# ANALYSIS OF SOCIAL DINE-OUT PREFERENCES OF THE UNIVERSITY MEMBERS ACCORDING TO PERSONAL CHARACTERISTICS: A CASE STUDY OF THE UNIVERSITY IN THE SOUTHWESTERN REGION IN THE U.S. 

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#### Abstract

As the annual migration of new students to campuses occurs, college town populations are composed of younger generations from different regions with different characteristics. This study illustrates the way students, faculty, and staff view dining out attributes when they select a restaurant for social purposes. Attributes such as price, cuisine, atmosphere, service quality and food quality, name brand, location, convenience, architectural design, other customers, previous experience, and alcohol service are used to identify members' social dining preferences. Furthermore, the study also observes whether the importance of dining attributes is different according to personal and dining out characteristics.


Keywords: Social, Dining, College, University, Characteristics, Preferences

## INTRODUCTION

Dining away from home and the work place has become the norm in our society. Diners have more than enough options to choose, from varied menus to types of restaurant, and time to dine out to various price structures. Restaurant operators need to continually identify a suitable market, develop unique menus, and offer exceptional value for customers in order to be successful. Identifying potential factors that can attract and maintain customers to the restaurant and examining the level of importance of each factor according to member's characteristics can be a critical point for restaurant operators.

The college restaurant market is getting larger as college populations are growing. Since there are many foodservice facilities throughout the campuses of the universities/colleges and surrounding areas, competition is increasing regardless of who operates them. Entrepreneurs who run restaurant businesses in areas where universities/colleges are located may wonder what could be done to differentiate themselves from other restaurants. According to the National Center
for Education Statistics, there are 4,276 post secondary institutions in the US. The composition of higher education communities has changed. For instance, the traditional college age population (18 to 24) rose 15 percent between 1995 and 2005, while college enrollment rose 23 percent in the same period. College enrollment grew to 18 million in fall 2007 and is expected to increase by 14 percent throughout fall 2016. During the same time-period, the number of males enrolled increased 18 percent, while the number of females enrolled increased by 27 percent. In fall 2005, degree-granting institutions, defined as post-secondary institutions that grant an associate's or higher degree and are eligible for Title IV federal financial aid programs, employed 4.5 million faculty and staff (U.S. Department of Education).

While colleges and universities offer a variety of managed services that cater to the needs of captive customers, local foodservice vendors also offer various types of foods and atmospheres with flexible operating hours. Owing to the increasing number of options that on-campus foodservice facilities offer and the growing number of off-campus competitors, members in the university/college community are not tolerating under-valued food and services.

Studies (Qu, 1997; Kievela et al., 1999; Pettijohn et al., 1997; Zopiatis \& Pribic, 2007; Andaleeb \& Caskey, 2007) indicate issues of social dining out preferences; however, these studies only identify what people prefer according to demographic characteristics in general. Individual dining out characteristics have not been well addressed in studying social dining out preferences in addition to demographic characteristics.

This study illustrates how university/college members view dining out attributes when they select a restaurant within the scope of social dining preferences. Attributes such as price, cuisine, atmosphere, service quality and food quality, name brand, location, convenience, architectural design, other customers, previous experience, and alcohol service are used to identify members' social dining preferences. Furthermore, the study also observes whether the importance of dining attributes differs according to personal characteristics; gender, age, income, job, number of residents, and resident type, and dining out characteristics; franchise preference, the time of dining out, the total hours of dining out, total number in the party, and total amount of spending.

In this study, social dining is defined as dining out for rapport with people such as families, friends, or peers. Business dining is defined as dining out for the purpose of conducting business with business/work related people such as colleagues or business partners. Business dining preferences are analyzed in the other part of the study.

## LITERATURE REVIEW

Service-based organizations must cater to a variety of customers seeking a variety of services. Customers' perceptions of service processes are a crucial element that
affects the restaurant's operational success. The restaurant operators need to know what drives customers' restaurant selections, and how to be better positioned in the university/college market as the market in the restaurant industry is getting larger (Knutson, 2000). June and Smith also indicate that tailoring products to specific customer wants is a potential advantage for improving both market share and profitability (June \& Smith, 1987).

The consumers' selection of a restaurant can also be influenced by different preferences (Gustafsson, 2004). Gabrielsen (2001) indicated preferences are one of the common concepts in the study of social sciences, and can be designated to individuals, diverse subgroups, or a population. East (1996) also indicates the importance of understanding different customer expectations on service. Studies have segmented potential restaurant customers by demographics (Binkley, 1998; Chowa et al., 2007), and by socio economics (Nayga \& Capps, 1994). Understanding social dining preferences of the target market can be beneficial to restaurant operators to differentiate themselves from other competitors.

As Gustafsson (2004) indicated, several preferences are identified through many studies in different fields. Pizam and Ellis (1999) indicated that customers, in general, select restaurants through groups of attributes. Some attributes are directly related to food quality and services, while some are related to surrounding atmosphere. Kivela et al. (1999) indicated that the total dining experience comprises not only food and beverages, but also the atmosphere of the dining area and service provided. Kivela et al. (2000) also reveal feeling comfortable, cleanliness, freshness of the food, staff appearance and the room temperature as important factors.

Clark and Wood (1998) stated generic reasons for selecting restaurants, such as the range of food offered, quality of food, price, atmosphere, and service speed. Mattila (2001) prioritized three attributes; food quality, service, and atmosphere, that motivate customers to select a restaurant among the attributes, food quality, services, atmosphere, value for price, personal recognition, and/or memorable past experience. June \& Smith (1987) tested a model of customers' choice behavior for a restaurant meal, and stated that people select restaurants based on their preferences for location, atmosphere, purpose, time, type, and price

Auty (1992) indicated food quality as the most important factor; however, the image and atmosphere of the restaurant are decision-making factors in the restaurant selection procedure. Kim (1996) also indicated the importance of elements of the atmosphere such as furnishings, lighting, decor, color, coordination, music, and use of space. In a study of mature diners, Lahue (2000) stated that physical aspects of the restaurants were important considerations for the mature segment. According to Knutson and Patton (1993) and Shank and Nahhas (1994) food quality was the main concern. Tzeng, Teng, Chen, and Opricovic (2002) indicated restaurant location as an important factor in selecting a restaurant and Mattila (2001) and Wilkie (1994) also examined the importance of brand. Candel (2001) indicated the importance of convenience, and price (Knutson \& Patton, 1993) and waiting time (Verma, 1999) were also identified as important.

## METHODOLOGY

The purpose of this study was to investigate social dining preferences of diners who are associated with higher education in the U.S. Data for this study was collected from current staff, faculty, and students in the university in the southwestern region of the U.S. Faculty includes individuals who are adjunct professors, associate professors, assistant professors, or professors, either tenured or non-tenured. Staff includes employees who are engaged in nonteaching and ancillary support work, including part time and full time. Students include both undergraduate and graduate students, including part time and full time.

Prior to administration, the questionnaire was pilot tested with 20 individuals including; students, faculty, and staff, for reliability with the utilization of the test-retest method and for validity. After the pilot study, minor modifications were made to make the survey clearer and more understandable for the targeted sample population and to increase the response rate.

The institution initially identified all subjects who had an official university email address. The combined total number of the three groups was approximately 19,700 ; faculty $(1,084)$, staff $(3,388)$, and students $(15,188)$. A computerized number generator system was utilized in order to ensure that each member of the population had an equal chance of being selected. The total sample of 985 , consisting of 55 faculty ( $5.5 \%$ of 985 ), 170 staff ( $17.2 \%$ of 985 ), and 760 current students ( $77.1 \%$ of 985 ) were extracted by selecting every 20 th person on its email list according to each category. Emails were sent to 985 systematically selected individuals with a web link that could be linked to the survey web (surveymonkey.com). The initial response cut off date was one week after the initial email was sent, and a follow up email was sent two weeks after the first email.

One hundred ninety-seven out of 985 questionnaires were initially returned which yielded a $20 \%$ response rate. Among these 197 returned, eight questionnaires were eliminated for data coding owing to invalid information. Therefore, one hundred eighty nine questionnaires ( $19.2 \%$ ) were coded and analyzed for this study.

In order to accomplish the purpose of this study, the questionnaire was sub-categorized into three parts. The first part consisted of 12 questions and was designed to measure respondents' level of importance on dining out attributes: Price, Cuisine Type, Service Quality, Food Quality, Name Brand, Location, Convenience, Architectural Design, Other Customers, and Previous Experience. Respondents were asked to respond to a five point Likert scale in this section. The descriptors ranged from (1) "least important" to (5) "most important."

The second part consisted of 11 questions which asked the respondents' dining out characteristics such as franchise preference, dining time, hours spent, amount of money spent, and number of people dining with for both lunch and dinner.

Part 3 addressed the respondents' personal characteristics using 6 questions, including demographic characteristics such as gender, age, annual income, types of residence (dorm, apartment, or house), the number of residents at the current residence, and current job/classification.

In order to explore respondents' social dining preferences, descriptive statistics (e.g., frequency and percentage) were initially used. To test whether there is a significant difference in selecting a restaurant according to gender and franchise preference, independent-sample t-test was used. Analysis of variance (ANOVA) was utilized to examine the level of importance of social dining attributes according to personal and dining out characteristics.

Based on the purpose of the study, three research questions were asked as follows:

1) What factors are important to members associated with colleges/universities in selecting a restaurant?
2) How does the importance of social dining attributes vary according to personal characteristics: gender, age, income, number of residents at the residence, resident type, and job?
3) How does the importance of social dining attributes vary according to dining out characteristics for both lunch and dinner: franchise preference, time of dining out, hours spent dining out, amount of money spent dining; frequency of dining out, and number of people chosen to dine out with?

## RESULTS

Table 1 indicates respondents' personal characteristics. The 189 respondents age groups consisted of 89 (47.1\%) aged 18-25 years, 26 (13.8\%) aged 26-35 years, and 74 ( $39.2 \%$ ) older than 35 years. About 71 (39.4\%) indicated their earnings as less than $\$ 10,000$ per year and followed by $51(28.3 \%)$ as $\$ 10,000-\$ 29,999$, and $29(16.1 \%)$ as $\$ 30,000-\$ 59,999$. The sample consisted of 55 ( $29.3 \%$ ) male and $133(70.7 \%)$ female respondents. More than half the respondents (110, $58.8 \%$ ) were living with one or two other people while 44 ( $23.5 \%$ ) respondents were living alone and only 33 (17.6\%) respondents with more than 3 people. In response to residence type, $130(70.3 \%)$ identified that they lived in a house while only $14(7.6 \%)$ respondents lived in a dorm, and $41(22.2 \%)$ respondents lived in an apartment. One hundred twenty students (64.2\%) consisted of 103 (55.1\%) undergraduate and 17 ( $9.1 \%$ ) graduate students. There were 35 ( $18.7 \%$ ) faculty and 32 (17.1\%) staff among the respondents.

Table 1: Demographic Characteristics of the Respondents

|  |  | Frequency | Valid \% |
| :--- | :--- | :---: | :---: |
|  | $18-25$ | 89 | 47.1 |
|  | $26-35$ | 26 | 13.8 |
| Age group | $36-45$ | 21 | 11.1 |
|  | $46-55$ | 30 | 15.9 |
|  | 56 or older | 23 | 12.2 |
|  | Total | 189 | 100.0 |
| Current Gross Income | Under \$10,000 | 71 | 39.4 |
|  | $\$ 10,000-\$ 29,999$ | 51 | 28.3 |
|  | $\$ 30,000-\$ 59,999$ | 29 | 16.1 |
|  | $\$ 60,000$ or more | 29 | 16.1 |
|  | Total* | 189 | 100.0 |
| Gender | Male | 55 | 29.3 |
|  | Female | 133 | 70.7 |
|  | Total | 188 | 100.0 |
| Number of Members at | Myself | 44 | 23.5 |
|  | $2-3$ People | 110 | 58.8 |
|  | More than 4 people | 33 | 17.6 |
|  | Total* | 187 | 100.0 |
| Residence Type | Dorm | 14 | 7.6 |
|  | Apartment | 41 | 22.2 |
|  | House | 130 | 70.3 |
|  | Total* | 185 | 100.0 |
|  | Undergraduate Student | 103 | 55.1 |
| Job | Graduate Students | 17 | 9.1 |
|  | Faculty | 35 | 18.7 |
|  | Staff | 32 | 17.1 |
|  | Total* | 187 | 100.0 |

*Questions in this survey were optional. Thus, missing values led to the variance in respondent numbers of each group, and some categories may not be equal to the total sample (189) owing to missing responses

Respondents' franchise preferences were almost evenly distributed to 90 (47.6\%) respondents who preferred franchised restaurants and 84 (44.4\%) respondents who preferred non-franchised restaurants. Not surprisingly, almost a half of respondents ( $86,45.5 \%$ ) favored the lunchtime between noon and 1 pm for lunch, followed by 1 pm to $2 \mathrm{pm}(57,30.2 \%)$. For dinner, after $7 \mathrm{pm}(88$, $46.6 \%$ ) was the most preferable for respondents and only 31 respondents ( $16.4 \%$ ) indicated before 6 pm as their preferred dinner time. Respondents usually took less than one hour ( $128,67.7 \%$ ) or one to two hours ( $58,30.7 \%$ ) for dining out for lunch. A majority of respondents tended to take two hours (135, 73\%) or two to three hours ( $41,22.2 \%$ ) for dining out for dinner. Respondents intended to spend less than $\$ 10.00(143,76.1 \%)$ for lunch while $\$ 10$ to $\$ 20(119,66.5 \%)$ was
spent for dinner. For both lunch and dinner, more than one third of respondents indicated that they dined out fewer than four times per month. More than $40 \%$ of respondents (77) dined out alone or with one more person and 102 (54.8\%) respondents dined out with 2-4 more people for lunch. For dining out for dinner, only $41(22.5 \%)$ respondents dined out alone or with one more person and 123 ( $67.6 \%$ ) respondents preferred to dine out with 2-4 or more people. For dining out for both lunch ( $7,3.8 \%$ ) and dinner ( $18,9.9 \%$ ), a group of more than 6 was identified as unfavorable.

Table 2: Dining characteristics

|  |  | Frequency |  | Valid \% |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Franchise <br> Preference | No preference | 15 | 7.9 |  |  |
|  | Non-franchise | 84 | 44.4 |  |  |
|  | Franchise | 90 | 47.6 |  |  |
|  | Total | 189 | 100.0 |  |  |
| Time preference for LUNCH | Before Noon | 37 | 19.6 |  |  |
|  | Noon-1:00pm | 86 | 45.5 |  |  |
|  | After 1:00-2:00pm | 57 | 30.2 |  |  |
|  | After 2:00pm | 9 | 4.8 |  |  |
|  | Total | 189 | 100.0 |  |  |
| Time preference for DINNER | Before 6:00pm | 31 | 16.4 |  |  |
|  | After 6:00-7:00pm | 70 | 37.0 |  |  |
|  | After 7:00pm | 88 | 46.6 |  |  |
|  | Total | 186 | 100.0 |  |  |
|  |  | Lunch | Dinner | Lunch | Dinner |
| Number of hours taking for LUNCH \& DINNER | Less than 1 hour | 128 | 9 | 67.7 | 4.9 |
|  | 1-2 hours | 58 | 135 | 30.7 | 73.0 |
|  | More than 2 hours | 3 | 41 | 1.6 | 22.2 |
|  | Total | 189 | 185 | 100.0 | 100.0 |
| Amount of spending for dine out for LUNCH \& DINNER | Less than \$10 | 143 | 29 | 76.1 | 16.2 |
|  | $\begin{aligned} & \$ 10.00 \text {-Less than } \\ & \$ 20.00 \end{aligned}$ | 39 | 119 | 20.7 | 66.5 |
|  | \$20.00 or more | 6 | 31 | 3.2 | 17.3 |
|  | Total | 188 | 184 | 100.0 | 100.0 |
| Diningout frequency for LUNCH \& DINNER | 4 times or fewer | 63 | 65 | 33.9 | 35.5 |
|  | 5-8 times | 41 | 56 | 22.0 | 30.6 |
|  | 9-12 times | 41 | 33 | 22.0 | 18.0 |
|  | 13 times or more | 41 | 29 | 22.0 | 15.8 |
|  | Total | 186 | 183 | 100.0 | 100.0 |
| Number of people dining out for LUNCH \& DINNER | 2 or fewer people | 77 | 41 | 41.4 | 22.5 |
|  | 3-5 people | 102 | 123 | 54.8 | 67.6 |
|  | 6 or more people | 7 | 18 | 3.8 | 9.9 |
|  | Total | 186 | 182 | 100.0 | 100.0 |

Questions in this survey were optional. Thus, missing values led to the variance in respondent numbers of each group, and some categories may not equal the total samples (189) owing to missing responses

The mean values of the attributes indicated by respondents were calculated and are presented in table 3. The respondents were asked to mark on a scale of one to five the attributes they considered important when they dined out for social purposes. Food quality (4.46) was the most important attribute for respondents when they dined out for both lunch and dinner. Cuisine Type (4.17), Previous Experience and Service Quality (4.14), Price (3.97), Atmosphere (3.51), Convenience (3.38), Location (3.28), and Name Brand (3.02) were considered important attributes; however, Architectural Design (2.73), Alcohol Service (2.74), and Other Customers (2.77) appeared to be less important compared to Food Quality, Cuisine Type, Previous Experience, Service Quality, Price, and Atmosphere for social dining out.

Table 3: Important Attributes for Social Dining Out

|  | n | Mean | Std. Deviation |
| :--- | :---: | :---: | :---: |
| Food Quality | 187 | 4.46 | .791 |
| Cuisine Type | 187 | 4.17 | .622 |
| Previous Experience | 188 | 4.14 | .757 |
| Service Quality | 188 | 4.14 | .740 |
| Price | 187 | 3.97 | .699 |
| Atmosphere | 187 | 3.51 | .806 |
| Convenience | 186 | 3.38 | .935 |
| Location | 187 | 3.28 | .860 |
| Name Brand | 182 | 3.02 | .898 |
| Other Customers | 183 | 2.77 | .950 |
| Alcohol Service | 184 | 2.74 | 1.120 |
| Architectural Design | 183 | 2.73 | .884 |

Questions in this survey were optional. Thus, missing values led to the variance in respondent numbers of each group, and some categories may not equal the total samples (189) owing to missing responses

No significant differences were found in the importance of dining out attributes according to respondents', job titles, residence types, and number of members at the current residence. As table 4 shows the result of an independentsample t -test, only 4 variables; importance of Name Brand ( $\mathrm{t}=-1.981, \mathrm{p}=.019$ ), Location ( $\mathrm{t}=-2.672, \mathrm{p}=.008$ ) Other Customers ( $\mathrm{t}=-2.334, \mathrm{p}=.021$ ), and Alcohol Services $(\mathrm{t}=2.771, \mathrm{p}=.006)$ were significantly different according to gender at the significant level of 0.05 . The average scores of Name Brand for female (3.10) was higher than male respondents (2.82); Location for female (3.38) was higher than male (3.02); Other Customers for female (2.88) was also higher than male (2.52) respondents; however, Alcohol Services for male (3.09) was higher than female (2.60).

Only the attribute, Architectural Design, was significant according to respondent's age. The F-value was $3.542(\mathrm{p}=.008)$. Those younger than 25 scored lower than those older than 25 in analyzing the attribute Brand Name.

The attributes, Cuisine Types, Atmosphere, and Alcohol Service were significant according to respondent's income. The F-values were $2.680(\mathrm{p}=.048)$ for Cuisine Type, 4.803 ( $\mathrm{p}=.003$ ) for Atmosphere, and 4.808 ( $\mathrm{p}=.003$ ) for Alcohol Service. LSD multiple comparison tests indicated that income groups in the more than $\$ 60,000$ (3.97) scored lower than groups in the under $\$ 10,000$ (4.23), and $\$ 10,000-\$ 29,999$ (3.74) in analyzing the attribute Cuisine Types. The income group in the more than $\$ 60,000(3.79)$ scored lower than those in the less than $\$ 10,000$, and the group in the $\$ 10,000-\$ 29,999$ scored higher than the group in less than $\$ 10,000$ in analyzing Atmosphere. In analyzing Alcohol Service, the group in $\$ 10,000-\$ 29,999$ scored higher than the group in more than $\$ 60,000$.

The result also indicates that there were no significant differences found in some attributes such as Price, Service Quality, Food Quality, Architecture, Convenience, and Previous Experience regardless of respondents' demographic characteristics.

Table 4: Mean Differences According to Gender and Income**


PRI: price, CUI: cuisine type, ATM: atmosphere, SER: service quality, FOO: food quality, NAM: name brand, LOC: location, CON: convenient, ARC: architectural design, OTH: other customer, EXP: previous experience, ALC: alcohol service
*denotes significance level $<0.05$
**only shows ones that have significant differences

As table 5 indicates, some significant differences were found in the importance of dining attributes according to the social dining out characteristics; franchise preference, hours spent dining out, dining out frequency for dinner, and the amount of spending on dining out. There were no significant differences in the importance of dining attributes according to respondent's time preference for dining out for lunch and dinner, dining out frequency for lunch, and the number of people dining out with for both lunch and dinner.

The importance of the attribute Price was significantly different according to the amount spent on dinner. The F-value was 6.422 at $p=.05$. The LSD multiple comparison test indicates that ones who spend less than $\$ 10.00$ (4.38) have a higher mean score compared to other groups; \$10-\$20 (3.93), and more than \$20 (3.81). Cuisine Type was significantly different according to the dining out frequency for dinner. The F -value was 3.035 at $\mathrm{p}=.031$. Those who dined out between $5-8$ times per month scored higher than ones who dined out fewer than 4 times and between 9-12 times per month. Service Quality was significant according to the number of hours spent on dinner. The F -value was 4.948 at $\mathrm{p}=.008$. Ones who spent less than 1 hour on dinner (3.56) had a lower mean score compared to ones who spent between 1 to 2 hours (4.11) and more than 2 hours (4.37).

Convenience was significantly different according to the franchise preference. Those who preferred franchised restaurants (3.51) scored higher than ones who did not prefer franchise restaurants (3.22).

Architecture was significantly different according to the number of hours spent for lunch ( F -value $=7.54$ at $\mathrm{p}<.05$ ). Ones who spent less than 1 hour (2.64) and ones who spent more than 2 hours (1.33) for dining out for lunch had lower mean scores than ones spending between 1 to 2 hours (3.00). Other Customer was significant according to amount spent for both lunch ( F -value $3.121, \mathrm{p}<.05$ ) and dinner ( F -value 5.074 at $\mathrm{p}<.05$ ). A significant difference was found between ones spending less than $\$ 10.00(2.68)$ and ones spending between $\$ 10.00$ and $\$ 20.00$ (3.03) for lunch. For dinner, ones spending between $\$ 10.00$ and $\$ 201.00$ (2.60) tended to have higher mean scores than ones spending more than $\$ 20.00$ (3.11) for dinner.

Previous Experience was identified as having a significant difference according to amount spent on lunch ( F -value $=4.482$ at $\mathrm{p}<.05$ ). Ones who preferred to spend less than $\$ 10.00$ for lunch (4.23) had a higher mean score than ones who preferred to spend between $\$ 10$ and $\$ 20$ (3.85).

There were no significant differences found in some attributes such as Food Quality, Name Brand, and Location in respondents' dining out characteristics.

Table 5: Analysis of Dining Attributes According to Social Dining Out Characteristics**

| No. | PRI CUI. ${ }_{\mathrm{M}}^{\mathrm{M}}$ | $\begin{aligned} & \text { AT } \\ & \text { M. } \end{aligned}$ | T. SER FOO. NAM ${ }^{\text {LOC }}$ |  |  | CON. ARC OTH EXP ALC |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Franchise a) No 82 | 3.984 .10 | 3.51 | 140174.54 | 2.96 | 3.38 | 3.22 | 2.75 | 2.73 | 4.22 | 2.79 |
| Preference b) Yes 89 | 3.994 .22 | 3.51 | 14.094 .48 | 3.11 | 3.21 | 3.51 | 2.72 | 2.78 | 4.13 | 2.66 |
| Significant Level | . 902.181 | . 993 | 3.504 .599 | . 284 | . 210 | .025* | . 839 | . 785 |  | . 477 |
| t-value | $-.123_{1.342}^{-}$ |  | 9.670 .527 | 1.074 | 1.259 | $2.262$ | . 204 | -. 273 |  | 712 |
| Statistical difference |  |  |  |  |  | $\mathrm{b}>\mathrm{a}$ |  |  |  |  |
| a) $<{ }^{1} 128$ | 3.924 .19 | 3.47 | 74.134 .48 | 3.02 | 3.23 | 3.34 | 2.64 | 2.67 |  | 2.79 |
| Hours spentb) for lunch hours | 4.094 .11 | 3.62 | 24.164 .41 | 3.05 | 3.39 | 3.45 | 3.00 | 3.00 |  | 2.69 |
| c) $>2_{3}$ hours | 4.004 .33 | 3.33 | 34.004 .67 | 2.33 | 3.33 | 4.00 | 1.33 | 2.67 | 4.6 | 1.67 |
| Significant Level | . 328.649 | . 4 | . 928.789 | .401 | . 482 | . 379 | 001 | . 107 |  | . 216 |
| F-value | ${ }_{1}^{1.12} .434$ | . 785 | 5.075.237 | . 918 | . 733 | . 9 |  |  |  | 1.54 5 |
| Post Hoc (LSD ) |  |  |  |  |  |  |  | \& |  |  |
| $\begin{array}{ll}\text { a) } & <1 \\ \text { hour }\end{array}$ | 4.114 .00 | 3.62 | 33.564 .56 | 2.89 | 3.44 | 3.56 | 2.89 | 2.89 | 3.78 | 2.44 |
| Hours spentb) ${ }^{1-} 135$ for dinner 2 hours | 3.934 .18 | 3.50 | 4.114 .44 | 3.06 | 3.25 | 3.36 | 2.72 | 2.71 |  | 2.75 |
| $\begin{array}{ll} \text { c) }> & 2_{39} \\ \text { hours } \end{array}$ | 4.024 .18 | 3.61 | 4.374 .56 | 3.00 | 3.38 | 3.50 | 2.78 | 2.95 | 4.20 | 2.72 |
| Significant Level | . 618.705 | . 693 | . 0008.632 | . 814 | . 595 | . 607 | . 813 | . 348 | . 317 | 735 |
| F-value | . 482.350 | $.367$ | $7{ }_{8 *}^{4.94} .461$ | . 207 | . 520 | . 501 | . 207 | 1.063 |  | 309 |
| Post Hoc (LSD ) |  |  | $a<b, c$ |  |  |  |  |  |  |  |
| $\begin{array}{lll} & \quad \text { a) } & { }^{-} 142\end{array}$ | 4.034 .20 | 3.51 | 14.154 .45 | 2.99 | 3.29 | 3.35 | 2.64 | 2.68 | 4.23 | 2.75 |
| $\begin{array}{lcc} \text { spent } & \text { forb) } & \$ 10-39 \\ \text { lunch } & \$ 20 & \end{array}$ | 3.824 .05 | 3.53 | 34.084 .46 | 3.11 | 3.31 | 3.37 | 2.95 | 3.03 | 3.85 | 2.74 |
| c) $>\$ 20 \quad 4$ | 3.604 .00 | 3.50 | 04.174 .80 | 3.40 | 3.00 | 4.20 | 3.40 | 3.40 | 4.33 | 2.60 |
| Significant Level | . 126.332 | . 991 | 1.856 .628 | . 491 | . 749 | . 138 | . 037 | . 047 |  | . 957 |
| F-value | $\begin{aligned} & 2.09 \\ & 6 \end{aligned} 1.110$ |  | 9.156.466 | . 714 | . 289 | 2.002 | 3.345 | $\begin{aligned} & 3.121 \\ & * \end{aligned}$ |  | . 043 |
| Post Hoc (LSD ) |  |  |  |  |  |  |  | $\mathrm{A}<\mathrm{b}$ | $\mathrm{a}>\mathrm{b}$ |  |
| Money a) < \$10 29 | 4.384 .24 | 3.76 | 63.934 .38 | 2.86 | 3.28 | 3.38 | 2.72 | 2.97 | 4.17 | 2.76 |
| $\begin{aligned} & \text { spent } \\ & \text { dinner } \end{aligned} \text { for }_{\$ 20}^{\text {b) }} \quad \$ 10-118$ | 3.934 .15 | 3.40 | 04.164 .48 | 3.04 | 3.29 | 3.36 | 2.68 | 2.60 | 4.14 | 2.68 |
| dinner c) $>\$ 20 \quad 36$ | 3.814 .17 | 3.64 | 44.254 .44 | 3.03 | 3.31 | 3.42 | 2.83 | 3.11 | 4.14 | 2.86 |
| Significant Level | . 002.790 | . 044 | 4.252.795 | . 597 | . 985 | . 972 | . 548 | . 008 |  | 840 |
| F-value | $\begin{aligned} & 6.42 \\ & 2^{*} .231 \end{aligned}$ | $3.01$ | $1.60 .203$ | . 484 | . 010 | . 059 | . 444 | $5.074$ | . 020 | . 368 |
| Post Hoc (LSD ) | $\mathrm{a}>\mathrm{b}$, |  |  |  |  |  |  | $\mathrm{b}<\mathrm{c}$ |  |  |

PRI: price, CUI: cuisine type, ATM: atmosphere, SER: service quality, FOO: food quality, NAM: name brand, LOC: location, CON: convenient, ARC: architectural design, OTH: other customer, EXP: previous experience, ALC: alcohol service *denotes significance level $<0.05 * *$ only shows ones that have a significant difference

## CONCLUSION

Understanding diners' characteristics is an important area that needs close attention from foodservice operators. In many instances, the students, faculty, and staff are captives of their food service providers because of the various foodservice facilities on campus and in surrounding areas. This captive clientele may have different lifestyles, characteristics, and preferences compared to the general public in the area. The study has explored the attributes university/ college community members perceive to be important when they dine out for social purposes. The study also observed whether the importance of these attributes was significantly different according to personal and dining out characteristics.

As Uysal and Hagan (1993) indicated consumer motivations vary by individual characteristics; this study also indicated that people have different dining out preferences based on their own characteristics. Findings from this study support that college towns consist of residents with different characteristics. As the annual migration of new students to campuses occurs, college town populations comprise younger generations from different regions with different characteristics. The size of these populations tends to be consistent.

Diners tend to consider factors that fulfill their hunger, (food related attribute), then look for the surrounding environment (atmosphere and location related attributes), and expect their presence to be acknowledged at the restaurant (brand and people related attributes) (Andersson \& Mossberg, 2004). This study finds that attributes people consider when they select a restaurant are ones that directly relate to peoples' dining out experience, such as quality of food and types of cuisine, service quality, price, and restaurant atmosphere. These attributes can be modified or adjusted according to potential customers' needs and preferences by restaurant operators. Fixed items that are not directly related to actual dining out experience and which are difficult to be changed by staff, such as architectural design, location of the restaurant, name brand and convenience, appeared to be not as important to university/college community members as ones that are directly related to the dining out experience.

As people prefer both a specific time for lunch and dinner and the number of hours to be spent on lunch and dinner, as well as spending different amounts on lunch and dinner, attributes that university/college community members consider when they dine out depend on who they are, when to dine out, how long, how much they spend, or how often they dine out. Even though restaurants compete in the same market, the market can be seen as different segments based on the characteristics they have. The restaurant operators should develop strategies that can be flexible to different segments in the market according to market characteristics. For instance, some attributes are important only for lunch and some only for dinner. Restaurant operators need to evaluate their staff training system, availability of flexible menu options and atmosphere such as music, space, lighting, and safety according to time. Just providing various food and services
with reasonable prices may not be enough in college towns, additional attention to atmosphere and convenience are needed to maintain customers. Diners tend to accept higher prices for dinner and expect to spend longer hours compared to lunch. It may not be feasible to increase prices for dinner on the same menu; however, it may be feasible to increase prices up to $\$ 20$ with any additional visible services to make it different from lunch, such as better table settings, or more personalized services.

As studies (Beardsworth et al., 2002; Martens, 1997; Zopiatis \& Pribic, 2007) have revealed that there are gender differences in dining behavior; this study also demonstrates that when it comes to dining out, men and women often conceive things differently. Female diners tend to consider attributes that are not directly related to an actual eating out experience such as food and services, instead they tend to consider more peripheral attributes such as name brand, location, and other customers whom they may see or who can be seen by others in the restaurant compared to males. Restaurant operators need to continually modify and adjust customers' dining experiences as diners tend to dine out as a group regardless of lunch or dinner. For instance, tables should be able to be easily converted from ones that accommodate fewer than two guests to ones that can accommodate five or more guests, especially for dinner. Convenience to customers is the most important factor for franchised restaurants. It is a clear indication that convenience should be initially considered for restaurants that carry franchised names.

Providing a comfortable atmosphere was another area that should not be undervalued. Just like menu changes, the atmosphere may need to be regularly changed and given a fresh look. Measuring how far each group needs to be apart from other groups (Roboson, \& Kimes, 2009) might be hard; as is choosing the type and volume of music people will accept. Restaurant operators need to train staff to follow standardized guidelines and adjust music, lighting, etc as time changes, not playing the same music repeatedly. The design and decor must harmonize with the cuisine and service. Unlike previous studies (Kapferer, 1997; Blank, 2006), the importance of brand was not highly considered by university/college community members. This explains that the role of a brand may differ depending on each market and people in the university/college may be more attached to local brands and do not view a brand name restaurant differently.

It is critically important to identify potential customers based on what food service operators can offer, and understanding their expectations would be a vital factor in the operations of the restaurant. Shoemaker (1998) showed that college community members have different needs and suggested different service strategies. Along with this information, operators can clearly design their marketing strategies as they identify what potential customers look for when they select a restaurant. The research findings provide much needed information for restaurant operators in college towns in the US. Some studies (Kivela, 1999; Auty, 1992; Bitner, 1992) indicated differences according to age; however, not
all demographic characteristics can be used in segmenting potential customers in the restaurant business. As some previous studies (Crawford-Welch, 1991; Oh \& Jeong, 1996) state, demographic characteristics may not be enough to segment different market expectations.

Improving what factors customers consider important will not only attract customer loyalty, but also improve the effectiveness of the operations. As the annual migration of new students to campuses occurs, college town populations comprise younger generations from different regions with different characteristics and the size of these populations tends to be consistent. People consider attributes differently when they select a restaurant, and there are many factors that make people decide which restaurant to go to. Restaurant operators will be able to identify their market and the characteristics it may possess, and it will help to identify what products and services should be offered. These findings can be used to develop a strategy for improving the competitive position for foodservice operators in college towns.

There are several things which could have been carried out differently if the study were to be repeated. This study may not be completely generalized because of its limited samples from one university located in the southwestern region in the U.S. The result may not be fully applicable to the entire college/university population because of other contributing factors such as the size of the area and the composition of the population, which could also lead to different results. Other limitations are the high percentage of student respondents in the sample, which may not be a valid representation of the general population, and may consider all dine outs as social dine outs, not business dine outs. Future research needs to identify more personal behavioral characteristics that may influence individual decision-making processes as well. As the college/university population becomes diversified, the cultural impact on restaurant selection also needs to be explored. Future research should include samples from a more diverse demographic mix and various locations such as urban and suburban regions. Other future studies could include a cross national study to investigate how results differ from one country to another.

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