cleanliness of the operation (Knutson, 2000). Food safety is very important for restaurant consumers, as these perceptions may result in the loss of customers if they decide to dine at other restaurants that are considered safer.

Food appeal relates to aspects, such as taste, presentation, temperature, and size of the food portion. Dietary characteristics are becoming progressively more important for restaurants because consumers are more worried about healthy food that is low in calories, fat, or carbohydrates, as well as vegetarian and vegan meals (Siguaw & Enz, 1999). A high percentage of people are allergic to certain foods, and their reactions can range from mild, a slight rash, to life-threatening consequences. About 30% of adults will acquire an allergy in their lifetime to foods such as peanuts, milk, or shellfish, and it is suggested that this number is increasing (Towers & Pratten, 2003).

The study by Parsa et al. (2005) found that food quality is important to the success of restaurants; however, there are many more factors that influence success. Restaurant customers in upscale restaurants stay for a much longer time period, making the physical setting another important aspect. Therefore, besides food quality, the restaurant's atmosphere, including décor, noise level, and cleanliness impact the dining experience (Sulek & Hensley, 2004). The atmosphere of a restaurant is particularly salient because it can either enhance or suppress feelings and emotions, such as pleasure and excitement (Wakefield & Blodgett, 1999). The study by Jensen and Hansen (2007) suggested that harmony is the most emphasized value among experienced restaurant consumers in Norway. Harmony means that a restaurant's atmosphere matches the actual situation, occasion of the meal, and personal preferences of the customer so that he/she has a relaxed and comfortable experience.

Consumers' perception of how the service employee cares for them also affects customer satisfaction (Smith, Bolton, & Wagner, 1999). Knutson's (1988) study indicated that the underlying factors that drive customer satisfaction in restaurants are employee greeting, restaurant atmosphere, speed of service, and convenience. The study by Kim, Lee, and Yoo (2006) on luxury restaurants in Korea showed that beyond food quality, employees' customer orientation, communication, relationship benefits, and price fairness are important predictors of relationship quality. The study by Noone, Kimes, Mattila, and Wirtz (2007) found that too brisk a pace does affect satisfaction levels of consumers dining experiences. Fine-dining consumers are more sensitive to speed of service than customers in casual or upscale restaurants (Noone et al., 2007). Njite, Dunn, and Kim (2008) used in-depth interviews and conjoint analysis to assess the importance of nonfood attributes associated with fine-dining selection preferences. Similar to earlier studies (e.g., Knutson, 1988; Smith et al., 1999), the authors found customer relations to be the most importance attribute in the fine-dining segment. Interestingly, the study indicated price was the least important attribute.

The availability of senior-citizen discounts, being a comfortable place to socialize, close travel distance, and peer recommendations are the most important considerations for consumers over age 55 patronizing specific restaurants (Moschis, Folkman Curasi, & Bellenger, 2003). Hu, Leong, Kim, Ryan, and Warde (2008) investigated senior citizens' perceptions of service level differences in quick-service, casual-dining, and fine-dining sectors. Results indicated substantial differences in service quality expectations (across sectors) and perceived value for this demographic group.

The study by Taylor and Long-Tolbert (2002) suggested that coupon promotion is a powerful marketing tool in developing relationships with existing customers because coupons increase sales during the promotion phase, and it is less expensive than attracting new customers. The customers have already become familiar with the restaurant and this is merely a form of up-selling without being obtrusive. Outback Steakhouse Korea created a competitive advantage by developing customer value through their site selection strategy that developed restaurants located closer to targeted customers (Enz, 2008).

If customers have eaten in a specific fine-dining restaurant before, they will have a more realistic and broad source of background information. On the other hand, if customers have never eaten in a specific restaurant, they may not have immediate information and, thus, may search for other relevant sources of information, such as recommendations of friends or food guides. In general, consumers search for information on products and services so that they can compare the existing alternatives and ultimately make their perceived best purchase decision (Namkung & Jang, 2007).

Bernstein, Ottenfeld, and Witte (2008) considered the impact of menu variability on consumer preferences in an upscale restaurant context. The authors found that daily variability of restaurant menus was an important attribute in a forced-choice scenario for patrons over 25 years of age. But, the study did not find a significant difference in overall menu appeal or differences in likelihood of patronage comparing a fixed menu versus a daily varying menu. These seemingly contradictory results leave open the question as to the relationship among menu variety and patronage decisions. And one could surmise that this contradiction may be the result of several potentially important variables, such as gender, age, and dining behaviors. Other more general studies have focused on the effect of variety seeking on issues such as customer loyalty and retention (Berne, Mugica, & Yague, 2001). Variety seeking is generally defined as a tendency to seek out variety or diversity in purchase choices. Variety seeking behaviors seem to vary by culture, context, and individual. In a restaurant setting, this concept relates to culinary diversity and food variety in restaurant experiences.

Based on the previous research reviewed, greater insight into the information restaurant customers' usage patterns and benefit rankings should enable restaurant organizations to better develop resource allocations,

marketing strategies, and management plans to capture and retain a larger share of the defined target market for their fine-dining restaurant concepts. Consequently, restaurant managers can focus more strategically on their target markets with their operations and marketing activities.

The purpose of this study is to determine which attributes impact and influence customer's choice when considering fine-dining restaurants. Specifically, fine-dining restaurant users are described in terms of restaurant characteristics representing the benefits desired, and these are associated with key demographic and behavioral categories that best describe consumers so they can be reached more easily by the restaurant managers.

## HYPOTHESES

Previous research has suggested the importance of several determinant attributes for restaurants. These categories can be summarized as communication, food, service, setting, and value/convenience. These general areas are not unlike three of the traditional "four Ps" of marketing: communication relates to "promotion;" food, service, and setting relate to "product;" and value/convenience relates to "price" and "place." While earlier research provides evidence of key attributes and common categories, little research has been accomplished to distinguish market segment differences in fine-dining settings (to describe target markets and more easily reach them).

Gender is commonly included in questionnaires in hospitality research, but results have been conflicting on the power to predict choice and relationships in hospitality service encounters (Poria, 2008). In an exploratory study of the gender relationship in a massage service encounter, Poria (2008) pointed out the importance of including gender differences as a crucial factor in understanding and explaining common service encounters. While previous studies have provided conflicting results, this study follows Poria's (2008) results and hypothesizes differences between genders on the perceived levels of importance of fine-dining restaurant attributes. Specifically, from the literature review above the following hypotheses were distilled.

Hypothesis 1: The importance level of key fine-dining restaurant attributes will vary by gender.

Age is a frequently used variable in marketing research, is commonly included in questionnaires concerning restaurant selection/satisfaction, and has been shown to impact the importance of various restaurant attributes (e.g., Moschis et al., 2003). Thus, because age groups will vary in terms of values, disposable income, and life experiences, it is hypothesized that

age will impact the importance of key fine-dining attributes. Formally stated:

Hypothesis 2: The importance level of key fine-dining restaurant attributes will vary by age.

A commonly used customer behavior representing possible benefits that may impact the importance level of fine-dining restaurant attributes is the dining frequency of the customer. This variable is often described by other related terms, such as involvement (Gursoy & Gavcar, 2003). One benefit this variable surrogates in a restaurant setting is “the desire not to cook and wash dishes as frequently as possible.” In other words, dining frequency is driven by differences in needs, values, and interests of individuals. These individual differences are also likely to impact decision-making behavior with perceived differences in value placed on key restaurant attributes (e.g., Varki & Wong, 2003). Specifically, it is hypothesized that

Hypothesis 3: The importance level of key fine-dining restaurant attributes will vary by fine-dining frequency.

## METHODOLOGY

To assess restaurant selection factors, a survey methodology was used and 574 completed were collected surveys from respondents. Following the data collection methods used by earlier authors in this area (e.g., Chung & Hoffman, 1998), data was gathered using the following procedures. Respondents were contacted through a convenience sampling procedure using a questionnaire developed by the authors. Age categories made up the following percentage in the sample: 18–25 years (57.5% of sample), 26–35 years (28.7% of sample), and greater than 35 years (13.8% of sample). The gender of the respondents was 51.4% male and 48.6% female. This appears, generally, to be representative on national reports for patrons of fine-dining restaurants for the regional norms in question (Deloitte & Touche, 2007), although the national data shows a slightly higher percentage of older patrons. The data was collected from one metropolitan area in the southwestern United States. Participants were contacted at the predetermined locations of shopping malls and local attractions.

Fine dining was defined as establishments where an average check is \$40 or more per person. The survey included 17 items (with a 5-point scale, 1 = not important to 5 = very important) that were determined by the authors as potentially important selection factors based on the literature review and a focus-group discussion on key selection factors. Because this study looked at higher-end dining situations, also included were items shown to be important for success in high-end restaurant settings, such as

ratings in food guides (Namkung & Jang, 2007), variety of menu (Berne et al., 2001), and innovative menu items (cf., Ottenbacher & Harrington, 2007). This methodology allows results to be reported based on overall factors, as well as to differentiating key factors across diners based on age, gender, and dining frequency.

## Tests

Statistical Package for the Social Sciences (SPSS; Version 15) was used to run linear regression statistical tests on the data. Upon obtaining the residuals, extensive data analysis was conducted. Specifically, the first thing checked was whether the homogeneity property was satisfied (Levene's test). The process then continued by checking if interdependence among the predictors was present, that is, multicollinearity was checked for by using variance inflation factors (VIFs). Finally, using the standard Shapiro-Wilkes statistic, it was confirmed that the normality assumption was not violated. The diagnostic analysis ended by testing for outliers applying the usual deleted student tests and the Cook's distance. These analyses showed no evidence suggesting any violations of the assumptions of the modeling process to be used.

## INDEPENDENT VARIABLES

To test the hypotheses, three independent variables were included in the tests: gender, age, and frequency of fine dining. Because gender is a commonly used variable in marketing research, gender was included in all tests as the first independent variable in the regression equation. Gender is a nominal data variable and was dummy coded as 0 for females and 1 for males (Nunnally & Bernstein, 1994).

It has been shown that age is an important predictor variable in restaurant choice research. Earlier research suggests mixed results based on age groups (e.g., Moschis et al., 2003). Therefore, age was used in test 1 for this study and was entered as the actual age in years, a metric variable, for each respondent.

Frequency of consumer fine dining appears in previous research as an important benefit and descriptor variable for restaurant choice and certainly must be considered. Respondents were asked to indicate their dining frequency ranging from "one or fewer times per year," "two or more times per year," "one or more times per month," or "one or more times per week." Because these measures are ordinal with no metric scale properties, responses were dummy coded as low fine-dining frequency (0) and high fine-dining frequency (1) using the median frequency of the sample.

## DEPENDENT VARIABLES

Restaurant attributes were categorized by factors and utilized as dependent variables for fine-dining restaurant customers. The final model consisted of 6 factors using the 17 questionnaire items included in this study. Because of the exploratory nature of the items in this study, the initial factors were derived through a principal component solution. The terminal solution utilized a varimax rotation. Because the criterion of independence was not as strong a motivator for this choice, varimax rotation was used for ease of interpretation as it provides the simplifying assumption of orthogonality (Nunnally & Bernstein, 1994). The inclusion of an item was based on the following criteria: factor loading  $> 0.40$ , eigenvalues  $> 1.00$ , an inspection of the scree plot, and the authors' interpretation of the factor meaning (Rahim & Magner, 1995).

The rotated solution of the principal component analysis is shown in Table 1 along with a short description of each item. From this solution, six factors emerged that provided interpretable variables with appropriate reliability measures. The six-component solution accounted for 67.6% of the total variance. The factors included: "promotion" (3 items), "price/value" (4 items), "quality expectation" (4 items), "setting" (2 items), "dietary issues" (2 items), and "variety/innovation interests" (2 items). The value for each dependent variable (factor) was calculated as the summed score for all items in each component. Table 1 provides a listing of items in each factor, the loadings, percentage of variance explained, reliability (internal consistency for each factor), and the mean and ranking of each variable. All reliability coefficients were above the recommended level of 0.60 for exploratory studies (Hair, Black, Babin, Anderson, & Tatham, 2006), ranging from 0.66 to 0.80.

### FACTOR 1: PROMOTION

This measure represents three variables from the questionnaire and explained 23.3% of the total variance. Variables included in this factor were ratings in food guides (e.g., Zagat), recent review(s) in newspaper/magazine, and magazine or newspaper ads.

### FACTOR 2: PRICE/VALUE

This measure represents four variables and explained 11.9% of the total variance. Variables included in this factor were speed of service, value of the food and drinks, value of experience, and price.

### FACTOR 3: QUALITY EXPECTATION

This measure represents four variables from the questionnaire and explained 10.2% of the total variance. Variables included in this factor were atmosphere

**TABLE 1** Principle Components of Important Fine-Dining Restaurant Attributes (After Varimax Rotation), Means and Rank

Items and principle components	Loadings	Percent variance explained	Reliability (Cronbach's $\alpha$ )	Mean	Rank
Promotion		23.3	0.78		
Ratings in food guides (e.g., Zagat)	0.853			3.11	14
Recent review(s) in newspaper/magazine	0.877			3.01	15
Magazine or newspaper ads	0.688			2.80	16
Price/value		11.9	0.69		
Speed of service	0.661			4.10	3
Value of the food and drinks	0.802			4.16	2
Value of experience	0.684			4.28	1
Price	0.708			3.89	5
Quality expectation		10.2	0.66		
Atmosphere of the restaurant	0.794			4.00	4
Interior design of the restaurant	0.678			3.82	7
Reputation of the restaurant	0.636			3.78	8
Recommendation from friends	0.525			3.75	9
Setting		8.9	0.77		
Noise level allows good conversation	0.705			3.67	11
Privacy	0.784			3.69	10
Dietary		7.2	0.80		
Flexibility for dietary requests	0.889			3.22	13
Healthy alternatives	0.893			3.39	12
Variety/innovative		6.0	0.68		
Innovative menu items	0.713			3.69	10
Variety of menu	0.847			3.88	6

of the restaurant, interior design of the restaurant, reputation of the restaurant, and recommendation from friends.

#### FACTOR 4: SETTING

This measure represents three variables and explained 8.9% of the total variance. Variables included in this factor were noise level, allows good conversation, and privacy.

#### FACTOR 5: DIETARY

This measure represents two variables from the questionnaire and explained 7.2% of the total variance. Variables included in this factor were flexibility for dietary requests and healthy alternatives.

#### FACTOR 6: VARIETY/INNOVATIVE

This measure represents two variables and explained 6.0% of the total variance. Variables included in this factor were innovative menu items and variety of menu.

## RESULTS

This study uses a moderated regression model to evaluate the direct and moderating effects of demographic and psychographic variables on restaurant attribute importance. To interpret the results, a four-step process was used: (1) estimating the original, nonmoderated equation (Model 1, Table 2); (2) estimating the moderated relationships (the original equation plus moderator variables); (3) assessing the change in  $F$  and  $R^2$  with moderators added; and (4) plotting statistically significant moderators for ease of interpretation (Figure 1). For all tests shown in Tables 2 and 3, standardized beta coefficients are reported to maintain a common scale for interpretation.

### Ranking of Attributes

Prior to an explanation of the regression results, an interpretation of the overall attribute rankings would be helpful (see Table 1). While the promotion factor explained the greatest percentage of variance, the price/value factor contained three of the top ranked attributes (value of the experience, value of food and drinks, and speed of service). This is most probably due to the factor analysis algorithm reflecting the homogeneity of the promotion factor variables related to food guide and other media evaluations and reviews. Attributes in the quality expectation factor appear to be the second level of importance rankings based on overall averages. Variety of menu and innovative menu items also rated in the top 10 in importance. The perceived importance of items in the promotion factor ranked the lowest overall.

**TABLE 2** Model 1: Direct Effects, Factors Regressed on Demographic Independent Variables

Variables	Promotion	Price/ value	Quality expectation	Setting	Dietary	Variety/ innovation
Gender	-0.01	-0.07 <sup>+</sup>	-0.07 <sup>+</sup>	-0.02	-0.10*	-0.05
Age	0.14***	-0.08*	0.10**	0.18***	0.09*	0.01
Dining frequency	0.11**	0.05	0.14***	0.19***	0.08 <sup>+</sup>	0.08 <sup>+</sup>
$F$	6.54***	2.49 <sup>+</sup>	7.05***	15.06***	4.87**	1.65
$R$	0.18	0.11	0.19	0.27	0.16	0.09
$R^2$	0.09	0.05	0.09	0.12	0.06	0.03
$R^2$ adj.	0.08	0.04	0.09	0.11	0.06	0.01

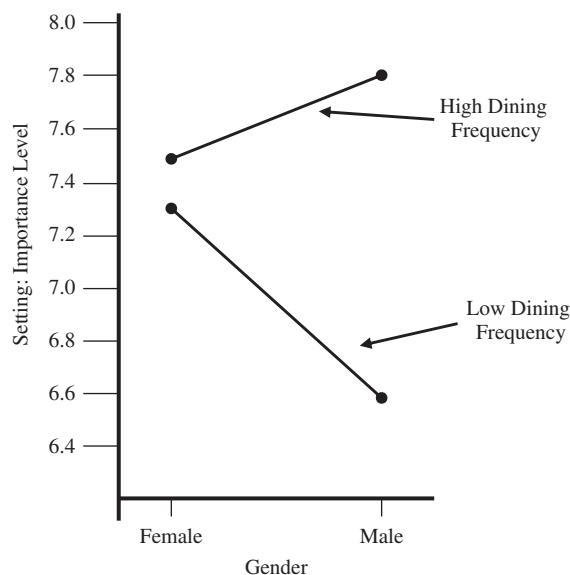
Note: All betas are standardized.

\* $p < 0.05$ .

\*\* $p < 0.01$ .

\*\*\* $p < 0.001$ .

<sup>+</sup> $p < 0.10$ .



**FIGURE 1** Interaction between gender and dining frequency on the setting importance.

**TABLE 3** Model 2: Interactions Included Regressed on Demographic Independent Variables

Variables	Promotion	Price/ value	Quality expectation	Setting	Dietary	Variety/ innovation
Gender	-0.01	-0.18	-0.06	-0.40*	-0.30	-0.05
Age	0.14 <sup>+</sup>	-0.07	0.13	0.09	0.01	0.07
Dining Frequency	-0.08	-0.07	0.20	-0.14	-0.12	0.17
Gender × age	-0.05	0.10	-0.01	0.27	0.21	0.04
Gender × dining frequency	0.30	0.41 <sup>+</sup>	0.01	0.52*	0.23	0.14
Age × dining frequency	0.17	0.11	-0.07	0.24	0.21	-0.08
Gender × age × dining frequency	-0.25	-0.41	-0.01	-0.33	-0.23	-0.20
<i>F</i>	3.36**	1.73 <sup>+</sup>	3.05**	8.17***	2.32*	1.10
<i>R</i>	0.20	0.15	0.19	0.30	0.17	0.12
<i>R</i> <sup>2</sup>	0.13	0.10	0.12	0.16	0.11	0.09
<i>R</i> <sup>2</sup> adj.	0.11	0.08	0.12	0.14	0.10	0.08
Chg. <i>R</i> <sup>2</sup>	0.02	0.02	0.00	0.02	0.01	0.01
Chg. <i>F</i>	0.98	1.15	0.08	2.86*	0.42	0.70

Note: All betas are standardized.

\**p* < 0.05.

\*\**p* < 0.01.

\*\*\**p* < 0.001.

<sup>+</sup>*p* < 0.10.

### Model 1

Table 2 provides results of the six attribute factors regressed on gender, age, and fine-dining frequency. For these tests, five of the six equations had

significant *F* values: promotion ( $F = 6.54, p < 0.001$ ), price/value ( $F = 2.49, p < 0.10$ ), quality expectation ( $F = 7.05, p < 0.001$ ), setting ( $F = 15.06, p < 0.001$ ), and dietary ( $F = 4.87, p < 0.01$ ). The variety/innovation factor had a nonsignificant *F*-value. Additionally, equations with the setting ( $R = 0.27$ , adjusted  $R^2 = 0.11$ ), quality expectation ( $R = 0.19$ , adjusted  $R^2 = 0.09$ ), and promotion ( $R = 0.18$ , adjusted  $R^2 = 0.09$ ) factors had the highest *R* and  $R^2$  values.

#### GENDER

Because females were coded as the reference group (0), the results can be interpreted as differences between the female reference and male respondents. Thus, a negative value indicates males rate the importance of a restaurant attribute category as less important.

As shown in Table 2, Hypothesis 1 received marginal support. The results in Model 1 (direct effects only) provide three statistically significant and negative betas. The regression equations with dependent variables of price/value, quality expectation, and dietary factors provided significant results with the gender dummy. The significant negative relationships among gender and factors are: price/value ( $\beta = -0.07, p < 0.10$ ), quality expectation ( $\beta = -0.07, p < 0.10$ ), and dietary ( $\beta = -0.10, p < 0.05$ ). One of these direct relationships was beyond a marginally significant result (dietary). The results indicate females rated price/value attributes, quality expectation attributes, and dietary attributes as more important than their male counterparts.

#### AGE

Age was entered as the actual age of each respondent. As shown in Table 2, Hypothesis 2 received strong support. The results in Model 1 (direct effects only) provide five statistically significant relationships. There was a significant positive relationship among age and promotion ( $\beta = 0.14, p < 0.001$ ), price/value ( $\beta = -0.08, p < 0.05$ ), quality expectation ( $\beta = 0.10, p < 0.01$ ), setting ( $\beta = 0.18, p < 0.001$ ), and dietary ( $\beta = 0.09, p < 0.05$ ). The importance level of the variety/innovative factor was the only non-significant result with age. Based on these relationships, older participants placed greater importance on the factors of promotion, quality expectation, setting, and dietary issues. Conversely, older participants placed less importance on price/value attributes than did their younger counterparts.

#### DINING FREQUENCY

Dining frequency was dummy coded with lower dining as the reference dummy (receiving zeros). Therefore, results can be interpreted as differences

between the low dining frequency reference and high dining frequency respondents (one or more times per month).

As shown in Table 2, Hypothesis 3 received strong support. The results in Model 1 (direct effects only) provide five statistically significant and positive relationships. A positive value indicates high dining frequency respondents rate the importance of these five restaurant attribute categories as more important than low frequency diners. Significant positive relationships with dining frequency include promotion ( $\beta = 0.11, p < 0.01$ ), quality expectation ( $\beta = 0.14, p < 0.001$ ), setting ( $\beta = 0.19, p < 0.001$ ), dietary ( $\beta = 0.08, p < 0.10$ ), and variety/innovative ( $\beta = 0.08, p < 0.10$ ). The price/value factor was not significant between the two dining frequency groups. Based on these relationships, more frequent fine-dining consumers placed greater importance on promotion, quality expectation, setting, dietary, and variety/innovative. But, participants (regardless of dining frequency) placed equal importance on price/value attributes.

## Model 2

Table 3 provides results of the six attribute factors regressed on gender, age, and dining frequency with all two-way and three-way interactions included. In these tests, only one change in the  $F$ -value was significant. The equation with the interactions regressed on the setting factor provided a significant change (change in  $F = 2.86, p < 0.05$ ; change in  $R^2 = 0.02$ ). In this equation, the interaction between gender and dining frequency indicated a significant and positive relationship ( $\beta = 0.52, p < 0.05$ ).

To interpret this interaction, the mean level of setting importance was plotted in Figure 1 for females and males with low and high fine-dining frequency. As noted in Figure 1, female respondents, regardless of fine-dining frequency, placed higher importance on setting, represented by the variables, noise level, allows good conversation, and privacy. Low fine-dining frequency male respondents placed significantly less importance on setting than did their frequent dining male peers.

## DISCUSSION

The results of this study provide some valuable information for practitioners and future research. Specifically, practitioners should consider key target market characteristics to ensure a fit between restaurant attributes and expectations of targeted customers. The findings also provide support for the need for researchers to evaluate and control for key customer characteristics in

service encounter research. Age, gender, and dining frequency proved to be important variables in this regard. It should be noted that communications need to identify the attributes (benefits) important to diners, but it is the classification variables that allow companies to better identify and reach these consumers.

Overall, the attributes contained in the price/value factor, the quality expectation factor, and the variety/innovative factor were ranked as the highest in importance when making fine-dining restaurant selection decisions. When gender, age, and dining frequency were considered, some interesting differences emerged.

Females rated price/value attributes, quality expectation attributes, and dietary attributes as substantially more important than their male counterparts as a direct relationship. Thus, restaurateurs should evaluate the quality of their attributes in these areas, particularly in environments where women are the primary decision makers for restaurant selection.

The results indicate that age of diners is an important indicator of attribute importance in fine-dining settings. Restaurants serving older consumers need to place greater emphasis on attributes in areas such as promotion (ratings, reviews, and advertising), quality expectation (atmosphere, design, reputation, and recommendations), setting (private and low noise), and dietary (healthy options and menu flexibility to meet special diet needs). In contrast, restaurants catering to younger customers should place greater importance on pricing, maximizing value in the experience, and creating products that maximize the value for price to this target market group.

The findings on dining frequency have important implications for restaurateurs. More frequent diners are a more likely target market for maximizing revenues since they are a “reached” market and they are less price elastic. These diners also appear to have higher expectations regarding all of this study’s attribute categories except price/value, which also increases the costs associated with serving them. In contrast to gender or age, frequent diners also found menu variety and innovativeness to be of greater importance in fine-dining restaurant selection decisions. There was no significant difference between the two dining frequency consumers in this study on the price/value factor; but it should be kept in mind that both dining frequency groups report high importance for the price/value relationship. Thus, while frequent diners are more likely to be enticed to dine out in fine-dining establishments, restaurants need to be operating efficiently and effectively to continue attracting them to their restaurants.

The gender and dining frequency interaction reinforces this point. Whereas female diners rated attributes of a restaurant’s setting as important (regardless of dining frequency), frequent male diners rated the setting significantly more important than did less frequent male diners.

## CONCLUSIONS

The results of this study have empirically tested the relationships between some key consumer characteristics and behaviors associated with importance for fine-dining restaurant choice. An important issue is that this article provides evidence to support some of the previous research and confirm some of the lay hypotheses held by restaurateurs. The importance of a variety of benefits related to key consumer characteristics for fine-dining restaurants provides substantial managerial direction for resource allocation decisions in the field. Matching the consumers' bundle of key benefits with the appropriate resource provision provides an opportunity to maximize value for the guest, as suggested in the discussion. The differences across a variety of target market groups evidenced in the results of this study with age, gender, and dining frequency provides managerial structure on making more precise and focused resource allocation decisions for restaurateurs.

From a theoretical perspective, the conclusion of these contributions is that previous work by Parsa et al. (2005) and Gupta et al. (2007), among others, has been reinforced and substantiated. Another conspicuous contribution to this article furthering the study of fine-dining attributes and consumer characteristics was the moderated results with gender and frequency of dining. Previous research reported in the literature noted mixed results associated with the key variable gender. Thus, by empirically presenting the unique interaction of males depending on their fine-dining frequency, more precision can be gained in explaining previously conflicting results.

### Future Research and Limitations

This study considered age, gender, and frequency of dining for important fine-dining restaurant attributes. Other demographic variables, such as family size and life cycle, income, education level, and fine-dining occasion, may also have critical effects on perceived importance of fine-dining restaurant attributes and should be controlled for in future research. And, of course, the geographic location, distance, and type of community may also play a substantial role on attribute importance and, thus, decisions for fine-dining restaurants. One might also wish to consider psychographic or life-style variables for inclusion in future research. While this study considered perceived importance of attributes in a general sense, future studies should consider the impact of these attributes tied to actual experiences by the respondents to verify the behavioral component of consumers.

Limitations of this study include the average age of respondents and the geographic boundaries of the sample. The median age in this sample was approximately 24 years of age; whereas the median age for the geographic

region in which it was drawn is approximately 32.5 years. Previous research has noted the conflicting results associated with age as well as gender, and this definitely needs more research clarification. The sample was taken from only one geographic area of the country so may not apply to other areas of the United States.

## REFERENCES

- Berne, C., Mugica, J. M., & Yague, M. J. (2001). The effect of variety-seeking on customer retention in services. *Journal of Retailing and Consumer Services*, 8, 335–345.
- Bernstein, D., Ottenfeld, M., & Witte, C. (2003). A study of consumer attitudes regarding variability of menu offerings in the context of an upscale seafood restaurant. *Journal of Foodservice Business Research*, 11(4), 398–411.
- Chung, B., & Hoffman, K. D. (1998). Critical incidents: Service failures that matter most. *Cornell Hotel and Restaurant Quarterly*, 39(3), 66–71.
- Davies, M. M., & Vollmann, T. A. (1990). A framework for relating waiting time and customer satisfaction in a service operation. *Journal of Services Marketing*, 4(1), 139–144.
- Deloitte and Touche. (2007). *Restaurant industry operations report, 2007–2008 edition*, pp. 68–93. Washington, D.C.: National Restaurant Association and Deloitte.
- Enz, C. A. (2008). Creating a competitive advantage by building resource capability: The case of Outback Steakhouse Korea. *Cornell Hospitality Quarterly*, 49(1), 73–78.
- Gupta, S., McLaughlin, E., & Gomez, M. (2007). Guest satisfaction and restaurant performance. *Cornell Hospitality Quarterly*, 48(3), 284–298.
- Gursoy, D., & Gavcar, E. (2003). International leisure tourists' involvement profile. *Annals of Tourism Research*, 30(4), 906–926.
- Hair, Jr., J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.), pp. 117–118. Upper Saddle River, NJ: Pearson Prentice Hall.
- Hu, S.-M., Leong, J. K., Kim, W. G., Ryan, B., & Warde, W. D. (2008). Senior citizens' perceived service levels in three restaurant sectors. *Journal of Foodservice Business Research*, 11(2), 202–219.
- Jensen, Ø., & Hansen, K. V. (2007). Consumer values among restaurant customers. *International Journal of Hospitality Management*, 26, 603–622.
- Kim, W. G., Lee, Y., & Yoo, Y. (2006). Predictors of relationship quality and relationship outcomes in luxury restaurants. *Journal of Hospitality & Tourism Research*, 30(2), 143–169.
- Knutson, B. J. (1988). Ten laws of customer satisfaction. *Cornell Hospitality Quarterly*, 29(3), 13–30.
- Knutson, B. (2000). College students and fast food: How students perceive restaurant brands. *Cornell Hospitality Quarterly*, 41(3), 68–74.

- Moschis, G., Folkman Curasi, C., & Bellenger, D. (2003). Restaurant-selection preferences of mature consumers. *Cornell Hospitality Quarterly*, 44(4), 51–60.
- Muller, C. C. (1999). The business of restaurants: 2001 and beyond. *International Journal of Hospitality Management*, 18, 401–413.
- Namkung, Y., & Jang, S. (2007). Does food quality really matter in restaurants? Its impact on customer satisfaction and behavioral intentions. *Journal of Hospitality and Tourism Research*, 31(3), 387–410.
- Njite, D., Dunn, G., & Kim, L. H. (2008). Beyond good food: What other attributes influence consumer preferences and selection of fine dining restaurants? *Journal of Foodservice Business Research*, 11(2), 237–266.
- Noone, B. S., Kimes, S. E., Mattila, A. S., & Wirtz, J. (2007). The effect of meal pace on customer satisfaction. *Cornell Hospitality Quarterly*, 48(3), 231–245.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.), pp. 491–541. New York: McGraw-Hill.
- Ottenbacher, M. C., & Harrington, R. J. (2007). The innovation development process of Michelin-starred chefs. *International Journal of Contemporary Hospitality Management*, 19(6), 444–460.
- Parsa, H. G., Self, J. T., Njite, S. D., & King, T. (2005). Why restaurants fail. *Cornell Hospitality Quarterly*, 46(3), 304–323.
- Poria, Y. (2008). Gender—A crucial neglected element in the service encounter: An exploratory study of the choice of hotel masseur or masseuse. *Journal of Hospitality & Tourism Research*, 32(2), 151–168.
- Rahim, M. A., & Magnier, N. R. (1995). Confirmatory factor analysis of the styles of handling interpersonal conflict: First-order factor model and its invariance across groups. *Journal of Applied Psychology*, 80(1), 122–132.
- Siguaw, J. A., & Enz, C. A. (1999). Best practice in food and beverage management. *Cornell Hospitality Quarterly*, 40(5), 50–57.
- Smith, A. K., Bolton, R. N., & Wagner, J. (1999). A model of customer satisfaction and service encounters involving failure and recovery. *Journal of Marketing Research*, 36, 356–372.
- Sulek, J. J., & Hensley, R. L. (2004). The relative importance of food, atmosphere, and fairness of wait: The case of a full-service restaurant. *Cornell Hospitality Quarterly*, 45(3), 235–247.
- Susskind, A. M., & Chan, E. K. (2000). How restaurants features affect check averages. *Cornell Hospitality Quarterly*, 42(6), 56–63.
- Taylor, G. A., & Long-Tolbert, S. (2002). Coupon promotions in quick-service restaurants: Preaching to the converted. *Cornell Hospitality Quarterly*, 43(4), 41–47.
- Towers, N., & Pratten, J. (2003). Managing special dietary needs for food allergies in the hospitality industry; a survey based on the Coeliac disorder. *International Journal of Hospitality Management*, 22, 341–351.
- Varki, S., & Wong, S. (2003). Consumer involvement in relationship marketing of services. *Journal of Service Research*, 6(1), 83–92.
- Wakefield, K. L., & Blodgett, J. G. (1999). Customer response to intangible and tangible service factors. *Psychology and Marketing*, 16(1), 51–68.