Students' Perceived Service Quality and Customer Satisfaction in a

Midwestern University Foodservice Operation

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Abstract

This study explored the measurement of perceived service quality and satisfaction in a university foodservice setting. An instrument was used to measure the expectations, perceptions, and satisfaction levels of students who purchased meal plans from the university's Housing and Dining Services. Results of face-to-face interviews and a pilot test were used to refine the modified SERVQUAL instrument. Cronbach's Alphas for the scales in the final instrument were 0.96, 0.96, and 0.89 for expectations, perceptions, and satisfaction scales, respectively. A positive linear relationship was found between perceptions and satisfaction ($F=188.98, p=0.000$). As perceptions on tangibles ($p = 0.000$), food ($p = 0.000$), and reliability ($p = 0.038$) increased, the level of customer satisfaction also increased.

Key words: perceptions, expectations, perceived service quality, satisfaction

INTRODUCTION

In recent years, college and university foodservices have experienced many changes that have affected management styles, board plans, payment methods, menu concepts, and service styles. These changes are in response to the demands of a customer base that is diverse in demographic characteristics, such as age, cultural background, life and educational experience, and eating habits (Bowman, McProud, Usiewicz, Gendreau, & Mitchler, 1995; Chi & Brown, 1996; Tayce, Gassenheimer, & Ingram, 1999). Customers in college foodservice operations want maximum choice with wide variety, flexibility and customization, and fresh-prepared food (Buzalka, 2003; Law, 2004). Foodservice managers must be knowledgeable of expectations and perceptions of current students that affect their satisfaction with services provided.

Hence, it is important for college and university foodservice providers to measure perceived service quality and satisfaction as distinct, but related constructs. According to Asubonteng, McCleary, and Swan (1996), the multi-item SERVQUAL developed by Parasuraman, Zeithaml, and Berry (1985,1988,1991), is the most widely used instrument to measure expectations, perceptions, and the resulting gap.   Two scales were developed to measure (1) the consumer's expectation of quality service from an ideal firm in an industry and (2) the consumer's perception of the service actually received from a specific firm in that industry.

Expectations involve the consumers' service quality requirements defined as what they feel a service provider *should* offer rather than *would* offer (Parasuraman et al., 1988). Literature has shown that expectations are important in determining satisfaction (Carman, 1990; Spreng & Mackoy, 1996). Customers have two levels of expectations: predictive or what *will* happen and normative or what *should* happen (Boulding, Kalra, Staelin, & Zeithaml, 1993; Stevens, Knutson, & Patton, 1995). Service providers need to discover what customers expect because satisfaction can be increased by decreasing expectations (Carman, 1990). Becker (2000) suggested that within the general population, expectations may not be homogenous across all students. Because these vary from one student to the next, it is desirable to analyze expectations at the individual level.

Boulding et al. (1993) concluded that perceptions result from a combination of (1) predictive and normative expectations and (2) the reality of the service encounter. It is the evaluation of the operation's performance in comparison to a food service quality standard that a student holds. The resulting gap, or perceived service quality, is "a global judgment, or attitude, relating to the superiority of the service" (Parasuraman et al., 1988, p. 16). Knowing the gap between expectations and perceptions can assist foodservice managers in benchmarking their performance and making changes needed to increase satisfaction.

Satisfaction, as discussed by Oliver (1989), involves "an evaluative, affective, or emotional response" (p.1). In his book, Oliver (1997) provided a definition that he thought was consistent with theoretical and empirical evidence available to him at the time. He defined satisfaction/dissatisfaction as "the consumer's fulfillment response, the degree to which the level of fulfillment is pleasant or unpleasant" (p.28). Therefore,

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satisfaction is the customer's overall judgment of the service provider (McDougall & Levesque, 2000). Crompton and MacKay (1989) stated, "Satisfaction is a psychological outcome emerging from an experience, whereas service quality is concerned with the attributes of the service itself" (p. 368).

Oliver (1997) defined disconfirmation as the difference between the customer's expectations of performance and the actual perceived performance of the service. He stated that satisfaction is determined by disconfirmation. If the performance is less than what the customers expect, quality is perceived to be low resulting in negative disconfirmation or dissatisfaction. Conversely, if performance meets or exceeds customer's expectations quality is perceived to be high, resulting in positive disconfirmation or satisfaction (Bitner, 1990; Kandampully, Mok, & Sparks, 2001).

Of the numerous studies that have applied modified SERVQUAL models, few have been specifically for foodservice. Two of these are Dineserv (Stevens et al., 1995), which measured service quality in its entirety, and TANGSERV (Raajpoot, 2002), which focused on measuring only the tangible dimension. Dineserv adopted the five factor structure of SERVQUAL: tangibles, reliability, responsiveness, assurance, and empathy. The TANGSERV instrument included a three-factor structure for Tangibles: layout/design, product/service, and ambiance/social.   Items used in these two scales were considered in the development of the instrument used in this study.

Application of the SERVQUAL to college and university foodservice operations is currently lacking. This study investigated the evaluation of students' perceived service quality and customer satisfaction with the foodservice operation in a Midwestern university.   The study used a valid and reliable online instrument (Estepa, 2004) to

measure students' perception of service quality and satisfaction in a college and university foodservice setting. The study also investigated whether a linear relationship between the student's perception of service quality and their overall satisfaction rating existed.

METHODOLOGY

Because the study involved gathering data from human subjects, an approval from the Committee for Research Involving Human Subjects (IRB) was obtained prior to the face-to-face interviews, pilot study, and survey administration. Data were collected from a sample of university students participating in a meal plan of a Midwestern university's Housing and Dining Services. Students are housed in four residence halls, located adjacent to the dining center. The sample was composed of a total of 1626 students that included U.S. citizens or permanent residents and international students who were enrolled in both undergraduate and graduate programs. The majority of whom were freshmen.

Data were collected in two stages. Qualitative data were gathered from face-to-face interviews that were conducted from February 21 to March 12, 2004. Quantitative measurements were pilot tested and collected using a web-based survey. The instrument was pilot tested between February 29 to March 6, 2004. After refinement, data were collected from March 10 to March 19, 2004. Additional qualitative data were obtained from responses to the open-ended questions included in the instrument. For a detailed description of the instrument development and data collection process, please refer to *Developing a web-based multiple-item scale for measuring perceived service quality and satisfaction in the university foodservice setting* (Estepa, 2004).

An email was sent to the 1626 students introducing the study, the purpose, and the link to the survey. Each student was able to access the survey site only once because each link was unique. Students were also given a separate link if they chose to opt-out of the study completely. A total of four follow-up emails were sent after initial contact. Consent of participation was automatic with the completion of the survey. The survey software recorded the responses in a downloadable database format that did not include specific identification of the respondent, thus allowing for full confidentiality.

The survey was composed of three primary scales to measure the students' expectations, perceptions, and satisfaction. The expectation scale included 21 attributes that the students expect from any dining center, while the perception scale asked the respondents to evaluate the performance of the specific Midwestern foodservice operation on the same set of attributes. The three-item satisfaction scale measured the students' overall satisfaction with the services that they receive from the facility. All scales used a 7-point Likert scale ranging from 1, strongly disagree, through 7, strongly agree.

The instrument also included a section for the students to rank the importance of the five SERVQUAL (Parasuraman et al., 1988, 1991) dimensions in their evaluation of service quality. The demographics section included questions such as age, gender, length of stay in the residence halls, and university classification. The survey concluded with an open-ended question that provided the respondents an opportunity to indicate their comments or suggestions regarding their dining experiences at the facility.

All statistical procedures were done using the Statistical Package for Social Science (SPSS, 11.5, Chicago, IL). Descriptive statistics were used to summarize means

and standard deviations. Perception minus expectation gap scores per attribute and
dimension were calculated and interpreted.   Multiple regression was conducted with the
perception scores as the independent variable and the total satisfaction score as the
dependent variable to test for a relationship between these variables.

RESULTS AND DISCUSSION

Sample

Although 270 students accessed the site, only a total of 187 completed responses
was obtained for a usable response rate of 11.5%. The growing number of unsolicited
mail in the form of junk, spam, or bulk mail may be a reason that response rates are not
necessarily high using this method (Sheehan, 2001). The recent rampage of computer
viruses spread through email further wards the prospective user from opening any links
or attachments (Sheehan, 2001). In addition, Sheehan (2001) states that response rates
for all types of surveys are declining as a result of the general population being requested
to complete more and more surveys.

Based on information from the university's dining services, the demographics of
the sample used for analysis was reflective of the actual characteristics of students (B.
Burgess, personal communication, November 5, 2003 and February 6, 2004).   The
majority of the respondents were freshmen, predominantly female, with a mean age of
19. The majority had lived in the residence hall for two semesters (61.5%). The most
common meal plan purchased was the 15 meals per week (47.1%). Table 1 provides a
summary of the demographic information.

Table 1. Demographic Characteristics of Respondents.

Demographic Characteristic	N	%
Gender		
Male	44	23.5
Female	143	76.5
Classification		
Freshman	120	64.2
Sophomore	33	17.6
Junior	22	11.8
Senior	11	5.9
Graduate Student	1	0.5
Length of stay in Residence Hall		
1 semester	31	16.6
2 semesters	115	61.5
3 semesters	4	2.1
4 semesters	21	11.2
5 or more semesters	16	8.6
Meal Plan		
10	38	20.3
15	88	47.1
20	60	32.1
No answer	1	0.5

Expectations and Perceptions

Through factor analysis, the 21 service quality attributes were categorized according to the extracted dimensions of Tangibles, Reliability, Customer Relations, and Food (Estepa, 2004). Table 2 shows the means and standard deviations for the 17 expectation and perception items retained for analysis.

Table 2. Perception, Expectation, and Gap Scores for Each Item and Each Extracted Dimension[a]

Dimensions	Perceptions Mean ± SD	Expectations Mean ± SD	Gap
Dimension 1: Tangibles[b]	4.69 ± 1.24	5.20 ± 1.35	-0.51
Employees of _____ dining center are neat and appropriately dressed.	5.43 ± 1.27	5.72 ± 1.23	-0.29
The service and dining areas at _____ dining center are thoroughly clean.	5.12 ± 1.40	5.72 ± 1.49	-0.60
Customers can be confident that safe food practices are followed in the preparation and service of food.	4.88 ± 1.61	5.45 ± 1.75	-0.58
_____ dining center has visually appealing serving and dining areas.	4.71 ± 1.51	5.20 ± 1.48	-0.49
The food presentation at _____ dining center is appealing.	4.47 ± 1.59	4.87 ± 1.72	-0.40
Employees of _____ dining center can answer questions about the menu, ingredients, and methods of preparation.	4.35 ± 1.60	4.78 ± 1.60	-0.42
_____ dining center has operating hours convenient to all their customers.	3.85 ± 2.01	4.68 ± 2.11	-0.82
Dimension 2: Reliability	5.30 ± 1.31	5.70 ± 1.20	-0.40
_____ dining center provides their services at the time they promise to do so.	5.51 ± 1.41	5.87 ± 1.23	-0.36
_____ dining center effectively communicates service hours.	5.46 ± 1.61	5.68 ± 1.59	-0.22
_____ dining center is consistent and reliable.	5.29 ± 1.59	5.65 ± 1.40	-0.36
_____ dining center performs the service right the first time.	5.27 ± 1.40	5.73 ± 1.23	-0.46

At _____ dining center, items on the printed menus are available throughout the service period.	5.01 ± 1.57	5.57 ± 1.56	-0.56
Dimension 3: Customer Relations	5.08 ± 1.30	5.46 ± 1.29	-0.38
Employees of _____ dining center are willing to help customers.	5.25 ± 1.42	5.73 ± 1.39	-0.48
Employees of _____ dining center are courteous with customers.	5.25 ± 1.41	5.59 ± 1.40	-0.34
_____ dining center gives customers individual attention.	4.74 ± 1.45	5.06 ± 1.48	-0.32
Dimension 4: Food	4.67 ± 1.64	5.17 ± 1.64	-0.50
_____ dining center offers a variety of food choices.	5.02 ± 1.77	5.52 ± 1.70	-0.50
The portion sizes offered at _____ dining center are appropriate.	4.32 ± 1.87	4.82 ± 1.93	-0.50

[a] A 7-point Likert scale ranging from 1, strongly disagree to 7, strongly agree was used.

[b] Dimension mean score = (Σ item scores) / number of items in dimension

The range for perceptions scores was from a low of 3.85 ± 2.01 to a high of 5.51 ± 1.41 on a 7 point scale ranging from 1, strongly disagree to 7, strongly agree. Data show that on average, the dining center performed best in reliability ($M \pm SD = 5.3 \pm 1.31$) and poorest in the food dimensions ($M \pm SD = 4.67 \pm 1.64$). The dining center performed well in the following attributes: providing their services when they were promised ($M \pm SD = 5.51 \pm 1.41$), effectively communicating the hours of operation ($M \pm SD = 5.46 \pm 1.61$), and appearance of the employees ($M \pm SD = 5.43 \pm 1.27$). Perception scores indicated that management needs to concentrate efforts on improving the students' perceptions in three key areas: (1) portion sizes that are available, (2) ability of employees to answer questions about the menu items, and (3) convenience of the operating hours that the dining hall has set. These findings are also reflective of sentiments expressed by the students in their responses to open-ended questions.

The range for expectations scores was from a low of 4.68 ± 2.11 to a high of 5.87 ± 1.23. The students also have the greatest mean expectation for the reliability dimension ($M \pm SD = 5.70 \pm 1.20$). Although the food dimension had the lowest expectation score, the mean of 5.17 ± 1.64 on a 7-point scale, indicated that students have high normative expectations. Students had highest expectations for the attributes of services being available at the time that management has promised ($M \pm SD = 5.87 \pm 1.23$), employees who are willing to help customers ($M \pm SD = 5.73 \pm 1.39$), and service being performed right the first time ($M \pm SD = 5.73 \pm 1.23$). Students had the lowest expectations for employee knowledge of the menu items ($M \pm SD = 4.78 \pm 1.60$), portion sizes ($M \pm SD = 4.82 \pm 1.93$), and operating hours ($M \pm SD = 4.68 \pm 2.11$). The students

may not be able to compare the expectations for these attributes to other settings such as restaurants, wherein expectations for these attributes would be relatively high.

Perceived Service Quality

Parasuraman et al. (1994) suggested that the gap analysis is accurate in identifying service shortfalls in an operation. Addressing these identified shortfalls is a foundation for planning strategies to ensure customer experiences that are consistent with their expectations and thus increasing the probability of satisfaction (Kandampully et al., 2001). The data showed that in general, the students' perceptions of the service quality in the dining center did not meet their expectations (Table 2). This is evidenced by all the perception minus expectation gap scores being negative, ranging from –0.22 to –0.82.

Although the students had low expectations about the convenience of the operating hours, portion sizes, and the knowledge of employees, these attributes had the widest gaps. This implied that having low expectations about an attribute does not necessarily suggest that those expectations are easily met or that the respondents are not as critical in evaluating performance on these attributes. On the other hand, the smallest gaps existed with the employees' appearance, ability to provide individual attention, and the effectiveness in communicating service hours. This suggests that these attributes are three of the facility's strongest points.

In general, the largest mean gaps were for the tangible (-0.51) and food (-0.50) dimensions. Management should consider concentrating on these shortfalls and improving the attributes under each dimension. On the other hand, the smallest mean gap was with the customer relations (-0.38) dimension, indicating that the staff is perceived to be generally courteous, willing to help customers, and give individual attention. The

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reliability dimension was not much different at –0.40, indicating that the dining hall is perceived to be relatively reliable and consistent. However, because these gaps were negative, improvement is still desirable to increase the operation's capacity to meet the students' expectations.

Student Satisfaction

Table 3 shows the customer satisfaction evaluation of the services offered by the dining center. The results indicated that the students were more satisfied with the service that they received from the employees of the dining center in comparison to the quality and variety of food offered. Although they are not necessarily dissatisfied, the data showed that overall satisfaction level of students was relatively low on a 7-point scale. The scores on the three items also suggested that students' satisfaction with overall dining experience can be attributed to their satisfaction with the employees.

Table 3. Customer Satisfaction Scores [a]

Statement	Mean ± SD
I am satisfied with the service that I receive from employees at _____ dining center.	5.26 ± 1.473
I am satisfied with the quality and variety of food offered at _____ dining center.	4.30 ± 1.871
Overall, I am satisfied with the dining experience at _____ dining center.	4.82 ± 1.632

[a] Evaluation was made on a 7-point Likert scale ranging from 1, strongly disagree to 7, strongly agree.

Over the years, a focal point for services marketing research has been service quality and the role of its dimensions as a primary determinant of customer satisfaction (Brown et al., 1993; Parasuraman et al., 1988, 1994). Research shows that service quality and satisfaction are indeed distinct constructs (Fournier & Mick, 1999). McDougall and

Levesque (2000) further stated that though distinct constructs, service quality and satisfaction have a causal relationship.

Total satisfaction scores per respondent were calculated by summing all the satisfaction item scores. Similarly, factor scores per student were calculated by averaging all the perception scores for the attributes per dimension. Stepwise multiple regression (Table 4) was conducted with the factor scores as the independent variables and the total satisfaction score as the dependent variable to test for a relationship between these variables. Results showed that variance inflation factors (VIF's) were less than ten, indicating that multicollinearity between dimensions was not an issue in the model.

Table 4. Summary of Stepwise Regression for Dimensions Significant in Predicting Total Customer Satisfaction[a]

Independent Variable	B	SE B	β	t value	Sig.
Tangibles	1.78	0.25	0.49	7.19	0.000*
Food	0.90	0.14	0.33	6.60	0.000*
Reliability	0.49	0.23	0.14	2.09	0.038*
$R^2=0.76$		Adjusted $R^2= 0.75$		F= 188.98	

* $p<0.05$

The tangibles, food, and reliability dimensions explained 76% of the variance in total satisfaction scores (*F=188.987, p=0.000*). Therefore, it is reasonable to conclude that as perception ratings increase, customer satisfaction also increases. Results of the regression imply that improving the attributes that compose these dimensions will have the greatest impact on increasing customer satisfaction scores. Notably, the two dimensions with the greatest effect, tangibles and food, are also the dimensions for which the dining hall received the poorest mean perception ratings. This again stresses management's need to focus immediate attention on these dimensions. The foodservice

manager should take steps to evaluate operational procedures involved in delivering these attributes.

Other findings

Besides the quantitative measurements in the instrument, the students were also asked to provide any comments and suggestions for the operation. Additionally, the students were asked to enumerate any quality attributes that they use to evaluate their dining experience. Eight attributes were identified in the responses, namely: convenience and appropriate meal hours, variety of food choices, food quality attributes, availability of healthy options, efficient staff, value for the money, novelty, and ability to offer suggestions. This further supports the importance of measuring and benchmarking perceived service quality and customer satisfaction in this segment.

<p style="text-align:center">**Conclusion and Applications**</p>

Meyer and Conklin (1998) suggested that successful school foodservice facilities give their student consumers a central role in the operations. Bojanic and Kashyap (2000) agreed that a customer-oriented approach is vital in the marketing concept. As implied by these authors, the study found that focusing on the customer can provide the foodservice manager an opportunity to identify important product and service attributes that affect customer perceptions of value and satisfaction. The study showed that as perceptions of service quality attributes increase, the level of customer satisfaction also increases. Hence, this emphasizes the need for management to monitor and constantly work to improve performance on the different attributes.

Applications

The evaluation of service quality and satisfaction involves many aspects simply because it is a human behavioral measurement. These expectations and perceptions vary from one student to another, from one semester to the next. Further research can focus on factors that cause the variances in these evaluations. Demographic factors such as gender, age, or cultural background may be areas of interest, especially in more diverse populations than the one studied in this research.

The expectations scale and demographics portion can be administered at the beginning of the semester to establish a benchmark for the foodservice manager. At the end of the semester, a matched survey can be administered to measure the performance of the facility. Reducing the length of the questionnaire may also encourage response rates to increase. Separate administrations could also minimize the effect of the students' familiarity on their expectation ratings.

Foodservice managers can use this instrument as a baseline for a longitudinal benchmarking program. Having a baseline will give foodservice managers a means of comparing their performance from semester to semester or from year to year. Foodservice managers can use the data to determine if they are performing well, mediocre, or poorly in the specific aspects of the service experience. It is much easier to improve services if management knows what needs to be improved. Having this information will help managers allocate funds or resources towards areas that most need improvement. Furthermore, data can be used to track fluctuations in expectations and resulting perceptions of changes that management may decide to implement.

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This information can also be used to develop employee-training programs to deal with service shortfalls identified in the operation. As results of this study have shown, satisfaction with employees contributes significantly to the overall customer satisfaction. Management should emphasize the need for employees to be knowledgeable of the food served. One way to do this is to have service staff take part in a taste panel where a supervisor will allow them to try menu items and explain cooking method, ingredients, and other pertinent information. Whether employees work in the back of the house or the frontline, their roles in the operation are central to the success of the facility.

Recommendations were submitted to the study site based on feedback from the students. Key suggestions included extending the availability of the service by having the grab-and-go option open throughout the day and adjusting meal hours to accommodate the students' more active lifestyles. Though unlimited portion sizes may initially affect the bottom line and food cost, it seems to be a popular demand among the students.

REFERENCES

Asubonteng, P., McCleary, K.J., & Swan, J.E. (1996). SERVQUAL revisited: A critical review of service quality. *The Journal of Services Marketing, 10*(6), 66-81.

Becker, C. (2000). Service recovery strategies: The impact of cultural difference. *Journal of Hospitality and Tourism Research, 24*(4), 526-538.

Bitner, M.J. (1990). Evaluating service encounters: The effects of physical surroundings and employee responses. *Journal of Marketing, 54*(2), 69-82.

Bojanic, D. C., & Kashyap, R. (2000). A customer oriented approach to managing noncommercial foodservice operations. *Journal of Restaurant & Foodservice Marketing, 4*(1), 5-18.

Boulding, W., Kalra, A., Staelin, R., & Zeithaml, V.A. (1993). A dynamic process of service quality: From expectations to behavioral intentions. *Journal of Marketing Research, 30,* 7-17.

Bowman, M.K., McProud, L.M., Usiewicz, R.A., Gendreau, M., & Mitchler, J.B. (1995). Evaluation of the effectiveness of point-of-choice nutrition information on consumer perceptions of food quality and value in a university food service. *Journal of the National Association of College and University Food Services, 17.* Retrieved February 3, 2004, from www.nacufs.org/resources/publications/journal/old/evaluation.asp

Brown, T. J., Churchill, Gilbert A. Jr., & Peter, J. P. (1993). Improving the measurement of service quality. *Journal of Retailing, 69*(1), 127-139.

Buzalka, M. (2003). A cross-segment business forecast. *Food Management, 38*(2), 34-50.

Carman, J.M. (1990). Consumer perceptions of service quality: An assessment of the SERVQUAL dimensions. *Journal of Retailing, 66*(1), 33-55.

Chi, C., & Brown, N. E. (1996). Attributes affecting purchase of residence hall meal plans by Pacific-Asian students at a land-grant institution. *Journal of the National Association of College and University Food Services, 18.* Retrieved January 30, 2004, from www.nacufs.org/resources/publications/journal/article3/Article3.asp.

Crompton, J.L., & MacKay, K.J. (1989). Users' perceptions of the relative importance of service quality dimensions in selected public recreation programs. *Leisure Sciences, 11*, 367-375.

Estepa, A. (2004). *Developing a web-based multiple-item scale for measuring perceived service quality and satisfaction in the university foodservice setting.* Unpublished master's thesis, Kansas State University.

Fournier, S., & Mick, D.G. (1999). Rediscovering satisfaction. *Journal of Marketing, 63*(4)*, 5-23.

Kandampully, J., Mok, C., & Sparks, B. (2001). *Service Quality Management in Hospitality, Tourism, and Leisure.* New York: The Haworth Hospitality Press.

Law, J. (2004). Station Innovation. *Food Management, 39*(6), 30-42.

McDougall, G.H.G, & Levesque, T. (2000). Customer satisfaction with services: Putting perceived valued into the equation. *Journal of Services Marketing, 14*(5), 392-410.

Meyer, M. K., & Conklin, M. T. (1998). Variables affecting high school students' perceptions of school foodservice. *Journal of the American Dietetic Association, 98*(12), 1424-1429.

Oliver, R.L. (1989). Processing of the satisfaction response in consumption: A suggested framework and research propositions. *Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behavior, 2,* 1-16.

Oliver, R.L. (1997). *Satisfaction: A behavioral perspective on the consumer.* Singapore: McGraw-Hill International Editions.

Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing, 49*(4), 41-50.

Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1988). SERVQUAL: A multi-item scale for measuring consumer perceptions of the service quality. *Journal of Retailing, 64*(1), 12-40.

Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1991). Refinement and reassessment of the SERVQUAL scale. *Journal of Retailing, 67*(4), 420-450.

Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1994). Alternative scales for measuring service quality: A comparative assessment based on psychometric and diagnostic criteria. *Journal of Retailing, 70*(3), 201-230.

Raajpoot, N. (2002). TANGSERV: A multiple item scale for measuring tangible quality in foodservice industry. *Journal of Foodservice Business Research, 5*(2), 109-127.

Sheehan, K. B. (2001). E-mail survey response rates: A review. *Journal of Computer Mediated Communication, 6*(2). Retrieved March 26, 2004, from www.ascusc.og/jcmc/vol6/issue2/sheehan.html

Spreng, R. A., & Mackoy, R. D. (1996). An empirical examination of a model of perceived service quality and satisfaction. *Journal of Retailing, 72*(2), 201-214.

Stevens, P., Knutson, B., & Patton, M. (1995). Dineserv: A tool for measuring service quality in restaurants. *Cornell Hotel & Restaurant Administration Quarterly, 36*(2), 56-60.

Tayce, E., Gassenheimer, J., & Ingram, R. (1999). The necessity of a market segmentation strategy in a university food service setting. *Journal of the National Association of College and University Food Services*, *21.* Retrieved February 6, 2004, from www.nacufs.org/resources/publications/journal_1999/tayce.asp