

An Analysis of Freshmen Students' Motivation to Eat at On-Campus Dining Facilities

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ABSTRACT

The purposes of the study were (1) to determine which attributes university freshmen consider most important when choosing to dine at on-campus foodservice venues, and (2) to reveal the students' level of satisfaction with several experience elements related to on-campus foodservice operations. The results of this study demonstrated that university freshmen consider "flavor and taste of food", "quality and freshness of food," and "operating hours" most important when choosing to dine at on-campus facilities. The study also revealed that university freshmen, attending a major institution in Texas, were most satisfied, by rank as follows, with the (1) Social Environment, (2) Atmosphere, (3) Customer experience, and (4) service of campus foodservice venues.

Keywords: *freshmen, motivation, satisfaction, on-campus dining.*

INTRODUCTION

Today's university student is opinionated, sophisticated, experienced in eating out, and willing to pay extra for quality products and services (Schuster, 2008; Sutherlin & Badinelli, 1993). By 2015, the total university population is predicted to increase from 15 million to 22 million students, so as enrollment for higher education continues to rise, students and their unique demands become even more apparent (Wolburg & Pokrywczyński, 2001).

As campuses have become increasingly progressive, foodservice operators find they are competing with local restaurateurs and have recognized the need to better understand their

customers (Shoemaker, 1998). This distinct generation of consumers has become a significant market for campus food and beverage outlets as choice and variety have become essential attributes (Shanka & Taylor, 2005; Sutherlin & Badinelli, 1993).

Keeping the student dollar on campus is the number one challenge operators face to date, especially because the average lifetime-value of the typical undergraduate student is four years, with the freshmen student residing on-campus for the first year of their academic career. (Hurst, 1997).

Therefore, this study sought to identify the set of attributes university freshmen consider most important when patronizing university foodservice venues and to identify the overall level of satisfaction of university freshmen with several experience elements including social environment, service, atmosphere, product assortment, price, retail brands, and customer experience.

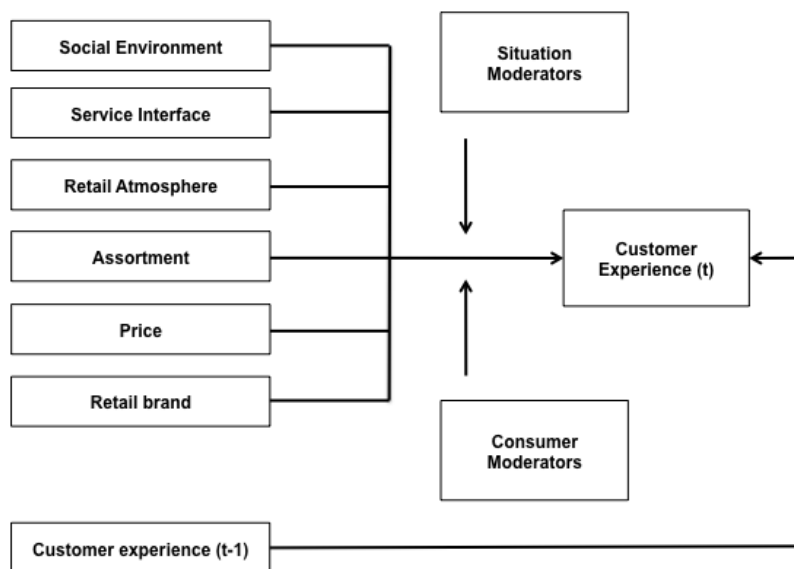
The following research questions were developed to test the research objectives.

1. Which foodservice attributes do university freshmen consider most important when choosing to dine on-campus?
2. What factors can be identified among the importance of the foodservice attributes?
3. Which of the seven factors are most important to university freshmen?
4. Which experience elements are university freshmen most satisfied with?

Theoretical Framework

The theoretical framework leading to the development of this study is based upon the model, Conceptual Model of Customer Experience Creation, developed by Verhoef et al. (2009).

Figure 1
Conceptual Model of Customer Experience Creation



As shown in Figure 1, there are several determinants or elements of the customer experience, including social environment, service interface, retail atmosphere, assortment, price, and retail brand. The model concludes the current customer experience at the time of t is impacted by previous experiences at time $t - 1$. Consumer and situational moderators are also considered. The model suggests food retailers and service providers take into account the broader outlook of how the consumer's experience is developed when outlining their customer experience management strategies.

METHODOLOGY

The testing site included a major university located in Texas with an enrollment of over 28,000 students. The University is one of the largest higher educational institutions, offering 150 undergraduate and over 100 master's degree programs, in the state of Texas. Students originate from all across Texas, each of the 50 states, and from more than 90 foreign countries. In the fall of 2008, approximately 4,407 freshmen, 2,203 transfer students, and 1,701 graduate and professional students were enrolled ("About Texas," 2008).

The intercept survey method was used to encourage participation in the study on September 13th, 14th, & 18th, of 2009. On all three days of collection, two researchers were set up at the main entrance into a dining facility. Upon entry, they asked students if they were a freshman, if answering yes, they were then asked if they would be interested in taking a survey about dining on-campus. If the informant agreed, the survey was distributed to the informants. A total of 355 surveys were collected and 342 were usable.

The survey instrument used contained 15 questions designed to assess the university freshmen's attitudes and opinions toward Hospitality Services based on a comprehensive literature review (Shoemaker, 1998; Verhoef et al. 2009).

Data Analysis

SPSS 17.0 was used to analyze the data obtained from the completed surveys. Frequency measurements were conducted on the survey informants' demographic information. The mean score was determined in order to reveal which attributes university freshmen consider most important, including which experience elements the informants are most satisfied with and was determined in order to assess which experience elements university freshmen are most satisfied with. A factor analysis was conducted revealing seven dimensions among the importance rating of the 28 foodservice attributes. Last, a multiple regression analysis was used to illustrate the effect of the six experience elements upon the overall level of satisfaction with the complete customer experience in order to reveal which factors or dimensions are most relevant to the consumer.

RESULTS

The majority, 85.4%, of informants were the age of 18. The distribution between the number of males (51.6%) and females (45.8%) was almost even. The survey informants were

predominately White/ Caucasian (69.7%), followed by Hispanic (12.8%), African American (9.6%), and Asian (4.1%).

Research Question 1

Which foodservice attributes do university freshmen consider most important when choosing to dine on-campus?

University freshmen were asked to rate the importance of 28 foodservice attributes when choosing to dine at campus facilities, using a five-point Likert scale, 1 being “not important,” and 5 being “very important.” The mean value was determined for each of the 28 attributes. The top 5 attributes were then ranked in order of importance. “Flavor and taste of food” was determined to be the most important attribute among university freshmen with a mean score of 4.54, followed by “quality and freshness of food” with a mean score of 4.51. The next two most important attributes were “late operating hours” (4.47) and “walking distance from dorm” (4.42).

Research Question 2

What factors can be identified among the importance of the foodservice attributes?

A total of seven factors were revealed among the importance of the attributes. A factor analysis was conducted in order to reveal the dimensions. Table 1 summarizes the results of the analysis. The first factor, *Variety in Food Choice*, includes the attributes “flavor and taste of food” with a factor loading score of .791, “quality and freshness of food” (.777), “wide assortment of food items” (.727), “clean serving and dining areas” (.614), “different and unique food items” (.583), and “ability to customize food choices” (.397).

“Offers healthy food options” (.763), “meets dietary needs” (.761), “offers organic food options” (.711), “early operating hours” (.439), and “provides made-to-order options” (.396) are all attributes grouped under the second factor revealed, *Healthy Food Options*. The third factor, *Service and Atmosphere*, contains the attributes “friendly staff,” “knowledgeable staff,” “quick service,” “décor and ambience,” and “attractive atmosphere.” The five attributes have factor loading scores of .798, .782, .597, .459, and .434, respectively. “A place to meet with friends” (.863), “a place to relax and unwind” (.782), “seating is available” (.527), and “recognizable brands” (.508) are included under the fourth factor, *Social Setting*.

The fifth factor is *Value and Price*, representing “good value for the price” (.873), “affordable items for purchase” (.831), and “portion sizes are comparable to price” (.829). The sixth and seventh factors are *On-the-Go Options* and *Convenience of Location*. The *On-the-Go Options* factor only included two specific attributes, “availability of pre-made meals” with a factor loading of .768, and “availability of grab-and-go items” (.700). *Convenience of Location* consisted of “walking distance from dorm” (.651), “walking distance from class” (.651) and “late operating hours” (.481).

Table 1
Factor Analysis Results of Foodservice Attributes (N = 342)

Subscales	Factor Loading	Eigen Value	Variance Explained	Reliability Coefficient
Variety in Food Choice		3.535	12.627	.820
Flavor and taste of food	.791			
Quality and freshness of food	.777			
Wide assortment of food items	.727			
Clean serving and dining areas	.614			
Different and unique food items	.583			
Ability to customize food choices	.397			
Healthy Food Options		2.687	9.596	.751
Offers healthy food options	.763			
Meets dietary needs	.761			
Offers organic food options	.711			
Early operating hours	.439			
Provides made-to-order options	.396			
Service and Atmosphere		2.669	9.533	.792
Friendly staff	.798			
Knowledgeable staff	.782			
Quick service	.597			
Décor and ambience	.459			
Attractive atmosphere	.434			
Social Setting		2.659	9.496	.782
A place to meet with friends	.863			
A place to relax and unwind	.782			
Seating is available	.527			
Recognizable brands	.508			
Value and Price		2.502	8.937	.860
Good value for the price	.873			
Affordable items for purchase	.831			
Portion sizes are comparable to price	.829			
On-the-Go Options		2.467	8.812	.772
Availability of pre-made meals	.768			
Availability of grab-&-go items	.700			

Table 1 (Continued)

Subscales	Factor Loading	Eigen Value	Variance Explained	Reliability Coefficient
Convenience of Location		1.658	5.921	.637
Walking distance from dorm	.651			
Walking distance from class	.651			
Late operating hours	.418			
Total			64.922	.913

Research Question 3

Which of the seven factors are most important to university freshmen?

A multiple regression analysis was used to illustrate the effect of the seven experience elements upon the overall level of satisfaction with the complete customer experience in order to reveal which factors or dimensions are most relevant to the consumer (Table 2). Of the seven factors, *Service and Atmosphere* and *Social Setting* were proven to be most significant among the informants based upon their level of satisfaction with the entire customer experience.

Therefore, when choosing to dine at on-campus venues, providing a place to meet with friends and a place to relax and unwind are most relevant to the student, including whether seating is available and recognizable brands are present through foodservice units or products. Friendly and knowledgeable staff members, quick service, décor and ambiance, and an attractive atmosphere are most imperative under the *Social Setting* factor.

Table 2
Factors Affecting Informants' Customer Experience by Regression Analysis

Variable	Standardized Beta Coefficient	<i>t</i>	Significance
Variety in Food Choice	.059	.832	.406
Healthy Food Options	.023	.336	.737
Service and Atmosphere	.143	2.009	.045
Social Setting	.199	2.990	.003
Value and Price	.101	1.754	.080
On-the-Go Options	.046	.725	.469
Convenience of Location	-.007	-.105	.917
Constant		5.144	.000 ^a

Note: $R = 0.418^a$; adjusted $R^2 = 0.156$; $R^2 = 0.175$; $F = 9.174$; $p = 0.000$

Research Question 4

Which experience elements are university freshmen most satisfied with?

Informants were asked to rate their overall level of satisfaction with several experience elements or determinants related to campus foodservice operations, using a five-point Likert scale, 1 being “dissatisfied,” and 5 being “satisfied.” The mean score for each element was determined and then ranked highest to lowest (Table 3).

Survey informants were most satisfied with the *Social Environment* (4.26) and *Atmosphere* (4.20) of campus foodservice venues. Freshmen students rated their overall customer experience fairly high as well, with a mean score of 4.15. The mean score for both *Service* and *Product Assortment* was the same at 4.13, *Retail Brands* received a mean score of 4.11, and students were least satisfied with *Price* (3.57).

Table 3
Level of Satisfaction with Foodservice Elements

Rank	Experience Elements	Mean	Std. Deviation
1	Social Environment	4.26	.77
2	Atmosphere	4.20	.77
3	Customer Experience	4.15	.80
4	Service	4.13	.87
5	Product Assortment	4.13	.88
6	Retail Brands	4.11	.83
7	Price	3.57	1.0

CONCLUSIONS

The results of this study support the theoretical framework and its components; by measuring the importance of these elements (e.g. social environment, service, and atmosphere) and the consumer’s level of satisfaction, one is able to gain a better picture of the current perception of the customer in order to improve upon the overall experience with the foodservice provider or retailer.

The results revealed the consumer, or Millennials, consider several foodservice attributes of high importance, which supports previous research released on the distinct preferences of the generation. The “flavor and taste of food” is the most important attribute when making the decision to dine on-campus. Millennials typically seek bold, global flavors, and expect their meal purchases to reflect quality and freshness. Late-night dining was proven to be a trend among these shoppers as well, but most significant is the matter of convenience to today’s student.

Seven factors were revealed among the importance of the foodservice attributes. These factors were named according to the attributes reflected, including *Variety in Food Choice*, *Healthy Options*, *Service and Atmosphere*, *Social Setting*, *Value and Price*, *On-the-Go Options*, and *Convenience of Location*. Each one of these dimensions distinguished the type of consumer this particular sample of university freshmen represents. These customers consider flavor, quality, assortment, variety, and customization highly important. The health factor also comes into to play when examining their needs and wants. They expect on-campus dining facilities to offer

healthy and organic meals and items, made-to-order options, and early operating hours for those who head to class in the morning.

The *Service and Atmosphere* factor illustrates the demand for friendly, knowledgeable staff members who can offer quick service. The overall atmosphere of the dining or retail facility plays an important role within the dining experience as well. *Social Setting* illustrates the need for on-campus facilities to create an environment where friends can meet, and where students can relax and unwind with plenty of seating available. It's all in the name with the fifth factor, *Value and Price*. University freshmen demand affordable products providing the right amount of value and appropriate portion size. *On-the-Go Options* reflects mobility in purchase decision, including pre-made meals and the availability of grab-&-go items, which are a high priority among this segment. The final factor, *Convenience of Location*, highlights the importance of the location of the dining facility, whether it's close to class or dorm room, and late operating hours.

The *Service and Atmosphere* and the *Social Setting* dimensions were discovered to be most significant among university freshmen based upon overall satisfaction. Therefore, friendly and knowledgeable staff members, quick service, total atmosphere, a place to meet with friends, a place to relax and unwind, and available seating are most imperative for this group of consumers.

In relation to satisfaction, students were most satisfied with the social environment and atmosphere generated by campus dining venues. They also rated their level of satisfaction with their overall customer experience fairly high as well, ultimately representing the success of the current initiatives implemented by campus foodservice providers at the University. This also supports the research presented in this study as well, illustrating the importance of continuous optimal customer experience management across university foodservice operations.

LIMITATIONS

Data were collected in one location on the campus of the university. The data were limited to freshmen living on-campus, and those individuals living on-campus with a higher academic standing (e.g. sophomore, junior, senior) were not considered.

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