# A MARKETING RESEACH STUDY TO DETERMINE IF THERE IS DEMAND FOR A FOOD CART SERVICE ON THE FRANKLIN PIERCE UNIVERSITY CAMPUS 

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## Executive Summary

Substantial evidence has been found that there is no convenience food option for students outside of the dining options provided by Sodexho, who is the current food service provider on the Franklin Pierce University campus. There are two dining options available to students throughout the day; the traditional café located in the center of the campus which is open from 7:15 am to 7:00 pm on Monday through Thursday, 7:15am to $6: 30 \mathrm{pm}$ on Fridays, and reduced hours on the weekends from 11:30 am to $6: 30 \mathrm{pm}$; the other option on campus is the Ravens Nest or known to students as the "pub" which is located underneath the campus center which has late night hours from 6:00pm to 11:00pm.

There are four convenience food options in the local area within a ten mile radius from the Rindge campus. While this does provide students with many dining options outside of those provided by the campus; this still is an issue for many students the campus does not provide late night off campus transportation and not all students have a vehicle on campus. With only one of these four options with a delivery service many students are left without any food options.

The food cart would provide all students on campus with a convenience food option without having to leave the Rindge campus. The researchers created a questionnaire to determine if there was substantial demand for a food cart on the Franklin Pierce University campus. The questionnaire asked respondents questions regarding the types of foods, hours, price, and location. The research demonstrated that there is demand for a food cart on the Franklin Pierce University and thus a food cart would be recommended for Franklin Pierce to add to its campus.

## Introduction

## Background Information of the Organization under Study

Franklin Pierce University is a small, private regionally accredited university focused on an education that matters, one that achieves academic success through integration of liberal arts and professional programs. Degrees are offered through the doctoral level. The institutional mission focuses on preparing citizens and leaders of conscience for a new century that makes significant contributions to their professions and communities, whether their aspirations are local or global.

This university campus has 1,340 undergraduate students and 391 employees. The average class size is 14 students with a student to staff ratio of $14: 1$. This school holds two 14 week semesters as well as two 4 week summer sessions. The yearly tuition and fees for 20122013 cost $\$ 41,310$ and according to Hoover's online database, this school has an annual income of over $\$ 67.93$ million. Franklin Pierce is included in Forbes' list of Top Undergraduate Institutions, currently ranked 572 , one of only 4 other New Hampshire colleges to be on the list.

## Nature of the Problem

Substantial evidence has been found that there is no convenience food option for students outside of the dining options provided by Sodexho, who is the current food service provider on the Franklin Pierce campus. There are two dining options available to students throughout the day; the traditional café located in the center of the campus which is open from 7:15 am to 7:00 pm on Monday through Thursday, 7:15am to $6: 30 \mathrm{pm}$ on Fridays, and reduced hours on the weekends from 11:30 am to 6:30 pm; the other option on campus is the Ravens Nest or known to students as the "pub" which is located underneath the campus center which has late night hours from 6:00pm to $11: 00 \mathrm{pm}$.

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The food cart would provide all students on campus with a convenience food option without having to leave the Rindge campus.

## Purpose of the Project

In completion of this study, the researchers will find out if there is substantial demand for a food cart on the Franklin Pierce University campus. The researchers will identify the types of food products that students would be interested in purchasing, the demand for the most productive hours of operations, the most convenient location of the food cart. Research will investigate what current college students spend on convenience food.

## Problem Statement

Research is necessary to determine if there is a demand for a food cart service on the Franklin Pierce University campus.

## Research Objectives

-Assess the current literature related to college students and convenience foods, preferences, and trends.
-Identify types of food products students would be interested in purchasing.
-Determine the most productive hours of operation for the food cart.
-Determine the most convenient location of the food cart.
-Investigate what Franklin Pierce University students spend on convenience food.

## Definitions

Convenience Food A food, typically used as a meal or snack, which has been preprepared as a quick and easy option and requires no preparation by the consumer; this would include such things as pizza, grinders, chips, and burgers.

Food Cart A food cart is a mobile kitchen that will be set up on the Franklin Pierce University campus to facilitate the sale and marketing of food to students from the local campus community.

Fast Food A food that can be prepared quickly and easily and is sold in restaurants and food cart as a quick meal or to be taken out.

## Literature Review

In order to determine if there is significant demand for a food cart on the Franklin Pierce University campus, it would be beneficial for researchers to first look at what motivates students to make food decisions. Food decisions are based on complex interactions between the social and environmental context, the individual, and the food. College students are influenced by these factors but mainly select foods that are convenient.

## Convenience Food

Convenience is known to be a consumer preference, which explains purchase behaviors and attitudes toward food and related services. Convenience can be defined as the
state of being able to proceed with something with little effort or difficulty. Young adults and specifically college students face time constraints and develop strategies to limit the time and energy devoted to food preparation (Marquis, 2005). College student's lack free time and proper cooking amenities which forces many students to turn to convenience food as a primary food source.

Based on a study conducted by Marie Marquis (2005) a Professor of Medicine from the University of Montreal titled Exploring convenience orientation as food motivation for college students living in residential halls, it is found that "for both male and female, convenience appears to be the most important food motivation retained by students living in residence, followed by price, pleasure, health and concern about weight" (Marquis, 2005, -21). The study that was conducted involved five focus groups and a pencil-and-paper questionnaire which was targeted at the food motivations and food behaviors of students within the residential dorms, 319 students participated. Students were asked to identify what they believed was the most difficult aspect of eating within the residential dorms.

Convenience foods are what college student's desire but determining what classifies a convenience food is very important and a necessity. A study conducted at Arizona State University (2011) looked at undergraduates to see which foods were considered snack foods, meals, and particularly useful to the use of food trucks, foods that were considered as snacks by some and meals by others, the study paid particular focus to age, gender, and time of day. One hundred and ninety-five undergraduate students participated in the study and the mean
age of the participants was 18.9 years with a mean weight of 151 pounds. The participant's categorized eighty-five foods as "snacks" or "meals" and the results determined that there were clear differences among foods, with come clearly categorized as meals, and some clearly categorized as snacks. A quote obtained from the research by the authors from Arizona State University states that "we conducted two surveys to determine the categorization of foods as 'snacks' or 'meals'.

Survey 2 included a larger variety of foods with detailed descriptions and a response option of 'never tried'. Both surveys found that potato chips, crackers, cookies, and nuts were consistently viewed as snacks, while soups, burritos, pizza, and pancakes were consistently viewed as meals. Useful for future research are foods we found that students varied in considering a snack or meal" (Kimberly, 2012, 『15). The study also found that the snacks that were more desired by college students and are seen to be more convenient to the consumer; some of these foods were: crackers, Pringles, Cheez-its, potato chips, cookies, and French fries. Through both of the surveys it is found that the most desired meal choice was pizza with $98 \%$ of respondents. It is obvious that overall college student's look to consume food that is convenient and available to them despite what the nutrition value of the foods may be (Capaldi \& Wadhera, 2011).

It has become very clear that college students desire convenient food regardless of its nutrition value, consumption of fast food or convenience food has risen greatly over the past several decades. In 2006, one out of every five United States dollars spent on retail shopping
was accounted for by food and beverage purchases. College students aged 19 to 25 years have reported that the top reasons reported for fast food consumption were convenience and cost, but convenience was the top reason (Hiedal 2012). A study published in Food and Nutrition Sciences assessed the money spent by college students on fast food and calories consumed from specific identified fast food items from seven chains of fast food restaurants located on and in close proximity of college campuses.

A Fast Food Frequency Questionnaire (FFFQ) and a College Life Survey were used to collect the data for this study, the questionnaire and survey included 123 food and beverage items sold at seven fast food restaurants on or near campuses. The frequency of food and beverage consumption was determined by the number of times an individual food was reported to be consumed for a month by each participant and summing all the foods and beverages by category for each participant. A total of 152 college students participated in this survey, 61 males and 91 female students. All surveyed students reported fast food consumption in the past month, $71 \%$ have a university meal plan. It was found that a positive correlation was found between the total monthly fast food expense and total monthly fast food caloric consumption. The more money spent by college students contributed to a higher amount of calories consumed from fast food restaurants.

## Other Campuses

It would also beneficial for researchers to assess what other college campuses are doing in terms of food carts. Many campuses across the nation have embraced the new
culinary trend of food trucks and some campuses even have more than one that frequent the campus, serving anything from coffee and breakfast to tacos and kabobs. Most of the food trucks that frequent the campuses across the nation are independent businesses and have gained permission from the schools in order to park on the campus grounds, for a small fee, within a certain time frame ranging from early morning breakfast rush to late night after the bars close rush.

One prime example would be the University of California Los Angles, UCLA, who closed one of their dining halls on campus and made the decision to invite independent food truck operators onto campus to replace the closed dining hall. "Students have taken to the array of food served by more than 30 food trucks that rotate through the space on the South Campus... there is one each weekday morning to serve breakfast and two others for the lunchtime crowd," (Food Management 2010). UCLA has even created a student run club on campus titled Associated Students of UCLA, ASUCLA, which manages onsite dining at the school including the existing dining halls and bookstore and now is in charge of inspecting and certifying every food truck before being allowed on campus. ASUCLA has even published a monthly food truck schedule which shows students what trucks will be on campus on what day and where on the campus they will be located; this is available on their website for students to print out. UCLA is not alone in this trend, while food trucks have always frequented the area of college campuses many universities are now allowing food trucks onto the campus grounds.

One of the oldest examples of this would be at "Massachusetts Institute of Technology (MIT), which has been accommodating outside vendor food trucks for over a decade. Currently, four operate on campus... 'we have a large graduate student community who live on campus and want an expensive but diverse meal choices' says, Richard Berlin, director of MIT campus dining, 'The trucks add a layer of complexity and interest to what we offer in terms of menu mix' Berlin notes that his department approves menus and prices and ensures that the trucks meet sanitary codes before being allowed to operate on campus" (Food Management 2010). Many of the food trucks on these college campuses are becoming more centered around the college, by not only taking only cash they are allowing students to use their school points at some of the trucks, not only providing the students with a convenient food option but also with a convenient way to pay for it.

## Campus Run Carts

As the popularity of the food trucks increase throughout the nation many college campuses are looking into running and managing their own trucks. For example at the University of Alabama at Tuscaloosa had "Brothers Street Eats, an independent Cajun-style food truck that had permission to park on campus...then, in April the university ejected Brothers Street Eats from campus. In its place, the university will debut its own truck," (Tanaka 2012). The university's vice president for food services stated that they invited the food truck on only for a trial period in order to gauge the popularity and student interest in
food truck dining. She also stated that by running their own food truck they are able to respond to students directly rather than having to deal with an outside vendor.
"Aramark Corp. and Bon Appetite Management Co, two companies that manage food services for universities, say that they have seen an increase in demand for college -run food trucks, especially as a way to offer late- night dining options and serve remote areas of campus. Aramark says it will add nine more university -run food trucks this fall, and Bon Appetite says it will add five," (Tanaka 2012). According to the National Association of College and University Food Services, which represents about 550 higher education institutions, close to 100 college campuses now run their own food truck rather than inviting independent vendors onto campus, compared to only about a dozen campuses five years ago (Tanaka).

## Methodology and Procedures

## Problem Identification

The problem that the research group identified is that substantial evidence has been found that there is no convenience food option for students outside of the dining options provided by Sodexho, who is the current food service provider on the Franklin Pierce campus.

There are four convenience food options in the local area within a ten mile radius from the Rindge campus. While this does provide students with many dining options outside of those provided by the campus; this still is an issue for many students the campus does not provide late
at night off campus transportation and not all students have a vehicle on campus. With only one of these four options with a delivery option many students are left without any food options.

We have identified that our main client is the student body at the Franklin Pierce University campus.

## Development of Survey

The development of our data collection started with our literature review. Through our research, we identified that there is demand for a food cart on the Franklin Pierce University campus. Most of our input was provided by members of our team and experts on the topic. We started conducting our research for our literature review on the day 9/17/12. Once we had the literature review assessed by Professor J. Little, we took that information to formulate questions for our questionnaire. Meeting several times as a group and based off of our research objectives and formed 11 questions to gather the information we needed to continue our research. The class and professor reviewed the proposed questionnaire during a class period. Throughout this process we have used face and content validity through expert review.

## Definition of Population

The population that we as researchers examined was the student population at Franklin Pierce University at Rindge, which has a current student population of 1,400 students.

## Sample Size

The particular chosen sample size of the food cart survey was the Franklin Pierce University at Rindge campus. Within the campus, 40 students from each class (freshman through senior year) were chosen. Specifically, 20 males and 20 females from each class were selected. Therefore, the total sample size was 160 . This was determined so that the team could obtain equal and accurate results to represent the opinions of the Franklin Pierce campus pertaining to demand for a food cart. While we did get a specified number per class and gender we used convenience nonprobability sampling method in which every person surveyed did not have the same chance as others, this is a more time effective.

## Data Collection Method

The subgroups chosen in the Market Research project were 40 students from each grade (40 Freshmen, 40 Sophomores, 40 Juniors, and 40 Seniors). The subgroups were then divided even more with 20 females from each grade and 20 males from each grade. A total of 160 students were surveys: 80 males and 80 females. Using a group self-administered survey allowed the respondents to take the survey in the group context while working individually, this was administered on Friday October 26, 2012. The group self- administered survey also made it easier on the surveyor. A drop-off survey was also used, allowing the survey questions to be left with the respondents so they could return it to the surveyors at their convenience; this was administered on Friday November 2, 2012. The non-probability convenience sampling method allowed the surveyor to choose at their discretion who should be surveyed.

## Assumptions

The fundamental assumption that the researchers made was that respondents answered the questions completely, honestly, and accurately.

## Limitations

Due to our time constraint, we could not use a probability sampling method. A probability sampling method would have been more compelling to outside research groups which allow everyone in the population to have an equal chance of being selected for the survey. Instead we were limited to using a non-probability sampling which was more favorable towards the time constraints.

## Results

## Question 1

Out of 160 respondents, $1.9 \%$ said that they were not very likely to purchase items from a food cart located on the Franklin Pierce University campus, 5\% reported that they were not likely to purchase food, $22.5 \%$ said that they were neutral, $30 \%$ said that they were likely to purchase food, and $46.6 \%$ said that they were very likely to purchase from the food cart. Our research concludes that there is demand for a food cart on the Franklin Pierce University campus.

## Question 2

The second question on the survey asked what foods are you most likely to purchase from the food cart (check all that apply). Out of 160 respondents, $62.5 \%$ said that they would
purchase pizza from the food cart and $37.5 \%$ said that they would not. $70 \%$ of respondents said that they would purchase sandwiches and $30 \%$ said that they would not. 56.3 said that they would purchase chips/pretzels and $43.8 \%$ said that they would not. $77.5 \%$ said that they would purchase side orders from a food cart which includes French fries, onion rings, and mozzarella sticks and $22.5 \%$ said that they would not. $63.1 \%$ said that they would purchase burgers and hot dogs from a food cart and $36.9 \%$ said that they would not. $29.4 \%$ of respondents said that they would purchase soup from a food cart and $70.6 \%$ said that they would not. $41.3 \%$ said that they would purchase fresh fruit from a food cart and $58.8 \%$ percent said that they would not. $32.5 \%$ of respondents said that they would purchase yogurt from a food cart and $67.5 \%$ said that they would not. Our research shows that the post popular items are pizza, sandwiches, chips, side orders, and burgers and hotdogs.

## Question 3

The question number three asks based on the purchase categories from question number two, estimate how much you would spend at the food cart. Out of 160 respondents, $1.3 \%$ said that they would spend $\$ 0.00, .6 \%$ said that they would spend $\$ 1.00,1.9 \%$ said that they would spend $\$ 2.00, .6 \%$ said that they would spend $\$ 2.25,4.4 \%$ said that they would spend $\$ 3.00, .6 \%$ said that they would spend $\$ 3.25, .6 \%$ said that they would spend $\$ 3.50$, $5.6 \%$ said that they would spend $\$ 4.00,1.9 \%$ said that they would spend $\$ 4.50,31.3 \%$ said that they would spend $\$ 5.00,8.1 \%$ said that they would spend $\$ 6.00,2.5 \%$ said that they would spend $\$ 7.00,8.1 \%$ said that they would spend $\$ 8.00, .6 \%$ said that they would spend $\$ 8.50,22.5 \%$ said that they would spend $\$ 10.00,1.3 \%$ said that they would spend $\$ 12.00$, $1.3 \%$ said that they would spend $\$ 13.50, .6 \%$ said that they would spend $\$ 14.00,2.5 \%$ said that they would spend $\$ 15.00,1.9 \%$ said that they would spend $\$ 20.00,1.3 \%$ said that they would spend $\$ 25.00, .6 \%$ said that they would spend $\$ 30.00$. The research shows that the most common amount of money respondents are willing to spend is $\$ 5.00$.

## Question 4

The question asks what time of day would you most likely purchase food from the food cart. Out of 160 respondents, $86.9 \%$ said they would not purchase food from the food cart between the morning hours of 7:00am and 11:00am, and 31.1\% said they would. $63.8 \%$ said they would not purchase food from the food cart between the afternoon hours of 11:00am and $4: 00 \mathrm{pm}$, and $36.2 \%$ said they would. $70.6 \%$ said they would not purchase food from the food cart between the night hours of $4: 00 \mathrm{pm}$ and $8: 00 \mathrm{pm}$, and $29.4 \%$ said they would. $45.6 \%$ said they would purchase food from the food cart between the late night hours of $8: 00 \mathrm{pm}$ and 2:00am, and $54.4 \%$ said yes. Our research shows that the majority of people would most likely purchase food between the late night hours of $8: 00 \mathrm{pm}$ and 2:00am.

## Question 5

The question asks what days would you most frequently purchase from the food cart (check all that apply); all seven days of the week were options. Out of 160 respondents, $43.8 \%$ respondents said that they would purchase from the food cart on Monday and $56.2 \%$ said that they would not. $50 \%$ said that they would purchase from the food cart on Tuesday and $50 \%$ said that they would not. $49.4 \%$ said that they would purchase from the food cart on Wednesday and $50.6 \%$ said that they would not. $66.9 \%$ said that they would purchase from the food cart on Thursday and $33.1 \%$ said that they would not. $79.4 \%$ said that they would purchase from the food cart on Friday and $20.6 \%$ said that they would not. $64.4 \%$ said that they would purchase from a food cart on Saturdays and $35.6 \%$ said that they would not. $46.2 \%$ said that they would purchase from a food cart on Sundays and $53.8 \%$ said that they would not. Our research shows that Thursday, Friday, and Saturday are the most popular days that purchases would be made at the food cart.

## Question 6

The question asks how many times per week does the respondent travel off campus to purchase convenience food. Out of 160 respondents, $18.1 \%$ do not travel off campus. $22.5 \%$ travel off campus one time per week. $23.8 \%$ travel off campus twice per week. $19.2 \%$ travel off campus three times per week. $6.9 \%$ travel off campus four times per week. $1.9 \%$ travel
off campus five times per week. $1.9 \%$ travel off campus six times per week. $2.5 \%$ travel off campus seven times per week. $1.3 \%$ travel off campus eight times per week. $1.9 \%$ travel off campus ten times per week. Our research shows that the majority of people travel off campus two times per week.

## Question 7

The seventh question on our survey asks where you would most likely patronize the food cart on the Franklin Pierce University campus. Out of 160 respondents, $51.3 \%$ said they would most likely patronize the food cart at the Library Courtyard. $25.6 \%$ said they would most likely patronize the food cart at Lakeview. $4.3 \%$ said they would most likely patronize the food cart at the Bubble. $8.8 \%$ said they would most likely patronize the food cart at Cheshire Field. 2.5\% said they would most likely patronize the food cart at the Sodexho Parking Lot. 7.5\% said they would most likely patronize the food cart at the Campus Center. Our research shows that the majority of people would patronize the food cart at the Library Courtyard.

## Question 8

The question asks do you have a meal plan on campus. Out of 160 respondents, $77.5 \%$ said they do have a meal plan, and $22.5 \%$ said they do not have a meal plan. Our research shows that the majority of people do have a meal plan on campus.

## Question 9

The question asks the respondents what their current class standing is. Out of 160 respondents, $25 \%$ were freshman, $25 \%$ were sophomores, $25 \%$ were juniors, and $25 \%$ were seniors. Our research shows that an equal amount of freshman, sophomores, juniors, and seniors responded to this survey.

## Question 10

Question ten asks the respondent what their gender is. Out of 160 respondents, $50 \%$ said they were males, and $50 \%$ said they were females. Our research shows that half of the respondents were male, and half of the respondents were female.

## Question 11

The final question asks the respondent where they reside on the Franklin Pierce University campus. Out of 160 respondents, $3.8 \%$ said they reside at Granite, $7.5 \%$ said they reside at Mount Washington, $8.8 \%$ said they reside at New Hampshire, and $6.3 \%$ said they reside at Cheshire. $18.8 \%$ said they reside at Edgewood, 5\% said they reside at Monadnock, $11.9 \%$ said they reside at Mountain View, $9.4 \%$ said they reside at Northwoods, $21.9 \%$ said they reside at Lakeview, $.6 \%$ said they reside at Sawmills, and 6\% said they are commuters. Our research shows that the majority of respondents reside at Lakeview.

## Cross Tabulation 1

The researches established that it is easy to assume that the student body would patronize a snack bar located on the campus, but were curious regarding the location in comparison to class standing. The cross tabulation examined responses regarding where students would most likely patronize the food cart and their current class standing.

According to the cross tabulation 24 freshmen thought the food cart should be located in the library court yard, 5 thought Lakeview, 1 vote for the bubble, 6 for Cheshire field, 0 for the Sodexho parking lot, and 4 thought the campus center would be where they were most likely to patronize the food cart.

25 sophomores thought the food cart should be located in the library court yard, 9 thought Lakeview, 2 voted for the bubble, 3 for Cheshire field, 1 voted for Sodexho parking lot and 0 voted for the campus center.

19 juniors thought the food cart should be located in the library court yard, 7 chose Lakeview, 4 for the bubble, 5 voted Cheshire field, 0 voted for sodexo parking lot and 5 chose the campus center.

14 seniors thought the food cart should be located in the library court yard, 20 voted for lake view, 0 picked the bubble, 0 picked Cheshire field, 3 picked Sodexho parking lot and 3 voted for the campus center.

Through our research we found that a total of 82 people would like the food cart to be in the library courtyard, 41 picked Lakeview, 7 wanted the bubble, 14 wanted Cheshire field, 4 picked Sodexho parking lot and 12 picked the campus center.

## Cross Tabulation 2

The researches established that it is easy to assume that the student body would patronize a snack bar located on the campus, but were curious regarding how likely they were to purchase convenience food items from a food cart located on campus in relation to their current class standing.

According to the cross tabulation 1 freshman is not very likely to purchase convenience food items from the food cart, 2 are not likely, 12 are natural, 12 are likely, and 13 are very likely.

0 sophomores are not very likely to purchase convenience food items from the food cart, 2 are not likely, 6 are natural, 10 are likely, and 22 are very likely.

1 junior is not very likely to purchase convenience food items from the food cart, 3 are not likely, 9 are natural, 9 are likely and 18 very likely.

1 senior is not very likely to purchase convenience food items from the food cart, 1 is not likely, 9 are natural, 17 are likely, and 12 are very likely.

Through or research we found that a total of 3 people are not every likely to purchase convenience food items from the food cart, 8 are not likely, 26 are natural, 48 are likely, and 65 are very likely.

## Discussion, Conclusions, Recommendations

## Discussion

When polled, a majority of students at Franklin Pierce University said that they would purchase food from a food cart located on the campus. The definition developed by the researcher's states that the food cart would serve convenience foods which can be defined as a food, typically used as a meal or snack, which has been pre-prepared as a quick and easy option and requires no preparation by the consumer; which include items such as pizza, grinders, and burgers. Based on the literature review the findings of the questionnaire are consistent with the studies earlier presented. According to the study completed by Marie Marquis it is found that "convenience appears to be the most important food motivation retained by students living in residential halls," (Marquis, 2005, 『 21 ).

When students were asked which foods they were most likely to purchase from the food cart it is found that majority of students would prefer to purchase convenience food regardless of the nutritional value. When given to option to purchase such items as pizza, burgers and hot dogs which are convenient but not necessary nutritional as compared to such foods as fresh fruit and yogurt which have nutritional value students opted for convenience and non-nutritional items. This is consistent with the findings of the literature review, "it is obvious that overall college student's look to consume food that is convenient and available to them despite what the nutrition value of the foods may be," (Capaldi \& Wadhera, 2011).

## Conclusions

After completing a literature review and studying the topic immensely we are able to conclude our research objectives. In terms of our first research objective of assessing the current literature related to college students and convenience foods in terms of preferences and trends we were able to find very helpful information and studies which supplemented our study.

Our second research objective was to be able to identify the types of food products students would be interested in purchasing. It was concluded that students would most likely purchase pizza (62.5\%), sandwiches (70\%), chips (56.3\%), side orders (77.5\%), and burgers and hot dogs (63.1\%).

Our third research objective was to determine the most productive hours of operation for the food cart. Through our research we were able to determine that the most productive time of operation would be between $8: 00 \mathrm{pm}$ and $2: 00 \mathrm{am}$ with $54.4 \%$ of the student body responding.

The fourth research objective was to determine the most convenient location of the food cart. Through our research we were able to determine that the library courtyard was the most popular response in which $51.3 \%$ ( 82 respondents) of the student body preferred.

The final research objective was to investigate what Franklin Pierce University students spend on convenience food. We addressed this objective by posing the question of based on the purchase categories from question two, estimate how much you would spend at
the food cart. Through our research we found that 50 respondents (31.3\%) said that they would spend $\$ 5.00$ at the food cart.

## Recommendations

Based on all the previous research the research team recommends that Franklin Pierce University should have a food cart located in the library courtyard between the hours of 8:00pm to 2:00am on the days of Thursday, Friday, and Saturday. It would be beneficial for the food cart to serve such foods as pizza, sandwiches, chips, side orders, and burgers and hot dogs. Based on the literature review many other colleges and food service providers are now offering and managing their own food cart already we think that the addition of a food cart on campus would be beneficial. For further research it would be valuable to increase the sample size in order to portray the opinions of the student body at Franklin Pierce University. As a research team we found ourselves to be very successful the one problem we encountered was respondents not reading the directions on the survey; as a research team we should have watched more carefully when respondents were filling out the questionnaire in order to better assess the overall results of each question.

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## Appendixes

## Appendix A

## Questionnaire for Food Cart Study

We are a team of Franklin Pierce University marketing research students currently conducting research related to the demand for a food cart located on the Franklin Pierce University campus. Your individual responses will be kept confidential and all data taken from the survey will be reported as aggregate data only. Thank you for your time and participation.

Convenience Food: A food, typically used as a meal or snack, which has been pre-prepared as a quick and easy option and requires no preparation by the consumer; this would include such things as pizza, grinders, chips, and burgers.

1. How likely would you purchase convenience food items from a food cart located on campus?
Not Likely
$\quad 1$
2. What foods are you most likely to purchase from the food cart ( Check all that apply)
$\qquad$ Pizza $(0 ; 1)$ $\qquad$ Sandwiches $(0 ; 1)$ $\qquad$ Chips/Pretzels $(0 ; 1)$ $\qquad$ Yogurt (0;1)
$\qquad$ Side Orders (ex: French Fries, Onion Rings, Mozzarella Sticks) (0;1)
$\qquad$ Burgers/Hot Dogs (0;1) $\qquad$ Soup (0;1) $\qquad$ Fresh Fruit $(0 ; 1)$

Other $\qquad$ (please describe)
3. Based on the purchase categories from question number two, estimate how much you would you be willing spend at the food cart in one visit?
\$ $\qquad$
4. What time of day would you most likely purchase food from the food cart? (Check all that apply)
$\qquad$ Morning 7:00am - 11:00am (1)
$\qquad$ Afternoon 11:00am- 4:00pm (2)
$\qquad$ Night 4:00pm - 8:00pm (3)
$\qquad$ Late Night 8:00pm - 2:00am (4)
5. What days would you most frequently purchase from the food cart? Check all that apply
$\qquad$ Monday $(0 ; 1) \quad$ __ Tuesday $(0 ; 1)$ $\qquad$ Wednesday $(0 ; 1)$ $\qquad$ Thursday $(0 ; 1)$
$\qquad$ Friday $(0 ; 1)$ $\qquad$ Saturday $(0 ; 1) \quad$ __ $\operatorname{Sunday}(0 ; 1)$
6. How many times per week do you travel off campus to purchase convenience food? For example Taco Bell, Subway, McDonalds, and Pizza Pie/Pizza Haven
$\qquad$ (please indicate the number of times per week)
7. Where would you most likely patronize the food cart on the Franklin Pierce University Campus?
$\qquad$ Library Courtyard (1) $\qquad$ Sodexho Parking Lot (sports field) (5)
$\qquad$ Lakeview (2) $\qquad$ Campus Center (6)
$\qquad$ Bubble (3)
$\qquad$ Cheshire Field (4)
8. Do you currently have a meal plan?
$\qquad$ Yes (1) $\qquad$ No (2)
9. What is your class standing?
$\qquad$ Freshmen (1) $\qquad$ Sophomore (2) $\qquad$ Junior (3) $\qquad$ Senior (4)
10. What is your gender?
$\qquad$ Female (1) $\qquad$ Male (2)
11. Where do you reside on the Franklin Pierce University campus?
$\qquad$ Granite (1) $\qquad$ Mt. Washington (2)
$\qquad$ New Hampshire (3) $\qquad$ Cheshire (4)
$\qquad$ Edgewood (5)
$\qquad$ Mt. View (7) $\qquad$ North Woods (8)
$\qquad$
$\qquad$ Commuter (11)

## Appendix B

How likely would you purchase convenience food items from a food cart located on campus?


## Appendix C

What foods are you most likely to purchase from the food cart (Check all that apply)
Would you purchase pizza from a food cart?


Would you purchase sandwiches from a food cart?


Would you purchase chips/pretzels from a food cart?


Would you purchase yogurt from a food cart?


Would you purchase side orders from a food cart?


Would you purchase burgers/ hot dogs from a food cart?


Would you purchase soups from a food cart?


Would you purchase fresh fruit from a food cart?


## Appendix D

Based on the purchase category from question two, estimate how much you would be willing to spend at the food cart in one visit?


## Appendix E

What time of day would you most likely purchase food from the food cart?
Would you purchase between 7:00 am - 11:00 am?


- No

Yes

Would you purchase between 11:00 am - 4:00 pm?


Would you purchase between 4:00 pm - 8:00 pm?


Would you purchase between 8:00 pm - 2:00 am?

${ }^{-}$No

- Yes


## Appendix F

What days would you most frequently purchase from the food cart?
Would you purchase on Monday?


Would you purchase on Tuesday?


Would you purchase on Wednesday?


Would you purchase on Thursday?

${ }^{-}$No

- Yes

Would you purchase on Friday?


Would you purchase on Saturday?


- No
- Yes

Would you purchase on Sunday?


## Appendix G

How many times per week do you travel off campus to purchase convenience food?


## Appendix H

Where would you most likely patronize the food cart of the Franklin Pierce University campus?


## Appendix I

Do you currently have a meal plan?


## Appendix J

What is your class standing?


## Appendix K

What is your gender?


## Appendix L

Where do you reside on the Franklin Pierce University campus?


- Granite
- Mt. Washington
- New Hampshire
- Cheshire
- Edgewood
- Monadnock

Mt. View

- North Woods
- Lakeview
- Sawmills
- Commuter


## Appendix M

Cross tabulation- Where would you most likely patronize the food cart on the Franklin Pierce
University campus? \& What is your class standing?

|  |  | What is your class standing? |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Freshman | Sophomore | Junior | Senior |  |
| Where would you most likely patronize the food cart on the Franklin Pierce University campus? | Litrary Courtyard | 24 | 25 | 19 | 14 | 82 |
|  | Lakeview | 5 | 9 | 7 | 20 | 41 |
|  | Bubble | 1 | 2 | 4 | 0 | 7 |
|  | Cheshire Field | 6 | 3 | 5 | 0 | 14 |
|  | Sodexho <br> Parking Lot <br> (Sports <br> Field) | 0 | 1 | 0 | 3 | 4 |
|  | Campus Center | 4 | 0 | 5 | 3 | 12 |
| Total |  | 40 | 40 | 40 | 40 | 160 |

## Appendix $\mathbf{N}$

Cross tabulation- How likely would you purchase convenience food items from a food cart located on campus? \& What is your class standing?

|  |  |  | What is your c | $s$ standing |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Freshman | Sophomore | Junior | Senior | Total |
| How likely would you | Not Very Likely | 1 | 0 | 1 | 1 | 3 |
| purchase | Not Likey | 2 | 2 | 3 | 1 | 8 |
| convenienc | Neutral | 12 | 6 | 9 | 9 | 36 |
| tems from | Likely | 12 | 10 | 9 | 17 | 48 |
| a food cart located on campus? | Very Likely | 13 | 22 | 18 | 12 | 65 |
| Total |  | 40 | 40 | 40 | 40 | 160 |

