



Report Title: Executive Summary of NACUFS Customer Satisfaction Benchmarking Survey
Author(s): D. Gilmore, Program Analyst
Revision History: Created February 11, 2013
Updated: February 19, 2013

Abstract

This report is to serve as a summary of the findings from the 2012 National Association of College & University Food Services (NACUFS) Customer Satisfaction Benchmarking Survey report. Using diagrams developed by Industry Insights, Inc., Johnson C. Smith University (JCSU) now has more information to better understand the student view of the campus dining experience. Findings indicate that there are various areas in which an improvement could greatly impact the satisfaction level of the JCSU student body. Due to the amount of responses, two open-ended questions are still in the process of being analyzed and will be reported at a later time. Following further review of the data, it is recommended that action plans are created in order to complete the study.

Keywords

NACUFS Customer Satisfaction Benchmarking Survey, 2012, food service, satisfaction, importance

Table of Contents

Introduction and Purpose	2
Methodology	2
Findings	3
Diagram 1. NACUFS Customer Satisfaction Benchmarking Survey Priority Matrix	5
Diagram 2. JCSU Importance versus Satisfaction Factor Gap Analysis	6
Diagram 3. Comparison of JCSU Satisfaction to Industry Satisfaction.....	7
Conclusions	8
Appendix I- Example of NACUFS Customer Satisfaction Benchmarking Survey Questionnaire	9
Appendix II- NACUFS Customer Service Benchmarking Survey Factors of Food Service Operation	11

Introduction and Purpose

Dr. Ronald Carter, Johnson C. Smith University President, appointed Dean Cathy Jones, Dean of Student Development in the Department of Enrollment Services and Student Success, to investigate general student complaints made regarding meals. The purpose of this study was to gather a view of what a variety of students feel about the dining services offered in the student cafeteria. Dr. Carter directed Dean Jones to use the National Association of College & University Food Services (NACUFS) Customer Satisfaction Benchmarking Survey to complete the study.

The NACUFS Customer Satisfaction Benchmarking Survey is designed to assist institutions in evaluating the food services provided across their entire campus. The survey instrument was designed based on contributions of representatives from various NACUFS member institutions. In 2004, the survey instrument was made available for online delivery. For the last 12 years, NACUFS has asked the independent research firm, Industry Insights, Inc.¹, to conduct the study. Industry Insights assisted institutions with the setup and administration of either paper or online surveys. Industry Insights also developed a results report for each institution as a way for decision-makers to view a variety of summary reports about key food service operations that impact the university dining experience.

Methodology

In September 2012, Dean Cathy Jones contacted the Office of Institutional Planning, Assessment, Effectiveness, and Research (IPAER) regarding the purchasing and administration of the NACUFS Customer Satisfaction Benchmarking Survey. IPAER's Program Analyst, Dawnita Gilmore, met with Dean Jones to discuss the contract for administration, the administration process, and the use of incentives to complete the survey. It was decided that surveying the entire student population with University meal plans was necessary to capture a broader viewpoint of the situation. Dean Jones and IPAER decided to use the online survey method provided by Industry Insights because of the ease of administration. A total of 1007 students were selected to complete the survey. IPAER provided Industry Insights with a list of email addresses of those students with meal plans to be a part of the survey administration². At the same time, Dean Jones and Margie Worthy, Administrative Assistant of the Department of Enrollment Services and Student Success, created an incentive plan to increase the number of responses to the survey. Each participant who completed the survey will be entered into a drawing to win a Visa gift card.

The NACUFS Customer Satisfaction Benchmarking Survey consists of a total of 53 web-based questions. In the first section, respondents are asked to complete demographic information for classification purposes. Next, respondents are asked how satisfied they are with the overall dining services provided by the university. The following section was designed to rate 25 factors³ of operating a dining facility based on satisfaction and importance of food services provided to customers⁴ of the university. Participants are asked to respond on a 1 to 5 Likert scale⁵ about each of these 25 factors. In the last

¹ Industry Insights, Inc. is headquartered in Columbus, Ohio.

² This list for survey administration contained only email addresses and would not be used for any other purpose by Industry Insights, Inc.

³ A list of the 25 factors is located in Appendix II.

⁴ Participating institutions had the option of surveying students, faculty, and staff as customers of multiple dining facilities on a campus. JCSU elected to only survey students as it pertains to the student cafeteria.

⁵ The survey questions are based on a scale from 1 to 5, where 1 denotes "very dissatisfied" or "not at all important" and 5 denotes "very satisfied" or "very important", respectively.

section, two open-ended questions⁶ ask respondents to share any other thoughts about campus dining and what one change they would make to any aspect of their dining experience. The web survey was launched on October 29, 2012. Two reminder notifications were emailed to students throughout the administration. The survey concluded on November 21, 2012.

In February 2012, Industry Insights provided each institution with a feedback report of their results. The report is made up of three sections: Industry Overview, Executive Summary, and Detailed Survey Results. The Industry Overview contains aggregated results about satisfaction from all participating schools that completed the survey during this administration. The Executive Summary contains more detailed reports giving an overview of JCSU findings; including predictors of overall satisfaction and comparative tables⁷. The Detailed Survey Results section is comprised of tables with frequency and means for each factor of the survey as it pertains to JCSU responses.

Findings

A total of 115 institutions participated in this year's survey, completing over 140,000 questionnaires. Of these 115 institutions, 86 chose to administer the survey online.

Johnson C. Smith University submitted 1007 student email addresses to Industry Insights for completion of the survey. Of 1007 student participants submitted, 21% (n= 207) completed the Food Service Survey. Of these 207 respondents, 77% (n=159) were female and 23% (n=48) were male. Only 6% (n=12) indicated that they live off campus. Respondents selected their class standing: First year 37% (n=77), Sophomore 31% (n=64), Junior 20% (n=41), Senior 12% (n=25)⁸.

The Executive summary provided by Industry Insights begins with a stepwise multiple regression analysis of the data submitted by JCSU⁹. The examining of customer satisfaction data by using regressions determines the role each variable plays in influencing the overall satisfaction. The "Key Drivers" with the largest regression coefficients are considered to have the most relative weight on how the overall satisfaction is determined. Likewise, regression analysis provides the power of the model (Adjusted R²) to explain the relationships and also provides the statistical significance of the model and variables.

For JCSU, the "Key Drivers" of overall satisfaction¹⁰ are in *Food: Overall* (Top Predictor), *Service: Overall* (2nd Predictor), *Eye appeal* (3rd Predictor). These three areas play some part in the prediction of overall satisfaction. Likewise, the model explains 70.6% of the variance in overall satisfaction (Adjusted R² = 0.706) is explained by the 25 factors. Additionally, it is highly unlikely that the model's findings are occurred by random chance (model significance = 0.00).

Diagram 1 illustrates the student satisfaction (vertical axis) compared to the student importance (horizontal axis) using a matrix. Each number on the matrix is related to a specific factor listed below the chart. Items that fall in the lower-right quadrant indicate "action areas." These are the factors in

⁶ Industry Insights allows for the selection of up to 3 questions at an additional charge. JCSU did not use this option.

⁷ Trend data is made available to institutions that have participated in the last three years.

⁸ A fifth option of "Other" was available but no students selected this option.

⁹ See pages 21- 23 of the NACUFS Customer Satisfaction Benchmarking Survey Report provided by Industry Insights for an in-depth explanation of the regression analysis performed.

¹⁰ See page 26 of the NACUFS Customer Satisfaction Benchmarking Survey Report provided by Industry Insights for more information.

which decision-makers may want to concentrate their efforts first because students gave low satisfaction, but high importance. The lower-left quadrant indicates areas to “watch” and the upper-right quadrant indicates areas to “sustain or improve”. Factors falling into these ranges may need to be reviewed in closer detail because they are either areas that should be monitored as to not fall into the action area or that can be continued for high satisfaction amongst students. The upper-left quadrant indicates factors in which the institution may be “overachieving” because students are satisfied, yet the item has low importance. In addition, the “Key Drivers” as determined by the regression analysis are listed in bold below the matrix. The factor *Food: Overall* is in the “action area” quadrant, while *Eye appeal* and *Service: Overall* are in the “watch” and “sustain or improve” quadrants, respectively.

Diagram 2 depicts the gap analysis of the satisfaction means and importance means for each of the 25 factors. A table of the satisfaction means and importance means are included. The bars represent the gap between satisfaction scores and importance scores as determined by the respondents; the longer the bar, the bigger the gap between satisfaction and importance. The goal for decision-makers viewing gap analysis is to shorten the gap between a respondent’s value of importance on an item and their indication of satisfaction with that item. The diagram is sorted by highest level of satisfaction. The three areas with the widest gaps are *Taste* (2.19), *Variety of healthy menu choices* (2.20), and *Variety of menu choices* (2.49).

Diagram 3 is a comparison of the satisfaction means and gap results of JCSU to the satisfaction means and gap results of all participating institutions (Industry). This table is sorted on highest satisfaction mean of JCSU. The data presented allows decision-makers to view the levels at which JCSU students are satisfied in comparison to other schools. This can be viewed as potential goals for changing how satisfied students are at JCSU. The three highest levels of satisfaction by JCSU students are in the areas of *Location* (3.97), *Friendliness of staff* (3.91), and *Layout of facility* (3.82). The three lowest levels of satisfaction by JCSU students are in the areas of *Availability of posted menu items* (2.40), *Variety of healthy menu choices* (2.32), and *Variety of menu choices* (2.13). In addition, of the three lowest levels of satisfaction, two factors (*Variety of healthy menu choices* and *Variety of menu choices*) also have the widest gap results between satisfaction and importance. Overall, JCSU students are less satisfied with all 25 factors than other students at other participating institutions.

Diagram 1. NACUFS Customer Satisfaction Benchmarking Survey Priority Matrix¹¹



#	Factor	#	Factor
1	Food: Overall	14	Helpfulness of staff
2	Taste	15	Friendliness of staff
3	Eye appeal	16	Cleanliness: Overall
4	Freshness	17	Cleanliness: Serving areas
5	Nutritional content	18	Cleanliness: Eating areas (tables, chairs, etc.)
6	Value	19	Location
7	Availability of posted menu items	20	Layout of facility
8	Variety of menu choices	21	Appearance
9	Variety of healthy menu choices	22	Availability of seating
10	Variety of vegetarian menu choices	23	Comfort (seats, temperature, lighting, sound level, etc.)
11	Service: Overall	24	Environmentally friendly practices related to food
12	Speed of service	25	Social/ ethical practices related to food
13	Hours of operation		

Items in **bold** were the “Key Drivers” as determined by the regression analysis.

¹¹ See page 27 of the NACUFS Customer Satisfaction Benchmarking Survey Report provided by Industry Insights for a closer look at the priority matrix.

Diagram 2. JCSU Importance versus Satisfaction Factor Gap Analysis

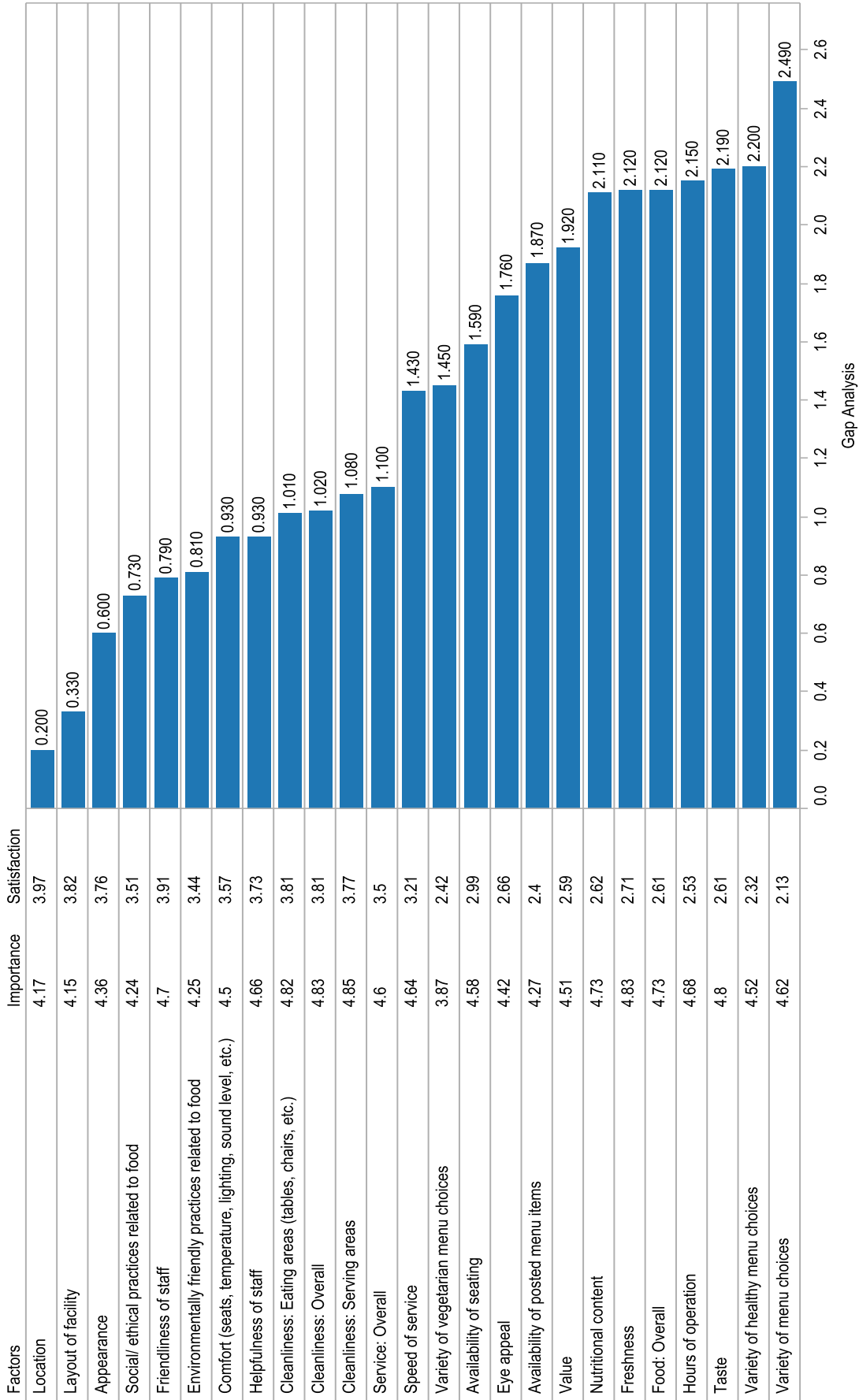


Diagram 3. Comparison of Satisfaction and Gap Results between JCSU and Industry

Factors ¹²	Mean Scores		Mean Gap ¹³	
	JCSU Satisfaction	Industry Satisfaction	JCSU	Industry
Location	3.97	4.40	0.21	-0.10
Friendliness of staff	3.91	4.28	0.79	0.13
Layout of facility	3.82	4.24	0.33	-0.22
Cleanliness: Overall	3.81	4.28	1.02	0.32
Cleanliness: Eating areas (tables, chairs, etc.)	3.81	4.07	1.01	0.47
Cleanliness: Serving areas	3.77	4.31	1.08	0.25
Appearance	3.76	4.30	0.61	-0.26
Helpfulness of staff	3.73	4.24	0.92	0.13
Comfort (seats, temperature, lighting, sound level, etc.)	3.57	4.14	0.93	0.12
Social/ ethical practices related to food	3.51	4.08	0.73	-0.08
Service: Overall	3.50	4.22	1.10	0.26
Environmentally friendly practices related to food	3.44	4.06	0.81	-0.01
Speed of service	3.21	4.06	1.43	0.40
Availability of seating	2.99	3.99	1.59	0.36
Freshness	2.71	3.80	2.12	0.82
Eye appeal	2.66	3.86	1.76	0.05
Nutritional content	2.62	3.55	2.11	0.86
Food: Overall	2.61	3.93	2.12	0.62
Taste	2.61	3.89	2.19	0.78
Value	2.59	3.50	1.91	0.93
Hours of operation	2.53	3.86	2.15	0.58
Variety of vegetarian menu choices	2.42	3.62	1.45	-0.15
Availability of posted menu items	2.40	4.05	1.87	0.18
Variety of healthy menu choices	2.32	3.53	2.20	0.82
Variety of menu choices	2.13	3.70	2.49	0.72

¹² Sorted by highest level of JCSU Satisfaction

¹³ Gap = Mean Importance minus Mean Satisfaction.

Conclusions

It is necessary for decision-makers to take the time to conduct further evaluation of the data in order to make effective action plans. The purpose of this report is to give an overview of the 154-page report provided by Industry Insights. The report provided by Industry Insights suggests that decision-makers focus on identifying areas of the dining experience that need improvement based on satisfaction measures. The diagrams presented in this report can be used as a starting point for these discussions. By creating action-oriented research questions, the process for analyzing the data can be more orderly. Similarly, the review and comparison of Industry data can help facilitate an assessment of the dining experience at JCSU to better align with other institutions. This can help decision-makers understand how JCSU compares to other institutions in the dining experience provided. Using the data to evoke change could help increase the overall student evaluation of the dining services provided at JCSU. Overall, careful reflection on the findings, further exploration of factors, and action planning based on results are recommended as vital steps for an effective assessment.

Appendix I- Example of NACUFS Customer Satisfaction Benchmarking Survey Questionnaire

1. Which of the following best describes you?

Student	Faculty	Administrative/ Staff	Other
---------	---------	--------------------------	-------

2. If you are a student, what is your class status?

First Year	Sophomore	Junior	Senior	Graduate	Other
------------	-----------	--------	--------	----------	-------

3. Gender Identity...

Female	Male	Transgender	Other Identity
--------	------	-------------	----------------

4. Do you live...

On Campus (University-owned housing)	Off Campus
---	------------

5. In general, how satisfied or dissatisfied are you with the dining services provided by your college/university?

Very Dissatisfied	Somewhat Dissatisfied	Mixed	Somewhat Satisfied	Very Satisfied
-------------------	-----------------------	-------	--------------------	----------------

**6. Please rate your satisfaction with the following items and their importance to you.
(Rate the items as they apply to this facility in general, without regard to any specific meal.)**

Food	Not Applicable	Satisfaction					Importance				
		Very Dissatisfied (1)	Somewhat Dissatisfied (2)	Mixed (3)	Somewhat Satisfied (4)	Very Satisfied (5)	Not at All Important (1)	Not Very Important (2)	Mixed (3)	Somewhat Important (4)	Very Important (5)
Overall											
Taste											
Eye appeal											
Freshness											
Nutritional content											
Value											
Menu	Not Applicable	Very Dissatisfied (1)	Somewhat Dissatisfied (2)	Mixed (3)	Somewhat Satisfied (4)	Very Satisfied (5)	Not at All Important (1)	Not Very Important (2)	Mixed (3)	Somewhat Important (4)	Very Important (5)
Availability of posted menu items											
Variety of menu choices											
Variety of healthy menu choices											
Variety of vegetarian menu choices											

Service	Not Applicable	Very Dissatisfied (1)	Somewhat Dissatisfied (2)	Mixed (3)	Somewhat Satisfied (4)	Very Satisfied (5)	Not at All Important (1)	Not Very Important (2)	Mixed (3)	Somewhat Important (4)	Very Important (5)
Overall											
Speed of service											
Hours of operation											
Helpfulness of staff											
Friendliness of staff											

Cleanliness	Not Applicable	Very Dissatisfied (1)	Somewhat Dissatisfied (2)	Mixed (3)	Somewhat Satisfied (4)	Very Satisfied (5)	Not at All Important (1)	Not Very Important (2)	Mixed (3)	Somewhat Important (4)	Very Important (5)
Overall											
Serving areas											
Eating areas (tables, chairs, etc.)											

Dining Environment	Not Applicable	Very Dissatisfied (1)	Somewhat Dissatisfied (2)	Mixed (3)	Somewhat Satisfied (4)	Very Satisfied (5)	Not at All Important (1)	Not Very Important (2)	Mixed (3)	Somewhat Important (4)	Very Important (5)
Location											
Layout of facility											
Appearance											
Availability of seating											
Comfort (seats, temperature, lighting, sound level, etc.)											

Environmental Stewardship/ Sustainability	Not Applicable	Very Dissatisfied (1)	Somewhat Dissatisfied (2)	Mixed (3)	Somewhat Satisfied (4)	Very Satisfied (5)	Not at All Important (1)	Not Very Important (2)	Mixed (3)	Somewhat Important (4)	Very Important (5)
Environmentally friendly practices related to food											
Social/ethical practices related to food											

7. Is there anything else concerning campus dining that you wish to share?

8. If you could make one change to any aspect of the dining services at this college/university, what would it be?

Appendix II- NACUFS Customer Service Benchmarking Survey Factors of Food Service Operation

The 25 operating characteristics measured¹⁴ were:

Food:

- Overall
- Taste
- Eye appeal
- Freshness
- Nutritional content
- Value

Menu:

- Availability of posted menu items
- Variety of menu choices
- Variety of healthy menu choices
- Variety of vegetarian menu choices

Service:

- Overall
- Speed of service
- Hours of operation
- Helpfulness of staff
- Friendliness of staff

Cleanliness:

- Overall
- Serving areas
- Eating areas (tables, chairs, etc.)

Dining Environment:

- Location
- Layout of facility
- Appearance
- Availability of seating
- Comfort (seats, temperature, lighting, sound level, etc.)

Environmental Stewardship/Sustainability (New in 2010):

- Environmentally friendly practices related to food
- Social/ethical practices related to food

¹⁴ See page 4 of the NACUFS Customer Satisfaction Benchmarking Survey Report provided by Industry Insights.