

## Impact of Virtual Food Service: Nutrition as Satisfaction in Educational Organisations

Saksham Arora Phagwara, MCA Student at LPU, Punjab, INDIA  
Lovely Professional University, Phagwara, Punjab,  
sakshamarora9120@gmail.com

### ABSTRACT

College catering is one of the largest segments of the catering industry globally, with increasing numbers of college students using on-campus catering during their studies. This article develops an integrative literature review (Torraco, 2005, 2016) that collates, assesses, and synthesizes existing knowledge on the contribution of the hospitality environment and food supply on university campuses to student well-being, with the aim of identifying future avenues for research and best practices that can make decisions about the development of facilities and services. This study aims to assess current opinion and examining the determinants of food and beverage quality (1), service (2), environment (3), price and value (4), and overall satisfaction of customers (5), as shown in Figure 1. The results of the study indicate that the overall satisfaction and satisfaction of students are related to the quality of the food service, the environment, the price, and the value of the service. In addition, the results of this study show that there are several factors that influence customer satisfaction when choosing a food service. Furthermore, the study also identifies potential avenues that can inform facilities and service development decisions what changes they would like to see to improve the on-campus dining experience as part of constructive interventions. Therefore, the review needs to move beyond studies of hospitality and health and draw more heavily on hospitality experience management, co-workspaces, and educational design literature.

**Keywords:** well-being, satisfaction, experience, ambience

### INTRODUCTION

#### (i) Catering services

The term "institutional catering services" refers to businesses that serve food in places like schools, hospitals, public and private cafeterias, nursing homes, and day-care and Senior centres.

It also includes colleges, universities, and hospitals takes into account of the difficulty of organizing food services on a campus, such as a college, university, business park, or sizable hospital. The planning process, which affects campus life quality, includes food services as a key element. The case study will use a university campus to illustrate the methods

and techniques with actual data. The main objective of this study is to compare the capacity available with

the demand for food services, and to do so separately and in comparison, for different areas of campus. The estimation of demand patterns and even capacity proved to be surprisingly difficult, leading to the development of numerous methods, each of which adds value to the outcome. Therefore, comparing the approaches to ascertain their efficacy in solving the problem is a secondary objective. Additionally, and to better understand demand, data from customer satisfaction surveys is reinforced with the student enrolment data used in a forementioned analyses.

Therefore, a secondary objective is to comprehend, at a fundamental level, customer satisfaction with food services on campus. The final findings will show whether there is a shortage of food capacity and where on campus new food services should be located.

This suggests that capacity management, or attempting to match capacity to the demand that materializes, is the most effective way to manage the relationship between demand and capacity on a campus.

Trying to figure out how to create reasonable, quantitatively based values that demonstrate how much of a need there is for food services at each location on campus was one of the challenges in this research. For a variety of reasons, traditional location techniques are not very effective. Most importantly, every dining option on campus is distinct. Finding multiple locations of the same fast

food restaurant or multiple fire stations is not the same as doing so. On campus, there are various food establishments that specialize in serving snacks, hot sandwiches or hamburgers, and beverages. Additionally, some businesses might receive business because of branding (e. g., Subway), while others draw customers mainly because of their location. As a result, the drawing power of various food establishments will vary and fluctuate throughout the day. For example, at 1:00 pm a student might be more willing to walk further for a good lunch, but at 10:00 am a beverage outlet might be more alluring.

Second, some places on campus might serve as "social hubs" more than others, drawing students there on foot. Additionally, demand varies depending on the day of the week and the time of day.

Applying conventional location algorithms is challenging because of these issues. Additionally, some location models assume that there are no existing outlets, but for a campus, it is important to take into account both the existence of outlets as well as how students view them.

#### (ii) Student expectations

Students will be more satisfied with a food and beverage management course if they have higher expectations for it and their learning objectives are met. Universities may be able to adjust their services to some extent if they are aware of how their students view the offerings, which should improve the perceived quality of the services and the satisfaction levels of the students. Students anticipate that their education in the foodservice industry will prepare them for employment once they graduate. According to a study on the needs of students in foodservice programs, students have higher expectations for their professional development and are more satisfied when they take courses in food and beverage management that offers more hand-on training.

### **(iii) Student experience and their hygiene**

The structure of the food and beverage learning environment must resemble the current setting of the restaurant industry to provide students with learning experiences that accurately reflect the real foodservice industry. Students were open to enrolling in a food and beverage course because the setting reflected the real industry, and they reported greater course satisfaction. The relationship between an updated learning environment and students' expectations for a course in beverage management has, however, not been empirically tested in detail.

By lowering the chance of contracting a foodborne illness, maintaining proper hygienic standards, and avoiding adulterated food, the canteen and meal service aims to protect. The College Canteen has operated effectively since the College's founding in 2003. Inside the College is where you'll find the canteen. By guaranteeing the

food's quality and safety, meals are given to day students and lodgers .

The students who travel from a distance begin their morning commute to the college.

Lunch is offered every day. Even many day students use the canteen for breakfast and evening tea and snacks. The College's two hostels currently house 130 students. They receive three meals each day, as well as morning coffee and evening tea or coffee. Directly under the direction of the college administration is the canteen management. According to the available and appropriate quotations, the Canteen Contractor is chosen. His team, which includes a manager with extensive experience in the food services industry, oversees the HCCMAT canteen. The College canteen provides benefits to both students and staff.

### **(iv) Canteen**

The designated management team will plan the menu and provide the Contractor with instructions. The Canteen's contract will be up for renewal each year. To evaluate the Canteen's performance, a regular meeting will be held by a team composed of the Management and Contractor. The appraisal also covers

physical setup, sanitary conditions, and the liberalization of the food trade in addition to rising consumer demand. Additionally, the suggestions, grievances, and issues of the food consumers are considered.

The campus's waste recycling plant effectively handles the canteen's waste. Near the canteen is a bio-gas plant. This facility turns biodegradable waste into manure, and the gas it produces is used for cooking. Always kept tidy, the canteen and its surroundings are. The campus prohibits the use of plastic bags smaller than 10 microns. For day students, hostellers, visitors to the college, and teaching and non-teaching staff, there may only be one communal dining facility (canteen facility) on the campus. To the greatest extent possible, the management is fully committed to maintaining the canteen's quality for the benefit of all parties.

### **(v) Role of internet in Campus food delivery**

Campus food delivery has changed dramatically because of the internet. The following are some effects that the internet has had on college food delivery.

**Ordering and Payment:** Thanks to the development of online ordering platforms, students are now able to place orders for food from

their favourite campus restaurants and make payments online. This saves time and increases convince by removing the need to go into restaurant physically.

**Delivery:** Campus eateries now find it simpler to provide delivery services thanks to online food delivery services like Grubhub, Uber Eats, and Door Dash. Students can use these platforms to place delivery orders for food from a variety of restaurants.

**Accessibility of the menu:** Campus restaurants can now more easily display their menus and prices online, making it simpler for students to decide what they want to eat.

**Reviews and ratings:** Students now depend heavily on online reviews and ratings to help them choose where to place their food orders. To maintain their high standards, campus restaurants now have a certain level of accountability.

Overall, campus food delivery has become more accessible, practical, and effective for students thanks to the internet. Campus eateries have also had new opportunities to broaden their clientele and boost their bottom line.

### **(iv) Impact of internet in campus food delivery**

**Customization:** Online ordering platforms let customers add, remove, or specify dietary restrictions from their orders to suit their preferences. The ability to get the precise meal one wants is facilitated for students in this way.

**Loyalty Programs:** Numerous online food delivery services provide loyalty programs that encourage students to place repeated orders from the same restaurant. This may boost client loyalty and promote repeat business.

Data analytics: Online food delivery services can gather information on consumer preferences and behaviour, which can assist campus restaurants in making knowledgeable choices about menu options, prices.

Marketing: Campus restaurants can use email marketing campaigns and social media platforms to advertise their Menu to students. This may raise brand recognition and encourage more sales.

Contactless Delivery: Contactless delivery methods have grown in popularity because of the COVID-19 pandemic. Students can now order food through online food delivery services without having to interact with delivery people, lowering the risk of transmission.

## LITERATURE REVIEW

College catering is one of the largest segments of the catering industry globally, with increasing numbers of college students using on-campus catering during their studies [1]. In 2014, there were 11.8 million college and university students under the age of 25 and 8.1 million students aged 25 and over, a significant increase from previous decades [2]. Consequently, college student perceptions of their on-campus dining operations are critical in influencing their level of satisfaction, meal frequency, and overall college experience [3]. With reported increases in enrolment, economic conditions, and the captivity of the market for college student catering, it has become increasingly difficult to achieve student catering satisfaction on campus among diverse student populations, particularly on campuses with limited catering options. Additionally, foodservice providers face many challenges in catering to millennial students, who are culturally diverse, volatile, demanding, savvy in their eating habits, and often confined to campuses, making their needs more complex [4].

### (i) Catering service

Cafeteria catering services can be found in hospitals, nursing homes, children's and senior centres, prisons, schools, and college campuses. The quality of gastronomy is one of the most relevant quality aspects perceived by customers. In healthcare, patient satisfaction is ultimately related to the quality of service provided. In hotel restaurants, the quality of the physical environment, service, and food influences guest satisfaction and intention [5]. In the university environment, gastronomy has become more than ever an essential part of the quality of life on campus.

Therefore, building on earlier research, the evaluation of university catering became essential. No previously published data examined the quality of catering services at Lebanese universities and its impact on customer satisfaction, leaving a knowledge gap regarding customer opinions and behaviours regarding campus catering services in Lebanon. This study aims to address this issue through five main objectives: assessing current opinion and examining the determinants of food and beverage

quality (1), service (2), environment (3), price and value (4), and overall satisfaction of customers (5). The study also aims to identify future avenues for best practices that can inform facilities and service development decisions what changes they would like to see to improve the on-campus dining experience as part of constructive interventions.

Few customer satisfaction studies have been conducted in the context of higher education [5]. According to Navarro and Iglesias [8], numerous attempts have been made by researchers to define the notion of satisfaction in relation to the services provided in higher education [9-10]. They recognize that gratification is the ultimate state of the psychological process. Amelia and Garg [9] indicated that the first impression is one of the most important factors, along with the quality and correctness of the food served and the friendliness of the service staff. In the canteens of the universities, the students make up the majority as users of the institutional catering; Therefore, campus catering is becoming more and more popular and important [10, 11]. Kwun [12] considered the gender difference when examining the effect of campus dining attributes on consumers' perceived value, satisfaction, and attitudes. According to Garg and Kumar [13], the dining experience affected both student and staff satisfaction and loyalty. In the university canteen, customer satisfaction depends entirely on the quality, variety, and selection of the food and drinks served on hygiene and cleanliness, and on price and performance justice [13]. Based on the above attributes, it has been found that many factors influence customers when choosing a hospitality service.

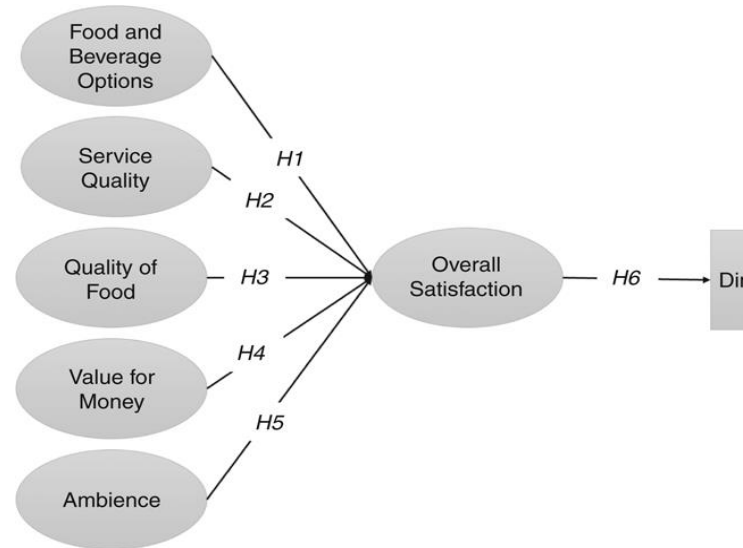
### (ii) Food Quality

Food quality is the quality characteristic of food that is acceptable to the customer [14]. Overall food and beverage quality, taste, freshness, nutritious aspect, and portion size are categorized under the food quality measurement. As the core product of a catering establishment, great importance is attached to food and beverage quality and it has been assessed for many aspects such as temperature, texture, taste and aroma [15]. It is believed that the quality of food and drink influences customers' intentions to return to a particular restaurant. Oh [16] found a high positive association between consumer satisfaction with food and drink quality and their intention to continue eating at a particular restaurant. In addition, eating at work is often associated with poor quality and wrong food choices, which has negative consequences. There are various aspects to encourage customers to adopt a healthy diet. Institutions have a responsibility to create an environment that makes it easier for students to prepare healthier foods. Previous research suggests that the food environments of many institutions are filled with high-energy, nutrient-poor foods that may be heavily advertised [17]. In addition, it is the operator's job to offer a variety of products in its menus, giving its customers more choices. Menu is one of the key indicators of restaurant marketing plans [18].

There's an oversimplified way of looking at college and university foodservice, but it's true, nonetheless. The more a university invests in its hospitality, the better its service will be. At the same time, it is extremely difficult to keep groceries affordable. Common beliefs are that a college should keep food as inexpensive as possible to cater to its student population, but due to some of the menu preferences and requirements listed above, it's not always as inexpensive as it used to be. One way to counteract this is to offer a level of service that not only appeals to a diverse student body, but also the places and times that students can eat. To meet this student food need, it is important to leverage other profit centres such as on-campus convenience stores or grab-n-go kiosks. Adjusting services and hours of operation during different parts of the day is another way to control costs and still provide the services you expect.

**(iii) Student Satisfaction**

Most of the existing research on college dining has focused on either student satisfaction with products, services, and service environments or on the dietary intake of students consuming food on campus and its health effects. Existing research has highlighted the potential impact of the provision of catering services in institutional settings on the health and well-being of users [19]. Access to food at work can provide short-term emotional comfort [20] and shape work relationships [21]. However, institutional catering can also be a source of stress, particularly for those with allergies, special dietary needs and people of different nationalities who encounter unfamiliar foods and have few suitable alternatives [22]. Access to food in workplaces, including universities, can also be an issue other risks in that healthy options may be limited and people in these contexts consequently make poor food choices [23]. Eating at work is often associated with poor quality and poor food choices, with negative consequences. However, studies have shown that workers who eat in well-run company canteens are more likely to eat healthier, which contributes to better health [24]. Company and university canteens have also been identified as potentially important sites for health [25]. Significantly, most of the research on workplace eating has focused on healthy food intake rather than the ability of the foodservice environment to contribute to people's overall well-being.



A few thinks about have inspected how understudies see campus catering. In any case, this work was generally quantitative, cantering on issues such as cost, nourishment quality, and fulfilment with benefit, instead of looking at the associations between nourishment (benefit), students' broader encounters, and their well-being. Given the information holes, this article creates an integrator writing audit that collates, evaluates, and synthesizes existing information on the commitment of the neighbourliness environment and nourishment supply on college campuses to understudy well-being, with the point of distinguishing future roads for investigate and best hones that can make choices almost the advancement of offices and administrations. Also, the constrained existing inquire about and objective to create common sense suggestions require the survey to move past thinks about of neighbourliness and wellbeing and draw more intensely on neighbourliness involvement administration, co-workspaces, and instructive plan writing. Synthesizing points of view from these broader regions makes a difference keep up the conceptual centre of the audit whereas utilizing hypothetical and down to earth bits of knowledge from these regions to distinguish integrator lines of request and useful intercessions. (iv)Internet in food Delivery.

**Conclusion**

The reason of this ponder was to decide the cafeteria customers' generally fulfillment with on-campus nourishment benefit properties. The discoveries recommend a few imperative suggestions for college nourishment benefit administrator. From the administrative viewpoint, the extraordinary significance of client put on the quality of nourishment benefit requires that the nourishment benefit given by the college campus ought to take into thought the customers' experiences and recognitions and in this way grant a thrust to numerous educate to overtake their campus nourishment benefit



operations. The current study can, in any case, offer assistance to supply a guide for making a difference the college administration superior get it the key significance of nourishment and refreshment benefit quality. The web has essentially changed the way that nourishment is conveyed to campuses, making it less demanding for understudies to get to, more down to earth, and more effective. It has too given campus eateries better approaches to reach more clients and make more cash. In general, the web has made campus nourishment conveyance more open, helpful, and proficient for understudies, and it has too opened up unused openings for campus eateries to extend their reach and increment their revenue. The web has had a critical affect on nourishment conveyance for colleges, which online requesting stages have gotten to be an fundamental portion of the industry.

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