# PERCEIVED INFLUENCE OF PHYSICAL SERVICESCAPE OF FOOD SERVICE FACILITIES ON CUSTOMER SATISFACTON IN SELECTED UNIVERSITIES, NAIROBI KENYA

BY

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# A THESIS SUBMITTED TO THE SCHOOL OF TOURISM, HOSPITALITY AND EVENTS MANAGEMENT IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF DEGREE OF MASTER OF HOSPITALITY MANAGEMENT

MOI UNIVERSITY

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### DECLARATION

## **Declaration by the Candidate:**

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# DEDICATION

This thesis is dedicated to my family, classmates and friends for inspiring me to further my studies in the area of my interest.

#### ACKNOWLEDGEMENTS

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#### ABSTRACT

Customer satisfaction refers to the fulfillment of a buyer expectations with a product or service being offered. Diverse studies have examined customer satisfaction in both commercial and welfare food service sectors. However the research focus has essentially been inclined on the effects of diverse food service dimensions on consumer behavior. Specifically, variables such as food quality, menu varieties and taste of food, have been explored with limited attention on the dining atmosphere or the physical servicescape. University food service facilities aim to maximize capacity while exceeding customer expectation. However, there has been a mismatch between utilization of food service facilities and projected demand. This study therefore investigated the perceived influence of physical servicescape on customer satisfactionin selected university food service outlets in Nairobi County, Kenya. The specific objectives were: to establish the influence of ambient conditions, space and communicators on customer satisfaction. The study was guided by the Expectancy-Disconfirmation Theory and Bitner's Servicescape Model. The study adopted a mixed method research design but specifically adopts descriptive and explanatory sequential research designs. The target population was 1,490 customers and 4 catering officers from four purposively selected universities. Systematic random sampling technique was used to select a sample of 305 customers while purposive was used to select 4 catering officers. Structured questionnaires were administered to customers and interviews conducted with catering officers. An observation checklist on physical servicescape aspects related to ambient conditions, space and communicators of each of the selected food service facilities was also completed. Quantitative data was analyzed using measures of central tendency and inferential statistics while qualitative data was analyzed using content analysis. The regression analysis established that physical servicescape explained 61.7% (R<sup>2</sup>=.617) of the variance in customer satisfaction. In addition, regression results revealed that ambient conditions ( $\beta$ =.494, p=0.000); space ( $\beta$ =.384, p=0.000) and communicators ( $\beta$ =.296, p=0.000) have a positive and significant relationship with customer satisfaction. The regression results were significant because the p values were less than 0.05. The interviews revealed that management continuously improve physical servicescape in order to remain pleasant and more so meet ever changing customer needs. To support upgrading of any form, the limited space allocation and ambience should also be considered as revealed in the observation checklist. The study concludes that the physical servicescape significantly influences customer satisfaction. In addition, aspects related to space, and communicators which received limited attention by management should be improved.

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# ABBREVIATIONS AND ACRONYMS

ANOVA:	Analysis of Variance	
APU:	Asian Pacific University	
CIT:	Critical Incident Technique	
CLRM:	Classical Linear Regression Model	
CUE:	Commission for University Education	
<b>DINESERV:</b>	Dining Service	
ERC:	Ethical Review Committee	
NACOSTI:	National Commission for Science, Technology and Innovation	
PAT:	Profile Accumulation Technique	
PLS:	Partial Least Squares	
SEM:	Structural Equation Modeling	
SOR:	Stimulus Organism Response	
	Stimulus Organism Response	
SPSS:	Statistical Package for Social Sciences	

#### **OPERATIONAL DEFINITION OF TERMS**

This section defines various terms and terminologies as used in this study. It also indicates how variables in the study have been operationalized and measured.

- Ambient conditions: Refers to intangible environment features that stimulate the common human sensations that influences people's perception and feeling to the surrounding of the university food service facilities through visual aesthetic, temperature, cleanliness, and the audio (Upadhyaya, EL-Shishini, Aziz & Kumar, 2018).
- Artifacts: Describes visual communication tool consisting of graphics and theatrics employed to enhance the physical appearance of a facility (Durna, Dedeoglu & Balikçioglu, 2015).
- Audio: Refers to sound of objects, people and items. In the context of this study, audio describes the sound system within the food service facility being pleasant or nuisance (Awasthi & Shrivastava, 2014).
- Cleanliness:Refersto the state of a surface, surrounding environment, material or an item being neat free of dirt or impurities (Vilnai-Yavetz & Gilboa, 2010).
- **Communicators:** refers to signs, symbols and the menu that are critical in determining customer satisfaction in the university food service facility (Kloosterman, 2017).
- **Confirmation**: Presumes that the degree to which perceived service exceeds the expectations (positive disconfirmation) while below expectations implies the service not meeting up the expectations of the consumer (negative disconfirmation) (Elkhani & Bakri, 2012).

- **Customer expectations:** Refers to the expected level of service by consumer against the level of service received (Oliver, 1980).
- **Customer loyalty:**The desire by a consumer to repurchase, or consume again a product or service based on past experience of the product/service (Oliver, 1999).
- **Disconfirmation:**Disapproval of services or product expectation based on the level of satisfaction derived after consuming the service or product (Oliver 1980).
- **Equipment:** Refer to material items designed for particular function and purpose (Awasthi & Suvivastava, 2014). In the context of the study, it refers to furniture and other items used in the food service facility to enhance satisfaction of customers.
- Food service facility: Refers to place, structure or a building where students take meals (Yakaboski & Birnbaum, 2013).
- **Furnishing:** Refers to equipping of the visual structure and shape of the fittings (Tuzunkan & Albayrak, 2016). It describes the nature of furniture in terms of comfortability at the university food service facility.
- Interior design:Describes aspects, like pictures, painting, furniture, flowers/ plants, or decoration on the walls enhancing perceived quality of dining environments by creating pleasant feeling (pleasure and arousal) as customer influence (Chua, Othman, Boo, Abkarim & Ramachandran, 2010).

- Layout: Refersto the arrangement of the objects that are used in the university food service facilities so as to deliver goods and services more efficiently (Aliyu, 2017).
- **Menu:** Refers to a list of food, drinks and other services against their prices offered to customers in a food service facility (Mill, 2007).
- **Perceived performance**: Refers to the expected level of satisfaction derived from a product and service against the cost of the product and service (Shashikala & Suresh, 2018).
- **Physical servicescape:** Describes the surrounding of a facility redesigned artificially to enhance its beauty (Ong, 2015).
- **Recommendation to others:**Refers to ones choice to refer someone somewhere to buy a product and service based on the quality, price or other features of interest to the customer (Cristo, Saerang & Worang, 2017). In the context of this study, it is the willingness of a previous customer to refer another potential customer to buy or consume food and drinks from particular food service facility.
- **Repeat visits to the food service facility:**The desire by consumer to buy and consume a service or product from the same service provider again and again (Forozia *et al.*, 2013). Basing on this study, it is the desire of a customer to buy or consume food and drinks from the same food service facility.

- Signage: Signs methods of communicating particular information regarding a service of product being offered (Hanaysha, 2018). Basing on this study, it describes the signs, labels or markers that communicate particular information at the university.
- Space: Is the available area for arrangement of services equipment (Onuoha & Nnenanya, 2015).
- **Temperature:**The state of being cold, warm or hot. Based on this study, temperature connotes the moderate temperatures within the food service facility favorable to customers (Awasthi & Shrivastava, 2014).
- Visual aesthetic:Refers to visual beauty emanating lighting, colors, shapes, wall, floor plantsetc and significantly influences the level of satisfaction among customers(Jain & Bagdare, 2011). In the context of the study, it describes overall beauty and attractive state of the university food facility.

#### **CHAPTER ONE**

## **INTRODUCTION**

#### **1.0 Introduction**

This chapter highlights background of the study, the statement of the problem, objectives of the study, research question, research hypotheses, the significance of the study, scope of the study and ends with the limitations encountered in the study.

### 1.1 Background of the Study

Customer satisfaction is deemed as the feeling after consuming a product or service and can either be positive or negative feeling (Amin, 2015).Thus, customer satisfaction defines the level of customers feeling of pleasure or displeasure based on the service offered in comparison to the expected level of service(Oliver, 1980). Relating to the context of the current study, customer satisfaction connotes the loyalty of the customer to the food and services sold at the food service facility, the desire to visit again to the food service facility and recommend other customers to the food service facility(Oliver, 1980).

Every food service facility should locate methods to retain and also attract brand-new customers, where at the same time food facilities need to continue to be competitive as well as successful (Prudent, 2014). It is no more surprising that nowadays for some reasons many customers are much more innovative to look for food center where not only supply an alternative unique menu with affordable rates but likewise use customer satisfaction beneath on its environment of physical servicescape as well as hospitable services. Customer satisfaction is essential to the existence of any kind of enterprise (Aliyu, 2017).

In the hotel industry, customers expect good services at the food facility. Customers are most likely to be pleased with the viewed high quality of service at the food service facility if they have attainedworthy experience that satisfies or surpasses their assumption (Harrington, Ottenbacher & Kendall, 2011). However, underperformance of highly anticipated institution may likewise cause customer frustration (Jysmä, 2012). According to Harrington *et al.*, (2011), the food service facility needs to take extra care to recognize the customer assumptions in order to guarantee the customer complete satisfaction can be optimized and possible in long run.

Customer satisfaction is a vital determinant of the present and future sustainability of a firm since itdetermines retention of the customers (Bilgin, Küçükosmanoğlu, &Şensoy, 2010). To ensure customer satisfaction is achieved it is crucial for to comprehend the needs and expectations of their customers. Many proprietor's design strategies, that would hopefully lead to increased sales (Canny, 2014). Notably Food facilities which pay attention and accurately determine customers' needs not onlysatisfy customers' needs and wishes, but are also more profitable than others. (Ryu& Han, 2010).

Basing on Expectancy-Disconfirmation theory, customers tend to compare services received against expected services to come up with conclusion whether the service was bad or good, worst or excellent (Oliver, 1980). Therefore, to achieve long term success in the market, it is paramount for firmsto check the monitor levels of customer satisfaction and use the information to improve the quality of the services (Dawi, Jusoh, Streimikis & Mardani, 2018).

Though customer expectation of services have been linked to the superiority of services presented at food service outlet, there are other elements like physical

servicescape that is important to customer satisfaction (Namkung *et al.*, 2007). Cleanliness, spatial layout, ambiance, appropriate design and decor, could be decisive by customers in evaluating customers satisfaction (Jysmä, 2012).

Physical servicescape is a modelpostulated by Bitner (1992) who emphasized the importance of environmentin relation to customer satisfaction (Kotler, 2012). The assessment of the physical servicescape is instantaneous for first timers as it does not need prolonged engagement (Ong, 2015). The importance of creating an attractive physical servicescape that include ambient conditions, space and communicators are critical in enhancing satisfaction of customers in hotel and service industry (Durna, Dedeoglu&Balikçioglu, 2015). In the context of the hospitality industry, ambient conditions, space and communicators play critical role in differentiating the nature of hospitality services offered among the hospitality service providers thus influencing consumer satisfaction (Chen &Hu, 2010; Ryu*et al.*, 2012).

Ryu and Han (2010) establish that the quality of food, the spatial layout of the premise and the price are critical elements thatinfluencecustomer satisfaction in regards to the service being offered. Servicescape has a substantial impact on customer satisfaction in the hospitality industry (Kleinhans, Van Heerden & Kleynhans, 2016). Common aspects of servicescape include functionality and spatial layout and the appealing of the premise. As per customers' perceptions, the customers will have a specific feelings and thoughts that will lead to consume the product/service or reject them (Rashid, Ma'amor, Ariffin & Achim, 2015).

The significance of the physical servicescapecreates image by attracting and satisfying customers in the hospitality sector (Wang &Mattila, 2015). The three physical servicescapedimension features include ambient conditions (aesthetic value);

spaceand communicators (signs, symbols and artifacts)(Line, Hanks & Kim, 2016). The ambient conditions are categorized as the intangible features that trigger the human sensations about physical environment via visual aesthetic (Lighting, color, shapes), cleanliness (air quality, fragrance and scent), ambient (temperatures) and the audio (music). More so, the music, color, lights, displays can enhance customer satisfaction(Hendriyani, 2018; Awasthi&Shrivastava, 2014; Kong &Jamil (2014, Shashikala& Suresh, 2018).

In this study, the Expectancy-Disconfirmation theory borrows from the idea that customer satisfaction entailsservice expectation against service received (Bilgin, Küçükosmanoğlu & Şensoy, 2010). Therefore, a customerwillingness to consume or not to consume a product or service is dependent on the level of satisfaction derived by consuming that product or service (Oliver 1980).

Various studies have been undertaken with regard to servicescape and consumer satisfaction. In Malaysia, spatial layout and functionality, significantly explain the rate of food consumption in a food service facility (Jang, Ro & Kim, 2015). The findings further indicated that customers have certain thoughts and feelings (emotional and physical) that lead them to either consume or avoid a service. Within the Malaysia university environment, the physical servicescape is an important aspect determining customerswithin the school food service facility. Elements such as serving tasty food, serving fresh food, serving at the properheat and food presentation is visually pleasing for customers. Hotel service providers in Malaysia strive to create as well as preserve better physical servicescape to ensure that favorable perceptions of image and also value can be created toenhance customer satisfaction (Chua *et al.*, 2010).

In Taiwan, hotel establishments are mainly run based on space layout, decor and amusement plans, with a unique motif or certain design to bring in customers and produce a worth psychological of consumers. The physical dimensions of the physical servicescape play a critical duty in the operation of motif dining establishments. According to Lee, Wang and also Cai (2015), appearances, ambient condition, space/function, seating comfort, and sanitation, and visible variables can be made use of as efficient analysis dimension indications.

In Nigeria, a study was conducted to provide an understanding of how hotel service provider interacts with their esteem customers as well as supply value solutions in a unique physical servicescape is of decisive significance in the friendliness sector (Amue, Adiele&Nkoro, 2013). Hotel facilities employ physical servicescape as a marketing strategy to attract more consumers to the facility (Kuti& Harrison, 2012). According to Onuoha and Nnenanya (2015)special layout, signs, symbols, artifacts and ambient conditions, influence customersatisfaction at the three star hotels in Nigeria.

Physical servicescapeis one way in which Kenyan service industry markets the hotels and restaurants. According to Nzioka, Kihima and Kivuva (2014), when selecting dining establishments, physical facilities, and physical appearance well as cleanliness in restaurants are one of the essential qualities that customers use. Kamau (2017) in a study on how physical servicescape influence customer satisfaction among hotel in Nairobi County noted that consumers are happy as well as pleased with the ambient conditions; functionality, spatial layout; symbols, signs andartifacts as well as cleanliness in the restaurants. Several research gaps that include conceptual gaps, contextual and methodological gapsexist among studies conducted on physical servicescapeand customer satisfaction. Thus, this study on physical servicescape is timely and offers insights into the importance of physical servicescape in food service facilities in the context of Kenyan universities. In a study conducted by Nzioka, *et al.*, (2014) they found out that the physical facilities, physical appearance and attractiveness as well as cleanliness in restaurants are one of the key attributes that customers use when selecting restaurants and has a positive impact on customer satisfaction. However, the study focused on the influence of servicescape on consumer satisfaction with little attention on consumer satisfaction presenting a conceptual gap that warrant further research. The study by Kamau (2017) focused on the influence of servicescape on customer satisfaction among hotel restaurants in Nairobi County only. The study focused on general restaurants in Nairobi County, current study focuses on institutional food service facilities.

Mill (2002) conducted a study on a comprehensive model to investigate customer satisfaction in the hospitality sector. However, the study relied largely on comprehensive desktop review to study customer satisfaction contrasting current study that wishes to quantitatively undertake the study by collecting actual data from customers thus presenting a methodological gap. A study by Khanau (2015) on the influence of hotel interiors on loyalty of customers only operationalized servicescape using interior designs, however there are other critical aspects of servicescape influencing customer satisfaction like personal artifacts, signage and cleanliness hence the need to undertake the current study. Focusing at cafeteria facilities in Universiti Kebangsaan in Malaysia, Kong and Jamil (2014) studied level of satisfaction among postgraduate health sciences students. However, the study focused on cafeteria

facilities in Malaysia. The state of food service facilities in Malaysian universities might be slightly different from food service facilities in Kenyan universities hence the need to undertake this study.

#### **1.2 Statement of the Problem**

According to Jang, Ro and Kim (2015) the capacity of university food service facilities should ideally full with customers particularly when in session. Fully utilized food service facilities often signify that either customers' expectations are met / exceeded or there's possibly no better alternative to source for meals. According to Njau, Mutungi and Mutinda (2019) food service facilities in most universities witness low consumer traffic raising queries on the state of hospitality services of the food service facilities.

Consumer enrollment in catering facilities within institutions vary continuously due to the diverse cultural, social individualities and various dining experiences from a range of restaurant segments, which raised their expectations of University food services facilities (Kwun 2010). These factors have let most universities to increasingly pay attention to the importance of their campus foodservices and its environment (Kwun 2010).

In hospitality industry, customers are more likely to be satisfied with the perceived good quality of service at a facility if the experience meets or exceeds their expectation. However, the food service facility needs to take additional care to understand the customer expectations in order to ensure the customer satisfaction can be maximized and achievable in long run (Harrington *et al.*, 2011).

With the numbers of higher education customers on university, there has to be unquestionably raised in the expansion of demand for food service availability and quality on universities (Jamil, 2014). Food service facilities operating in the universities have unquestionably become critical hospitality service providers for customers competing with many local and private food service operators operating nearby (Liang & Zhang, 2009). Because of the rising variety of meal-plan options and also dining system options in addition to raising off-campus rivals, customers are no more tolerating low quality of food yet anticipating greater than excellent food quality and dietary worth of the food they eat as food is a compound that are taken into the body to maintain life, furnish power and promote development (Jamil, 2014).

Nutritious food is incredibly crucial when it comes university'scustomers as it helps them to make their minds sharp, concentrate better in their studies as well as end up being superior in their efficiency, academic success and top quality of college life (Jamil 2014). For that reason, it is important for food service operators to fully acknowledge the wants of university customers and satisfy their demands to keep up with the expanding expectations of concerning the overall university eating experiences (Jamil 2014).Customers in higher learning institutions prefer to take food in private premises rather than food service facilities within the university (Woo Goo Kim, 2009). As a result, university food service facilities are largely not preferred food facility places for customers. According to Yakaboski and Birnbaum (2013) most food service facilities at the universities records significantly very low occupancy that need to be explained by empirically undertaking this proposed study.

Many empirical studies have been undertaken on theeffect of physical servicescape on customer satisfactionin selected universities, Nairobi Kenya.A study byKamau (2017) focused at theinfluence of servicescape on customer satisfaction amongclassified restaurants operating within the Nairobi City. The study focused on general restaurants in Nairobi County, current study focuses on consumer' food facilities at the universities.Also Kamau (2017) found that ambient conditions did not significantly influence customer satisfaction.

Mill (2002) conducted a study on a comprehensive model of enhancing satisfaction of customers in the hospitality sector. However, the study relied largely on comprehensive desktop review to study customer satisfaction contrasting current study that wishes to quantitatively undertake the study by collecting actual data from consumers thus presenting a methodological gap. A study by Khanau (2015) on the influence of hotel interiors on loyalty of customersonly operationalized servicescape using interior designs, however there are other critical aspects of servicescape influencing customer satisfaction like personal artifacts, signage and cleanliness hence the need to undertake the current study. Focusing at cafeteria facilities in Universiti facilities in Malaysia. The state of food service facilities in Malaysian universities might be slightly different from food service facilities in Kenyan universities hence the need to undertake this study.

While focusing on Nepalese Restaurants, Dipesh and Apil (2018) investigated the effects of price rates, ambience conditions, service quality and food quality on customer satisfaction in Finland. However, the study focused on Nepalese hotel service providers operating in Finland, contrasting current study that focuses on food service facilities in Kenyan universities. Chang and Suki (2018) conducted a study focusing at level of satisfaction among studentsat university cafeteria using Partial Least Squares(PLS)method. However, the study only identified ambience conditions

as significant element in regard to students' level of satisfaction at the food facility services, there are many other aspects of servicescape that are important on customer satisfaction that need to be studied.Nadzirah, Karim, Ghazali and Othman (2013) conducted a study on university foodservice. The study identified servicescape as a factor influencing customers' dining choice; however, the study failed to determine the aggregate impact of servicescape on customers' dining choice hence the desire to undertake the proposed current study.

According to Kearney, Kennedy and Coughlan, (2007; 2012), many research studies done on servicescape originated from North America as well as a few from Europe. Kennedy et al, insist that; otherstudieshave to be executed in various other countries in order to have feasible evaluations. As a result, offered the essential function played by servicescape or the physical servicescape in food service facilities, there is need to investigate the perceived influence of physical servicescape of food service facilities on customer satisfactionin selected universities, Nairobi Kenya.

### 1.3 Objective of the study

To investigate the perceived influence of physical servicescape of food service facilities on customer satisfactionin selected universities, Nairobi Kenya.

# **1.3.1 Specific Objectives**

- i. To determine the influence of the ambient conditions of food service facilities on customer satisfaction selected universities, Nairobi Kenya.
- To establish the influence of spaceof food service facilities oncustomer satisfactionin selected universities, Nairobi Kenya.
- iii. To examine the influence of communicators of food service facilities oncustomer satisfaction selected universities, Nairobi Kenya.

- **iv.** To investigate the perceptions of the catering officers regarding physical servicescapeof food service facilities how it influencescustomer satisfactionin selected universities, Nairobi Kenya.
- v. To investigate the nature of physical servicescapeof food service facilities on customer satisfaction in selected universities, Nairobi Kenya.

## **1.4 Research Question**

- i. What is the influence of the ambient conditions of food service facilities on customer satisfaction in selected universities, Nairobi Kenya?
- **ii.** What is the influence of space of food service facilities on customer satisfaction in selected universities, Nairobi Kenya?
- iii. What is the influence of communicators of food service facilities on customer satisfaction in selected universities, Nairobi Kenya?

### **1.5 Research Hypotheses**

The hypotheses underlying this study include the following;

- i.  $H_{o1}$ : There is no significant influence of ambient conditions of food service facilities on customer satisfaction in selected universities, Nairobi Kenya.
- ii.  $H_{02}$ : There is no significant influence of spaceof food service facilitieson customer satisfaction selected universities, Nairobi Kenya.
- iii. H<sub>03</sub>: There is no significant influence of communicatorsof food service facilities customer satisfaction in selected universities, Nairobi Kenya.

#### 1.6 Significance of the Study

The results of the study are expected to be beneficial to the university food service facilitieshotel service providers in improving servicescape in an effort to promote enhance consumer satisfaction. The study isalso of significance to related hospitality industry that wishes to improve their physical servicescape in order to enhance customer satisfaction by improving ambience conditions at the food service facilities, by setting up proper lighting and undertaking proper color merging at the food service facility.

The university food service facilities may also improve the arrangement of eating tables and chairs with aim of enhancing comfort of customers. The university food service facilities may also enhance proper installation of signs and labels with aim of informing and directingcustomers around the facility. The university food service facilities may also improve their menu cards and menu board to clearly capture the type of products and services available at the facility against their pricing. The outcomes of this study are expected to contribute to the body of knowledge regarding servicescape as well as customer satisfaction.

Lastly, the study is of significant to management food service facilities in regard to continuous improvement of ambient conditions features like setting up proper lighting, undertaking periodic color painting of the food service facility and rebuilding food facility floors and ceilings with aim of promoting aesthetic value.

#### **1.7 Scope of the Study**

In terms of the conceptual scope, the study investigated the influence of physical servicescape on customer satisfaction in selected universities, Nairobi Kenya. Physical servicescape was operationalized by ambient conditions, space and communicators while customer satisfaction was operationalized by customer loyalty, repeat visits to the food service facility and recommendation the food service facility.

The study was limited to two public and two private universities in Nairobi County presenting a contextual scope. The study population was the food service facilities of four universities in Nairobi County.

The units of analysis were customersbased on the seat capacity visiting the food service facilities daily basis. Catering officers at the main food service facilities in the selected universities also participated in the study. The study was conducted in October and November the year 2020, presenting time scope.

#### **1.8 Assumptions of the Study**

The study was basedon the following assumptions;

- i. The participants of the study were to cooperate and willingly provide honest and true responses on time as their responses informed the study results.
- ii. That physical servicescape, i.e., ambient conditions; space and communicators influencecustomer satisfaction.
- iii. The time scope was adequate for the study as the study used devices such as digital camera to capture the nature of physical servicescape at the university food service facilities. The environment may be altered when the participants are expecting a study in the premises.

### **1.9 Limitations**

The study encountered some limitations and external factors. Some respondents hesitated to express their views regarding physical servicescape of the food service facilities in the selected university. In addition, the respondents had feeling that information collected regarding physical servicescape and nature of facility services being offered in the university may be used against the food service facility by exposing its state. Nevertheless, the limitation was mitigated by guaranteeing

respondents that the facts collected are meant for purpose of academic research only. They were thus asked to be honest and truthful regarding the physical servicescape of the food service facilities in the selected university and how it influences the level of satisfaction of the customers. The function of data collection was greatly impacted by Covid-19 pandemic as most respondents were operating onlineand not all were available in person. However, the limitation was mitigated by support coordination with the management on safety protocols and scheduling for online meetings.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### **2.0 Introduction**

This chapter presents the concept of customer satisfaction, concept of physical servicescape, literature review on ambient conditions, space and communicators. Theoretical models, of the study have been given, critiqued and their relevance to the current study drawn, analysis of empirical studies and the conceptual framework is provided. Further, an empirical review and summary of the chapter are also presented in this section. Critique of the past studies was conducted to uncover knowledge gaps.

### 2.1 Concept of Customer Satisfaction

Customer satisfaction refers to the customer's response relating to the gratification of his expectations of the services or product, and also whether he views that the usage has actually met client's needs and wishes in relation to his expectations, prior to getting the products or service (Chang & Suki, 2018). Customer satisfaction is the outcome of customer's perception of the worth received in a product or service, where worth equals perceived service high quality, contrasted to the worth anticipated from service or product with contending service providers (Oliver 1980). According to Reianu (2014) defined the idea of satisfaction by merging toward two primary techniques, specifying fulfillment as either an end result or as a procedure after taking in a services or product.

According to ServQual model as introduced by Parasuraman et al. (1985), principle of customer satisfaction as a feature of consumer expectations (what consumers get out of the solution) and perceptions (what clients get). Supplying and preserving customer satisfaction is one of one of the most essential challenges facing company today

(Tessera, Hussain & Ahmad, 2016). Customer satisfaction is thus a business viewpoint which leads to the development of value for customers, expecting and also handling their assumptions, and also demonstrating capacity and also obligation to satisfy their requirements. Hence, customer satisfaction is the difference in between the assumptions of the customers before obtaining the services and also understandings of the clients after receiving the services.

Customer satisfaction primarily depends upon the accumulation of the viewed value to which the customers have worrying a service or product (Amin, 2015). For that reason, customers' complete satisfaction can show a person's feeling of pleasure or dissatisfaction arising from contrasting an item's regarded performance or outcome in regard to the assumptions. According to Dominici and Guzzo (2010) customer satisfaction is a critical variable for success of any kind of business and is the crucial driver for any company to sustain in present competitive period as well as ability to preserve customers.

Service providers need tounderstand their customers as well as make their services as though maximum feasible satisfaction is attained by the customer (Zhang, Ye, Song & Liu, 2015). The key to accomplish sustainable advantage depends on delivering high quality service that satisfies clients (Dominici & Guzzo, 2010). In order to achieve customer satisfaction, it is necessary to acknowledge and also to prepare for customers' needs and also to be able to please them (Tessera, Hussain & Ahmad, 2016). Enterprises which have the ability to rapidly understand as well as satisfy clients' needs, make better earnings than those which fail to recognize as well as please customers (Barsky & Nash, 2003). For a resort to continue to be competitive in regards to customers' fulfillment, it should track the levels of customers' fulfillment.

From this point of view the measuring of customer satisfaction is important as afar is hospitality industry is concerned (Reianu, 2014).

Measuring customer satisfaction entails collecting information regarding either what customers report needs to be altered (in a product, solution, or delivery system) or to assess just how well the service market is currently delivering on its understanding of these requirements (Monga & Kaplash, 2016). It is interested in all tasks directly involved in obtaining, taking in as well as taking care of products and services, consisting of the choice refines that precede and adhere to these activities (Ipek & Tulay, 2010). Customer satisfaction allows the management of a food service facility to understand the needs and wants of their customers (Mari & Poggesi, 2013). Moreover, the satisfaction of the customers contributes to determine the numbers of times the customers will come back to the business entity for the service and goods.

The objective for determining customer satisfaction is 'to accumulate info pertaining to either what customers report demands to be transformed (in a product, solution, or distribution system) or to evaluate how well a company is currently supplying on its understanding of these demands' (Almsalam, 2014). By surveying customer satisfaction, the organization reveals interest in understanding its customers' needs, pleasures or annoyances. Determining customer satisfaction can be described as procedure of defining, highlighting and checking customer satisfaction or customer satisfaction indications, degree and signs which, in the final, reveal the efficiency of the company or the program' (Mattila & Wirtz, 2015). Customers' satisfaction includes both their life time and also their life time worth as well as their willingness to suggest an organization to others. Customer fulfillment dimension is made use of on the market by firms in order to influence the customer commitment, being known

that a completely satisfied customer will certainly share a higher chance to consume the exact same product and services.

#### 2.1.1 Customer satisfaction in the Hospitality Industry

Hospitality is one-of-a-kind industry and supplies a series of significant products as well as insubstantial solutions, for instance accommodation, atmosphere, food and beverage as well as spa solution (Heo & Lee, 2011). Among the biggest challenges for supervisors and capitalists in the hospitality market is to offer and also sustain customer satisfaction (Dominici & Guzzo, 2010). In order to be successful in the hospitality, it is not sufficient to bring in only brand-new customers however additionally focus on maintaining existing customers via customer satisfaction and also commitment.

Thus, customer contentment is mainly complicated as well as considerable in the direction of hotel industry. Understanding the needs and desires of a customer's presents a unique perspective on customer satisfaction in the hospitality sector (Tessera, Hussain & Ahmad, 2016). It is critical that hospitality industry to be aware of the type of customers who consume the product and service, and pay close attention to customers' needs so that they will be ready to change nature of service and products provided when customer preference, wants, or needs change.

In the hotel market, customer satisfaction is mainly connected upon high quality of service. An administration approach concentrated on customer satisfaction can boost client loyalty, thus boosting the favorable image of the eating center (Dominici & Guzzo, 2010). Thus, exploring the significance for customers of hotel qualities in hotel option is essential. Vital understanding on customer satisfaction translates right into the consideration of whether or not customers will certainly return to a hotel or

suggests it to various other vacationers, is essential to the success of the hospitality market (Radojevic, *et al.*, 2014). Disregarding to pay attention to those hotel attributes thought about crucial by visitors, might lead to negative analysis of the hotel, hence limiting the opportunity of repeat visits and referrals.

Customer relations are a strategic property of the organization as well as satisfaction is the beginning point to define business goals (Dipesh & Apil, 2018). In this context, favorable relationships can create client's greater dedication and also raise their return price. Long-term and also reciprocally helpful relationships between customers and also the hotel is ending up being progressively crucial because of the extremely positive relationship between customers' general contentment degrees and also the chance of their going back to the same resort (Radojevic, et al., 2018). Food service facilities are increasing their investments to improve solution top quality and the viewed value for customers so as to attain far better customer satisfaction as well as commitment, thus leading to better relationships with each consumer (Phan & Nguyen, 2016). Relationship top quality has a remarkable favorable effect on hotel visitors' satisfaction: it produces positive word of mouth as well as increments repeated client rates. Many authors view customer satisfaction in the hotel industry as a conglomerate of loyalty, repeat visits to the food service facility and recommendation to others (Chang & Suki, 2018; Oliver 1980; Canny, 2014; Cengiz, 2010). In-depth synthesis of the measures of customer satisfaction as indicated by the authors is presented in the subsequent next sections.

# 2.1.2 Influence of Customer Satisfaction on Customer Loyalty

Customer loyalty is specified in the form of habits, attitudinal, as well as discerning viewpoints to make sure that the behavior point of view is based upon the buying quantity of a certain product or services as well as attitudinal viewpoint web links

preferences and also what is a concern for the customer as well as also critical point of view is concentrated on efficient elements on option (Soltanmoradi, Poor & Nazari, 2013). Customer loyalty could be specified as the substantial dedication to perpetual shopping of a needed product or service in the future as well as describes attitude and continuity to consume a product or service. Thus, customer loyalty informs repetitive purchasing of a product and service (Iqbal, Murni & Sulistyowati, 2018).

Citing Oliver (1980), Bela *et al.*, (2016) define customer loyalty as a commitment kept in deepness to support a service or purchase or product that is picked in the future although the influences of the scenario as well as advertising and marketing efforts have the feasible to activate customers to change. According to Durian (2010) customer loyalty is a measure of customer attachment to a product or service. Loyalty building needs a company to focus the worth of its services and product and to show that it is interested to accomplish the need or develop the partnership with customers.

The complete satisfaction of company client leads to customer loyalty (Nur'Najmah, Menudin & Laidey, 2019). Customer loyalty will certainly boost dramatically when complete satisfaction completes at a certain degree as well as at the same time customer loyalty will certainly decline instantly if the fulfillment degree drops to a certain point (Yap, Ramayah & Shahidan, 2012). Furthermore, highly completely satisfied customers are often tending to be extra faithful than the customers that are simply pleased. Customer loyalty may lead to an increase in both sales and profitability of an organization.

# 2.1.3 Influence of Customer Satisfaction on repeat visits

Repeat visits to the food service facility refer to the desire by a customer to buy and consume a product or service from the same service provider again and again. Repeat visit is an outcome of customer satisfaction. Thus, customer satisfaction is an essential element of attaining competitive advantage in hospitality industry that will attract customers and maintain them while influencing their repeat visits to the service center (Forozia *et al.*, 2013). Repeat visits are largely determined by the nature of services offered in a service industry. It is not easy to meet various customers' needs with different backgrounds, however good customer service will certainly aid create customer loyalty and also repeat visits (Amirreza, Mohammad & Gilani, 2013). It is believed that customers that are completely satisfied are more probable to make repeat go to and also desirable word-of-mouth (Fornell, 1992). Sirgy and Tyagi (1986) stated that a consumer's repeat browse through is very closely related to his or her fulfillment with a preliminary purchase).

According to Gnanapala (2014), customer satisfaction is necessary for all organization establishments, since it influences the repeat see to purchase a service or a product (2014). The satisfied customers make repeat see and also talk positively concerning their fulfillment, and also it will spread positive word of mouth attention about the company (Ryu & Han, 2011). Further, a pleased consumer is highly likely to make use of the company's services repeated times as well as furthermore to draw in brand-new customers by revealing favorable comments about business (favorable word of mouth).

## 2.1.4 Influence of Customer Satisfaction on Customer recommendations

Customer satisfaction after consuming a product or service is likely to influence recommendation of the same service or product to a new customer. One of the common methods of recommendation is by word-of-mouth (Cristo, Saerang & Worang, 2017). There is evidence that recommendations have a strong influence on customer choice of the service provider. According to Radojevic, Stanisic and Stanic (2015) customer satisfaction as well as suggestions have a U-shaped relationship. This suggests that if consumer does not have a high degree of fulfillment, he/she will certainly not be willing to suggest his/her service experience to other people.

A satisfied client is always intended to suggest the service to their buddies, relatives and also the persons that they come across. When the customer is satisfied with the product and services of the business, it can make the customer to buy frequently as well as to suggest service or products to possible customers (Lee & Tussyadiah, 2010). If the customers are very satisfied with the solutions, after that it identifies that there is the opportunity of expanding the marketing channels of the service provider. Good service delivery may result to positive recommendations to friends, colleagues and relatives. Positive recommendation as stated by Dawi, Jusoh, Streimikis and Mardani (2018) may bring benefits in terms of productivity and sustainability of a service provider through customer satisfaction.

Dissatisfied customer will likely whine, participate in negative word of mouth as well as button to a rival. On the other hand, a satisfied client will likely to spread out positive words and also suggest the service/product to others (Al-Tit, 2015). There are unambiguous empirical assistances for the influence of customer satisfaction on positive referral. Shen and also Choi, (2015) in the hospitality industry discovered that there is a positive relationship between customer satisfaction and suggestion. It is believed that the anticipated benefits of switching to one more vendor ought to be decreased when a client viewed a greater level of complete satisfaction and also consequently, it will increase the probability of giving a positive referral.

Satisfied customers are thus more probable to repurchase, lower their rate sensitivity, engage in positive referral recommendation, as well as come to be dedicated customers (Tao 2014). Satisfied customers are the ones that develop the opportunity of the new customers. There are the possibilities of tip to the brand-new ones if the

existing customers are pleased with the product and also solution (Berezina, Bilgihan, Cobanoglu & Okumus, 2016). This will certainly lead to the raising selection of customers as well as can keep the level of the partnership with the customers. In the context of the study, physical servicescape of a food service facility is deemed to influence customer satisfaction.

# 2.2 Influence of Physical Servicescape on Customer Satisfaction

This section presents general empirical literature on how physical servicescape influences customer satisfaction. It presents empirical literature on how ambient conditions, space and communicators relate with customer satisfaction.

The impact of the eating facility's physical servicescape on customer satisfaction has actually long been analyzed by researchers in numerous countries. In numerous studies have actually been examined the influence of physical servicescape on customer satisfaction. The physical servicescape of the eating facility is the extremely first component that customers will experience after entering into a restaurant, developing a crucial element for customers (Hendriyani, 2018). As a matter of fact customers want to eat at an eating facility not just for their dietary demands nonetheless additionally to develop a remarkable experience, to quadrate others as well as likewise get away the troubles as well as regimens of life. Consequently, the dining establishment's physical servicescape requires to offer components of interest to customers. The physical servicescape is a crucial component of customer psychology and additionally customer satisfaction in a dining establishment. Pleased customers will definitely notify their associates regarding their experience to make certain that this can be part of a word-of-mouth solution for the dining establishment. Word of mouth promotion has verified to be among the most efficient as well as also relied on types in a friendliness business marketing initiatives. Challenging to gauge,

oral ideas from coworkers undoubtedly have a favorable long-lasting impact on the profits of a dining facility. As a result a restaurant is expected to supply the very best ambience and also experience for its customers.

Physical servicescape describes the built atmosphere or more particularly 'the synthetic' physical environments in contrast to the all-natural or social environment (Ong & Yap 2017). Likewise Lee and Jeong (2012) defined physical servicescape as a setting created by service provider consisting of general layout, style, design, as well as appearances. Physical servicescape, is a crucial active ingredient of the solution offering, vary in its surveillance as well as intending counting on the level of interaction that customers have with the center. Bitner Servicescape is a design developed by Bitner (1992) to emphasize the impact of the physical servicescape in which a service takes place. This phenomenon has just recently been found to be a vital part of customer complete satisfaction (Ali & Amin, 2013; Ruiz, *et al.*, 2012). The importance of producing an attractive physical servicescape is a crucial variable for drawing in and pleasing customers in hospitality market (Kloosterman, 2017). In this context, physical servicescape plays a vital function in differentiating solution companies as well as affecting their image as well as consumer contentment (Chen & Hu, 2010; Ryu *et al.*, 2012).

Bitner (1992) insisted that company's physical servicescape affects customer satisfaction. Customers seek evidence of the ultimate quality of the abstract service by observing the concrete aspects (physical servicescape), called servicescape (Tuzunkan & Albayrak, 2016). Solution products are distinct since they are generally produced and also consumed all at once (Bitner, 1992). Nevertheless, the service setting where the solution is given consists of both substantial as well as abstract elements (Ong & Yap, 2017).

The assertion that customer satisfaction is influenced by the physical servicescape in which it takes place is basically a truism. Interestingly, nevertheless, until the 1960s psycho therapists largely overlooked the results of physical servicescape in their attempts to anticipate customer satisfaction (Theron & Pelser, 2017). Because that time, a large as well as gradually expanding body of literary works within the field of ecological psychology has addressed the partnerships between humans as well as their built environments (Darley & Gilbert, 1985). The three physical servicescape include ambient conditions, space, and communicators (Bitner, 1992).

#### 2.2.1 Influence of Ambient conditions on Customer Satisfaction

The ambient conditions are therefore very significant factors that contribute to satisfaction of consumers in the food service facilities in the university (Jang, Ro & Kim, 2015). Ambient conditions are employed by customer to assess the state of a food service center for convenience. Because the foregoing, ambient problems have been attested as significant variables on customer feedbacks (Jang, Ro & Kim, 2015). The ambient conditions are categorized as the intangible background features that stimulates the common human sensations that drive exhibitor's perception and the response to the surrounding through visual aesthetics temperatures, cleanliness and the audio (music and noise). More so, the music, color, lights, displays help in forming a physical servicescape and emotional of consuming a particular product or service (Awasthi & Shrivastava, 2014) and thus motivate the customers to spend more of their time in the service space and enhance product and service satisfaction. The ambient conditions are therefore very significant factors that result to customer satisfaction among students in the food service facilities in the university (Jang, Ro & Kim, 2015). In this study, ambient conditions measures include Visual aesthetic (light,

colour, shape), Cleanliness (scent, air quality, fragrance), Temperature and Audio (music, noise).

#### 2.2.2 Influence of Visual aesthetics on Customer Satisfaction

Visual aesthetic include lighting, colors, shapes and have significant influence on consumer satisfaction. Lights, colors, shape, fragrances, a soft and cozy ambience can create mood thus influencing customer satisfaction (Jain & Bagdare, 2011), assistance in creating physical servicescape and also emotional states of exhibitors (Awasthi & Shrivastava, 2014) as well as encourage customers to spend even more time in servicescape. Visual aesthetic have been identified by numerous authors, including Line, Hanks and Kim (2016) Upadhyaya, EL-Shishini, Aziz and Kumar (2018) and Kamau (2017) are vital in influencing customer satisfaction.

Visual aesthetic are made use of by customer as part of auditory components of their assessments of an atmosphere, whereas management can use them as trustworthy devices to decrease the adverse repercussions of waiting in any kind of sort of remedy treatment. Because the foregoing, aesthetic appeals have really been verified as critical prominent factors of consumer activities (Jang, Ro & Kim, 2015). According to Eiseman (1998), shade is a solid visual element of a physical servicescape, especially in an indoor configuration. Study has actually revealed that various shades promote differing individual moods in addition to feelings. In examining a servicescape, this aesthetic sensory input consists of creating a mental picture via cognitive handling before influencing individuals' individual state of minds as well as also feelings.

#### 2.2.3 Influence of Cleanliness on Customer Satisfaction

Cleanliness refers to the state of neatness of a service facility and the surrounding environment (Vilnai-Yavetz & Gilboa, 2010). In the context of the study, cleanliness is the appearance of the food service facility and affection that boosts the environment which impacts the customers feeling towards the food solution center. Customers develop negative or favorable word of mouth concerning supplying center by considering the tidiness (Banat & Wandebori, 2012). Tidiness can boost shop feel. Sanitation of a shop establishes favorable impression among customers as well as additionally makes them stay much longer in the shop. Item screen and also cleanliness are extremely important for the food service facility option (Hussain & Ali, 2015). Cleanliness of the food service centers create a picture of convenience and also luxury in the client's mind because of which customers stay for more time in the food service facility and make more purchases.

Cleanliness of the servicescape has a solid effect on customers' feedbacks in multiple solution contexts, and that it can avoid solution failures along with assistance healing (Lindberg, Salomonson, Sundström & Wendin, 2018). Maintaining cleanliness can assist in providing better solution as well as in avoiding solution failings. Cleanliness functions both a hygiene element and also an incentive at the same time (Hussain & Ali, 2015). A clean servicescape far more than initially expected attracts favorable disconfirmation and positive reactions. Tidy servicescape as anticipated, the confirmation of expectations produces basic satisfaction whereas poorer servicescape in terms of cleanliness than expected produces negative disconfirmation and negative reactions. According to Upadhyaya, *et al.*, (2018), cleanliness of the servicescape is important forecaster of regarded solution premium quality. The level of cleanliness

brings special importance, as it has the potential to impact customers' impact of the service, and, thus, their intentions to take another look at.

#### 2.2.4 Influence of Temperature on Customer Satisfaction

Temperature is extremely essential conditions for customers in restaurants, as well as customers obtain cold at certain temperatures. Psychology scholars such as Mari and Poggesi (2013) suggest that specific temperatures are connected with adverse emotions. At particular temperature levels customers think about the restaurant negatively and also in return, this provides a return browse through not likely.Unsurprisingly, extreme temperatures make a hotel facility unpleasant for food consumption (Chow, Ong, Tham & Wong, 2013). Too low temperatures likewise make the hotel facility uncomfortable to stay in (Awasthi & Shrivastava, 2014).

### 2.2.5 Influence of music on Customer Satisfaction

Music additionally impacts customers' feelings in dining establishments; when music or ambient sound is loud, quick, or discomforting, people are most likely to invest less time in a restaurant (Ryu & Han, 2010). Whereas if songs is soft, individuals eat gradually, invest longer time at a dining establishment, in addition to take in or take in much more (Lee, Wang & Cai, 2015). By revealing that a specific ambient stimulation of a servicescape activates a consumer's sensory system and ultimately developing specific psychological, cognitive feelings towards a company, it is thought that sensory hints might affect client dedication (Simpeh, Simpeh, Nasiru & Tawiah, 2011). As mentioned earlier, customer commitment, consequently, is an attitudinal construct that comprises 3 elements, namely affective commitment, extension commitment and normative commitment.

Affective commitment is feeling to be part of the organization, continuance commitment describes the requirement to remain in the company and also normative

commitment explains the way of thinking of customer to continue to be in the company (Mercurio, 2015). Solinger, Van Olffen and Roe (2008), noted that affective component is specified as employees' emotional accessory to, recognition with, and also engagement in the company. The continuance element is specified as the perception of costs related to leaving the company. Normative component describes workers' feelings of commitment to stay with the company (Lau, 2011). The three components are interrelated and may be experienced and demonstrated by individuals simultaneously.

#### 2.2.6 Influence of space on Customer Satisfaction

Space is the available area for arrangement of services equipment, including the provision of space among them for easy movement (Onuoha & Nnenanya, 2015). The degree of client convenience in a service point depends a lot on the space of the physical servicescape (Awasthi & Suvivastava, 2014). Both the customers' as well as workers' needs are considered throughout spatial design as well as design to guarantee that the tools as well as home furnishings promote ideal functioning, based on the latter's degree of communication with the atmosphere (Bitner 1992). Furnishings serves as a link between the space as well as its locals while conveying a company's character and influencing people' affective reactions, especially of comfort (Medabesh & Upadhyaya 2012). The quantity of space between rows of seats is likewise a vital dimension, in that it influences the convenience with which customers might leave their seats to use additional service locations (i.e. washrooms, concession locations, etc). Additionally, when rows are too slim various other customers are regularly forced to stand or move in their seats to allow various other customers to move along inside the food facility.

#### 2.2.6.1 Influence of Layout on Customer Satisfaction

The layout describes the setting of the objects that are used in a commercial place: restaurants, shops, supermarkets like the equipment, machinery, furniture and the service areas that are needed by the company to deliver its goods and services more efficiently (Aliyu, 2017). A well-designed layout like the convenience access to the facilities used by the customer will significantly enhance the perception of the business and increase rate of the repetitive customers (Amue, Adiele & Nkoro, 2013). Layout that is very comfortable and appealing is believed to be very attractive and changes the emotions of the customers and thus creates a good reputation (Tuzunkan & Albayrak, 2016). A perfect interior design will influence the satisfaction of customers the university food service facility and thus enhance perception of a quality service and positive attitude towards the services.

Layout is essentially vital for self-service business where the customer is practically a co-producer in addition to therefore needs to be advertised in the success of his goals of seeing the solution company (Theron & Pelser, 2017). Layout refers to the ability of the aforesaid items to assist in customers' satisfaction and ease (Medabesh & Upadhyaya, 2012). The reliable design and also performance will certainly offer for entryway as well as exit as well as at the very same time make additional locations like restrooms a great deal a lot more easily accessible and likewise this in turn generates a positive perception amongst the dining establishment customers which brings about customer satisfaction (Harris & Goode, 2010).

# 2.2.6.2 Influence of Equipment on Customer Satisfaction

According to Aliyu (2017), equipment's are of different size, shape, and arrangement and spatial relationships among them influence customer satisfaction. The arrangement of service equipment, including the provision of sufficient space facilitates easy movement of customers in the food service facility (Onuoha & Nnenanya, 2015). The level of customer comfort in a service point depends much on the space available and on the arrangement of equipment in the physical servicescape (Awasthi *et al*, 2014).

The size space along equipment is an important dimension as it impacts the manner in which customers move in and out of the food service facility. If the space is too narrow, attendance would be difficult, thus causing unnecessary service delay hence customer dissatisfaction (Ong & Yap, 2017). Customers' as well as employees' desires are taken into consideration during spatial layout as well as style to make sure that the equipment advertise optimum performance, based upon the latter's level of communication with the environment (Bitner 1992).

## 2.2.6.3 Influence of Furnishing on Customer Satisfaction

Furnishing which is very comfortable and appealing is believed to be very attractive and changes the emotions of the customers and thus creates a good reputation (Tuzunkan & Albayrak, 2016). A perfect furnish will influence the customer satisfaction of institutional customers eating in the university food service facilities and thus enhance perception of a quality service and positive attitude towards the services. The influence of providing can be verified with the affective reaction of convenience. Seating comfort is most likely to be an especially significant concern for customers of leisure remedy settings who require to sit for a number of hours observing or taking component in some form of entertainment (Aliyu,2017).

Seating convenience is impacted by both the physical seat itself and by the space in between the seats. Some seats may be unpleasant or comfortable because of their design or trouble (brand-new vs. worsening, padded vs. non-padded, bench seats vs. seats with backs) (Khanau, 2015). Seats may furthermore be comfy or anxious due to their distance to various other seats; customers may be literally as well as psychologically uneasy Barker along with Pearce (1990) if they are forced to sit near customers close to them.

## 2.2.7 Influence of Communicators on Customer Satisfaction

Communicators (signs, symbols and the artifacts) are very important in determining customer satisfaction in the restaurants and others places that requires loyalty (Aliyu, 2017). It can fall under the explicit cues and implicit cues. In the explicit cues, it comprises of the interior and exterior signage and the implicit consists of the furnishing and floor coverage (Klosterman, 2017). Artifacts, symbols and signs, symbols, communicate information about service to customers. These cues are believed to portray the image of the company and define its unspoken rules and regulations to the entire public (Theron & Pelser, 2017).

The cues that are made by the sign, symbol and the artifacts are in a position to form the primary picture of the physical servicescape, establish good perception of the setting, impact the intention of the company and promote the service delivery (Ong & Yap, 2017). Therefore, the organizations use symbols to create aesthetic impressions so that the customers are capable to understand the meaning of a place and convey the instructions that can be understood by everyone and thus positively promotes the reputation of the companies (Panchasara & Dangarwala, 2015).

# 2.2.7.1 Influence of Signage on Customer Satisfaction

Signage is a powerful ways of connecting the image of a service-oriented organization (Hanaysha, 2018). Signage are specific communicators as well as likewise might

contain tags of divisions, name plates, identity cards, directional material-arrows, as well as likewise rules of engagement no smoking cigarettes, threat zone, adults need to go along with kids, silence (Kloosterman, 2017). Various other aspects in the setting, though not strong communicators, likewise communicate a significance as well as standing. Quality of products utilized in construction, art work, visibility of accreditations and pictures on wall surfaces, floor coverings and individual things presented in the setting can all interact symbolic meaning as well as produce a general aesthetic influence (Theron & Pelser, 2017).

Signage presented on the exterior and also inside of a framework are examples of explicit communicators. They can be made use of as tags (e.g., name of facility), for directional functions (e.g., entryways, leaves), and also to interact rules of engagement (e.g., no smoking cigarettes, children have to be accompanied by a grown-up). Signage can play a fundamental part in interacting company image. Indicators have actually even been located to decrease viewed crowding as well as tension in a prison entrance hall setting (Wener & Kaminoff, 1982).

Signs are particularly essential in creating first impressions, for connecting new solution ideas, for repositioning a service and also in very competitive markets where customers are trying to find signs to separate the company. Symbols in the servicescape supply cognitive guidance in situating certain locations as well as physical attributes (Kim *et al.*, 2010). The quality and number of such signs is among the characteristics that aid customers' cognitive task and assist in as well enhance movement in the servicescape, therefore, minimizing feelings of being lost (Celik, 2015).

Quality signage to departures provides assistance and also decreases stress. Nevertheless, symbols are very intricate and need to be used sparingly as may be intentionally or unintentionally shared and subject to several analyses of designated and also unplanned consequences to both the client as well as the service provider.Symbols communicate certain information to customers and what is expected of them, norms in the hotel area (Jang, Ro & Kim, 2015). Symbols additionally have interactions of symbolic significance and also create an aesthetic impression of quality of products used in art work, building, visibility of certificate as well as photos on wall surfaces, floor coverings and individual items (Theron & Pelser, 2017). Symbols that are made robust as well as proper graphics as well as artifacts such as pictures, add personality, charm and individuality outward look of the hotel facility.

# 2.2.7.2 Influence of menu on Customer Satisfaction

Menus is a vital aspect in a food service facility for competitive benefits in the marketplace compared with competitors dining establishments by having competitive advantages in offering top quality services as well as inexpensive solutions to the customers (Mill, 2007). It is a lot more typical for customers to have some options going along with things in the food selection with their entrées. Choices are streamlined for the customer making use of the table d'hôte menu Given that mixes are minimal, orders are much less made complex to put together in the kitchen area, making simplification an additional benefit for this type of food selection. (Mill, 2007).

According to Ozdemir and Caliskan (2014), the menu is guidance for the customer to count on for making the food selection. Properly designed menu draws in as well as thrills customers along with positively influence the efficiency of the dining establishments. Previous literature has examined the subject of the menu and also its associated elements including menu planning, menu price, menu designing, and menu analysis. Food service facility menu are prepared to supply things in a manner that draws in customers to enhance sales (Murphy & Smith, 2009).

In a recent study conducted by Baiomy, Jones and Goode (2017), they discovered factors that affect customer satisfaction including menu product description, menu range as well as menu design. According to them, the food service facility menu plays an important role in the total success of the food service facility as it defines to the customers the items that are available. Remarkably, they discovered that menu item description, menu style as well as menu variety predicted customer satisfaction with the menu in dining experience. Particularly, they discovered that menu product description variable, particularly was a crucial measurement of menu marketing.

Menu has the primary role of communicating the type of products and services being offered in a food service facility. Well-put word naming of food items in the menu, simple and easy to understand make it fascinating and unforgettable hotel experience. A properly designed menu is a map that browses the customer to reach their complete satisfaction and surpass their expectation. Menus are additionally a reflection of the food facilities image. There are various facets of the well-designed menu. These facets consist of simple and also uncomplicated language, exact, a precise description such as dietary info, food preparation, as well as cooking approach, plainly show the customer about just how much they are most likely to invest and if the services will attract extra charges (Davis et al., 2013).

It is evident from the empirical studies that physical servicescape is an important area of concern in the hospitality industry. However, many hospitality service providers pay minimal or little attention to the possible influence of physical servicescape on customer satisfaction. Many hospitality service providers fail to observe good ambience conditions in terms of visual aesthetics, cleanliness, temperature and music in the food service facility. It is also common phenomenon that spacing of food service facilities chairs and tables, nature of furnishing and type of equipment receive little attention from service providers. In addition, menu presentation and mode of signage as communicators need ultimate attention by service providers.

# **2.3 Theoretical Models**

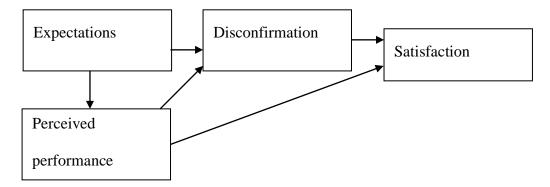
The study was guided by Expectancy-Disconfirmation theory and Bitner's Servicescape Model are presented in the next subsections.

## **2.3.1 Expectancy-Disconfirmation Theory**

Expectancy-Disconfirmation theory is one theory that explains satisfaction among customers. Expectancy-Disconfirmation theory was proposed by Oliver (1980) and states that consumer measures service offered against their expectations. This theory is anchored upon the suggestion that customer satisfaction is a procedure of contrasting what you have expected from a product or service as well as what you have actually got from that services or product. Oliver (2010) suggested that expectations work as a context versus which customers' experiences are determined.

Dissatisfaction occurs when the perceived quality is below expectations, the situation of balance 'neither satisfied nor dissatisfied' occurs when the perceived quality is at the same level with the consumer expectations, and satisfaction occurs when perceived quality is above expectations. Their idea concerning the service is established by exactly how well it comes up to this criterion. The theory assumes that customers make purchases based on their intents, expectations, and also attitudes (Oliver 1980). Later on, during or after consumption, perception of performance occurs as customers examine the experience (Oliver, 2010). The procedure is finished when customers compare the actual service performance with their pre-experience standard or expectation (Elkhani & Bakri, 2012). The outcome is confirmation, satisfaction or dissatisfaction.

Figure 2.1 shows the Cognitive model of the antecedents and consequences of satisfaction decisions.



**Figure 2.1: Affective model of the antecedents and consequences of satisfaction** Source: Oliver, (1980), p. 462

The model implies that consumers purchase goods and services with pre-purchase expectations about the anticipated performance. The expectation level then becomes a standard against which the product is judged (Dawi, Jusoh, Streimikis & Mardani, 2018). That is, once the product or service has been used, outcomes are compared against expectations. If the outcome matches the expectation, confirmation occurs (Bilgin, Küçükosmanoğlu & Şensoy, 2010). Disconfirmation arises where there is a distinction between expectation outcomes. A customer is either disappointed or completely satisfied as a result of positive or unfavorable difference in between expectations as well as perceptions (Yüksel & Yüksel, 2008). Thus, when service performance is better than what the customer had initially expected, there is a positive disconfirmation in between expectations and performance which results in satisfaction, while when service performance is as expected, there is a confirmation in

between expectations and perceptions which leads to satisfaction. On the other hand, when service perception is not comparable to what the customer expected, there is a negative disconfirmation between expectations and perceptions which causes dissatisfaction.

Four dimensions to customer satisfaction or dissatisfaction as per the Expectancy-Disconfirmation Theory entail perceived performance, expectations, disconfirmation and satisfaction. Expectations connote the pre-consumption expectations involving courteous staff, service availability. Performance describes the perceptions of customer about the service including, quality of services, service pricing (Mill, 2002). Disconfirmation describes the difference between service expectation and actual performance; it involves service exceeding expectation, service not meeting expectation and average services. Satisfaction entails the combination of the attributes about service granted including customer loyalty, repeat visits to the food service facility and recommendation (Isac & Rusu, 2014). However, the weakness with the theory is that expectation, perceived performance and disconfirmation affect satisfaction but it is not clear if or not the components will lead to customer satisfaction or dissatisfaction. There is also no consensus on how the four variables interrelate.

Expectancy-Disconfirmation theory is relevant to the study. The key aspects identified from the Expectancy-Disconfirmation theory shall include service expectations by consumers, perceived performance of services offered, disconfirmation of services offered confirmation of services offered. The aspects shall help in informing the current study in understanding customer satisfaction. The willingness to consume or not to consume a product or service by a consumers will be dependent on the level of satisfaction derived by consuming a product or service in a hotel.

The Expectancy-Disconfirmation Theory informed the choice of the dependent variable which is customer satisfaction. Customer will tend to take their meals in the university food service facilities based on the nature of food or services offered by the food facilities and the level of satisfaction. The argument is that if the food or service leads to satisfaction, customers will go back to take their meals there and if the service or food consumed result to dissatisfaction, the customers will shy away from the university catering facility. The theory also informed the formulation of the dependent variables; customer loyalty, repeat visit and recommendation.

# 2.3.2 Bitner's Servicescape Model

Bitner's model as proposed by Bitner's (1992), states that servicescape consists of all physical elements that can be regulated by service provider. By doing this, they are able to enhance customer as well as employee's actions. The model also takes a holistic view of the internal environment as it relates to the perceived servicescape. Essentially Bitner's servicescape model (1992) is a more comprehensive version of the Stimulus – Organism – Response (SOR) model originally advanced by Mehrabian and Russel (1974). The model also takes a holistic view of the internal environment as it relates to the perceived servicescape.

Bitner (1992) suggests customer's perceptions are influenced by tangible cues (the physical environment), due to the fact that they commonly have to form opinions of the service through means apart from direct physical contact. Bitner (1992) suggests that a service company's environment might actually have a strong effect on customer's perception of the service experience. Bitner (1992) suggests that customers

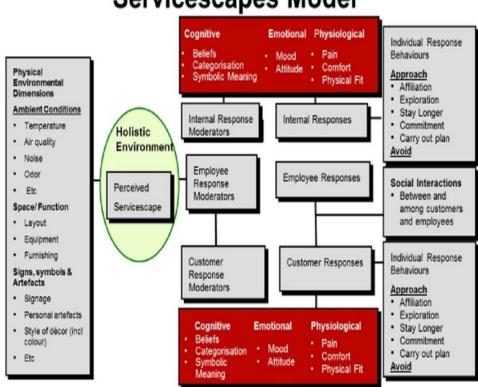
frequently try to find cues concerning a company's capabilities or quality of the services and that the physical environment is rich with these kinds of cues. The physical environment is assumed to affect the customer's ultimate satisfaction with the service (Bitner 1990; 1992).

Bitner's (1992) model infers' from the environmental psychology literature that: - at a fundamental level, this framework thinks that the physical surroundings influence customer satisfaction (Bitner, 1992; Muhammand et al., 2014). This model identified that due to the unique characteristics of services such as intangibility, inseparability, perishability as well as heterogeneity, the physical environments that service occur in can substantially impact on a consumer's perception of the service ultimate delivery. This is due to the fact that prior to purchase, customers commonly look for cues about the firm's abilities as well as quality (Kisang & Heesup, 2010; Mill, 2013).

Bitner's model was employed by Kamau (2017) while studying influence of servicescape on customer satisfaction in restaurants within classified hotels in Nairobi County and noted that physical servicescape as described in Bitner's model influence the customer's ultimate satisfaction with the service. Kearney, *et al.* (2012) while studying an exploration of the effects of the servicescape on customer and employee responses in a grocery retail context, suggested that the servicescape as described Bitner's model affect employee satisfaction.

The key aspects identified from the Bitner's model shall include ambient conditions, space and communicators. These aspects formed key variables under consideration in this study. Physical servicescape of a service facility has strong influence on consumer desire to buy a service or product from in there. Thus, physical servicescape as described by Bitner's Model is an important aspect of a service facility and need to be given priority when designing food facility.

With the realization that customers are influenced by their physical environment, comes the opportunity to influence the design of the setting. Every individual comes to a service organization with an objective or purpose that might be aided or hindered by the setting. Indeed, a firm may want to ensure a particular progression of events that is, following a script, with the ultimate purpose of designing environments being to enhance customer satisfaction.



# Servicescapes Model

Figure 2.2: Bitner's servicescape Model

Source: Bitner's servicescape Model(1992)p. 37

#### 2.4 Empirical Review

#### 2.4.1 Influence of Ambient Conditions on Consumer Satisfaction

Chang and Suki (2018) conducted a study on the level of satisfaction among students at university food facilities. Partial Least Squares (PLS) was adopted in analyzing data. Ambience conditions were found to greatly influence level of satisfaction among university students, followed by how cafeteria staff carry out themselves and lastly quality of food. Improving ambience conditions through decoration enhances satisfaction of students in the university cafeteria. However, the study identified ambience as only element influencing satisfaction of students at the university food facilities, there are many other aspects of servicescape that influence customer satisfaction that need to be studied.

Focusing on Debonairs Pizza outlets in Botswana, Chiguvi (2017) investigated how ambience elements impacts satisfaction of customers. Casual research design was employed. The outlets included main mall, Riverwalk and Pula spar in Gaborone City. Ambience elements significantly impact the level of satisfaction among customers. Ambient scent had greatest impact followed by lighting and room temperatures.

Kwong (2016) while focusing on Hotel Buffet Restaurant investigated the role of physical servicescape in enhancing customer satisfaction. Results of the study revealed that physical servicescape dimensions positively impact satisfaction of customers. Cleanness greatly impacted customer satisfaction. However, the study focused on restaurants in general contrasting this study that specifically focuses on university students' food facilities.

In Cluj-Napoca City Hall, Reianu (2014) undertook a study regarding the level of satisfaction among customers satisfaction by focusing at Day Center for the Elderly.

Questionnaires were used in collecting data and data analysis was undertaken by use of SPSS version 11. T-test was employed to emphasize on those factors that influence customer satisfaction. It was revealed that customers at the care center were satisfied to large extent. However, the study focused on satisfaction of customers in the context of Day Center for the Elderly unlike current study that focuses on customer satisfaction by focusing on food service facilities presenting a contextual gap. Moreover, the current study investigates influence of servicescape model on customer satisfaction presenting a conceptual gap.

While focusing at one casual dining restaurant in the Southwestern United States, Raab, Zemke, Hertzman and Singh (2013) investigated how noise in a restaurant impacts satisfaction and level of loyalty among customers. Level of noise influenced level of customer satisfaction. There was no effect on customer loyalty. Physical attributes, nature of services, quality of food and beverages significantly affects level of customer satisfaction, loyalty of customers and dining atmosphere.

Mill (2002) conducted a study on a comprehensive framework in understanding customer satisfaction in the hospitality industry. Repeat visits and customer recommendations are common if customers are satisfied by the nature of services offered. The study relied largely on comprehensive desktop review to study customer satisfaction contrasting current study that wishes to quantitatively undertake the study by collecting actual data from customers thus presenting a methodological gap.

Berglund and Halvarsson (2008) conducted a study on how to manage physical servicescape focusing on Elite Hotels of Sweden in Luleå. Primary data were collected in the study. It was established that physical servicescape is helpful in maintaining and attracting customers. The study relied largely on comprehensive desktop review to study physical servicescape and customer satisfaction contrasting current study that wishes to quantitatively undertake the study by collecting actual data from customers thus presenting a methodological gap.

Khanau (2015) investigated the impact of hotel interiors on customer satisfaction. Hotel interiors were described by nature of color, layout, style, furnishing, lighting and how it impacts customer loyalty. Hotel interiors were found to significantly influence level of customer satisfaction. However, the study only operationalized servicescape using interior designs, however there are other critical aspects of servicescape influencing customer satisfaction like personal artifacts, signage and cleanliness hence the need to undertake the current study.

Kim, Ng and Kim (2009) investigated the effect of institutional DINESERV (price, value, food quality, atmosphere, service quality and convenience) on the level of customer satisfaction measured using repeat visits and customer recommendations. Web based questionnaires were distributed to students in the Midwest. The study found that all the elements of institutional DINESERV significantly influence customer satisfaction. However, the study focused on university dining facilities in USA with advanced food service facilities, there is need to undertake similar study focusing food service facilities in the context of Kenya where university dining facilities for students are partially developed.

Shashikala and Suresh (2018) conducted a study on how servicescape impacts satisfaction of customers by focusing on 422 customers in selected restaurants in Bangalore. Multiple regression analysis showed that cleanness, ambience and aesthetic elements significantly explain customer satisfaction. Tangible elements and exterior did not significantly impact customer satisfaction. However, the study focused on general restaurants, unlike current study that focuses specifically on university food facilities hence the need to undertake this study.

By focusing on Hotel Haven, Jysmä (2012) conducted a study on impact of physical servicescape on customer satisfaction. An interview session was held with hotel manager while online based questionnaire was send to hotel employees. From interview responses, physical servicescape is important in hotels as it enhances hotel experiences of customers. Physical servicescape also created warm and ambience in hotel that significantly impacted customer satisfaction of customers. However, the study focused boutique hotels in Finland, unlike currents study that focuses on university food facilities among students in Kenyan universities presenting a contextual gap hence the need to undertake this study.

Dipesh and Apil (2018) conducted a study on the impact of ambiance, food quality, service quality, and price rates on customer satisfaction. This was a quantitative study focusing on Nepalese Restaurants in Finland. The study revealed that, ambiance, food quality, service quality, and price rates are responsible for customer satisfaction. However, the study focused on Nepalese restaurants in Finland, contrasting current study that focuses on food facilities in Kenyan universities.

Duong (2016) also conducted a study on the approximately 300 respondents from various territories in Queensland and New South Wales, Australia. The study was conducted in the supermarkets. The principle store condition factors included physical servicescape and social variables. Measurable tests on the discoveries uncovered that music, lighting, collection, and workers impacted consumer loyalty emphatically. Nonetheless, aroma, format, inside plan and other clients' elements had no effect on consumer loyalty. Comparable investigation was likewise led by Vivian (2017) on retail super markets in Kenya. The investigation incorporated a sample of 224 respondents and took a looked at the point of neatness, space, appeal and a cordial

situation. The results showed a positive connection between the servicescape components and consumer loyalty.

By focusing on restaurant in Bali, Hendriyani (2018) conducted a study on the significance role of physical servicescape in enhancing customer satisfaction. This was a quantitative study where principle comment matrix was employed. The factors investigated include ambience, lighting, aesthetic, atmosphere, layout and employee as a factor. The most determining factor of customer satisfaction is ambience followed by the aesthetic value of the hotel. However, the study focused on guest satisfaction in restaurants, unlike current study focusing customer satisfaction while focusing students' food service facilities in universities.

Chia (2018) explored servicescape, quality of food, value and price rates and how it influences satisfaction of customer in Asian Public University students Cafés. This was an explanatory study and data analyzed was conducted using SPSS. The objective measuring for customer satisfaction was net worth and the subjective measurement of customer satisfaction is their perceived financial satisfaction. Independent sample ttest was performed to determine the significant difference in attitude towards APU students between male and female. The study found that servicescape significantly influences quality of food, price and satisfaction of customer. However, the study focused on Asian Public University students student cafeteria facilities. The state, perceptions of service levels among student cafeteria facilities in Asia might be slightly different from food service facilities in Kenyan universities hence the need to undertake this study.

More so Chow, Ong, Tham and Wong (2013) did a study to explore factors that influence experience of customers in dining areas and how this impact customer satisfaction and intention to revisit the food outlets among undergraduate students towards in Malaysia. The study adopted the descriptive research design to describe the characteristics of a population. The study found that in fast food industry, a satisfying air will even contribute a larger amount of generally consumer loyalty. There is an immediate connection among condition and consumer loyalty in drive-through eatery in many restaurants. Achrol and Kotler (2012) found that more than 70% of the experiences of the day are significantly affected by the smell. Odours are very influential and can mix the emotions to sadness and also comfort an individual and relieve stress.

Furthermore, Ali and Amin (2014) did a study how physical servicescape influences customer satisfaction and emotions of customers in Chinese resort hotels. The study found that the ambient conditions that affected the customers and the responses to the influence of the environment are very strong indicators of the sustainability of a company. The ambient conditions were seen as the representative of the background stimuli that are known to affect the feelings of the customers (Canny, 2014). Some studies have shown that the purchasing power increases with the surrounding that are perfumed and smell has an impact on the approach avoidance decision. There are immense expectations among customers in regard to the nature of physical servicescape of a food service facility. Favorable physical servicescape of a food service facility may impact customers' satisfaction. Ambience and aesthetic value influences customer sastfaction (Mari & Poggesi 2013). In this review, knowledge gaps that need further review were identified. Further, various aspects of ambience conditions that include visual aesthetic, cleanliness, temperature and audio were identified and adopted to develop the proposed current study.

#### 2.4.2 Influence of Spatial Layout on Consumer Satisfaction

Sabir, Ghafoor, Hafeez, Akhtar and Rehman (2014) conducted a study on the factors influencing satisfaction of customers by focusing on Pakistani restaurants. The results showed that quality of service and special layout positively significantly influences satisfaction of customers. The study found that there was a positive relationship between the quality of food served to the customers, quality of services and the physical servicescape on customer level of satisfaction (Canny, 2014). The service quality was the most significant in the restaurants followed by the quality of the food and finally the environmental conditions (Canny, 2014) and so companies have to employ all factors available to modify the most factors which positively affect the performance directly.

By focusing on classified hotels in Nairobi City County, Kamau (2017) conducted a study on the influence of servicescape on customer satisfaction. Descriptive survey design was employed in this study. The study focused at 25 classified restaurant hotels operating in Nairobi City County. Customers were happy with ambience conditions, functionality, spatial layout, symbols, signs, cleanness and artifacts. Ambience conditions, functionality, spatial layout, symbols, signs, cleanness and artifacts significantly influenced level of customer satisfaction. Greatest predictors of customer satisfaction were symbols, artifacts and signs. The study recommends that restaurant managers take the issue of servicescape seriously as it proved to be a key indicator for customer satisfaction. The study focused on general restaurants in Nairobi County, current study focuses on students' food facilities at the universities.

Moreover, Aliyu (2017) found that the customers' food consumption and satisfaction is dependent on quality of food than quality of service and hotel atmosphere among hotels in Kaduna Metropolis, Nigeria. Therefore, an improvement in hotel atmosphere, quality of service and food increase customer satisfaction and the total income of the organizations will significantly increase and the perceived image of the company improves. According to Mari and Poggesi (2013), the environmental elements help customers ascertain the desired level of satisfaction, which mostly comprises of the convenience through a successful completion of the actions of an employee. Spatial layout, defining the arrangement of rooms, furniture and the furnishing of the whole premise fulfill the needs of an individual and significantly influences customer satisfaction (Ferrera, 2015).

Using Profile Accumulation Technique (PAT), Nadzirah, Karim, Ghazali and Othman (2013) conducted a study on factors influencing university dining experience. Students and staff from local university dining hotel participated in filling 115 questionnaires. Results of the study showed that negative, positive perceptions and expectations determine the choice of food outlet. However, the study identified servicescape as a factor influencing customers' dining choice but not to what extent.

In Jakarta, Canny (2014) analyzed the mediating effect of dining experience attributes on satisfaction level of customers. A total of 213 customers participated in the study. It was found that dining experience attributes that include physical servicescape, quality of food and quality of service had positive influence on satisfactions. Quality of service had the greatest impact on customer satisfaction. However, the study focused on general restaurants in Jakarta, unlike current study that focuses specifically on university food facilities hence the need to undertake this study.

Phan and Nguyen (2016) explored factors impacting level of customer satisfaction by focusing on restaurants in Vietnam. A total of 250 customers participated in filling a

structured questionnaire. The study identified servicescape as one of the factor affecting customer satisfaction. However, the study did not indicate the extent servicescape influences customer satisfaction hence presence of a conceptual gap.

By focusing on restaurants in Istanbul Özdemir-Güzel and Dinçer (2018) investigated how physical servicescape of the restaurant affects satisfaction of customers and perceived value. Structural Equation Modeling was employed in determining the effect of physical servicescape on satisfaction of customers and perceived value. It was found that servicescape positively influences perceived value and level of satisfaction among customer satisfaction. It was also found that aesthetics, staff and layout positively influences customer satisfaction.

The needs of the customer and the employee are taken care of during the spatial layout and the design to make sure that equipment and the furnishing enhance maximum functioning, based on the future interaction with the environment (Bitner, 1992). Arrangement of furniture in the restaurants act as leeway for occupants to move with ease in the hotel (Medabesh & Upadhyaya 2012). For instance, an office in a service facility may portray certain norms in the organization, its trust worthies and the level of dependability based on the aspects of the office layout and the design.

Theron and Pelser (2017) conducted a study on servicescape to manage student commitment towards a higher education institution. The statistical program SPSS version 23 was used to analyze the data, and the hypothesized relationships were assessed by means of regression analyses. The findings of the study indicate that the physical element dimensions 'communicators' and 'virtual servicescape' most significantly influenced overall student commitment. Contrary to popular belief, the study revealed that social servicescape did not have a significant impact on student commitment. Furthermore, it appears that a specific set of physical element attributes should be applied when student commitment is managed. Finally, the study offers an in-depth discussion of the theoretical and managerial implications of these findings for relationship marketing strategies.

By focusing on retail food market, Ferrera (2015) investigated the influence of customers' perception of physical servicescape on customer satisfaction. It was found that the primary usefulness of the special layout is to control the progression of movement of customers. For instance, in a retail location setting, it ought to empower the flow of clients through the distinctive zones of the store. Also, the coordination helps to join products and space so as to propose clients' needs. Moreover, the accommodation which comprises in masterminding things in a way that ought to make a level of comfort for the two clients and workers. Ferrera, (2015) also found that space layout is very important in attracting more customers and ought to be one of the primary needs of organization, since it can delineate the organization's capacity and be utilized as a differentiator among contenders. The climate of the service entity is a conclusive element in client satisfaction and can be the reason for the choice of a client to purchase a specific item.

While focusing on Azadi Hotels in Ramsar, Mohammad (2018) conducted a study on the influence of physical servicescape on customers' satisfaction using structural equation modeling. Structured questionnaire was employed to collect data. It was found that physical servicescape influenced customer's experiences and level of satisfaction.

#### 2.4.3 Influence of Communicators on Consumer Satisfaction

Theron and Pelser (2017) undertook a study on servicescape and customer satisfaction in university eating outlets. This was a cross sectional study and focusing 290 students across South African Universities. It was found that physical servicescape elements particularly virtual servicescape and communicators have a significant influence on the level of satisfaction among customers visiting the hotel outlets in the South African University. However, the study hypothesized that the relationship between servicescape and student commitment unlike current study that attempts to study the link between servicescape and customer satisfaction presenting a conceptual gap thus the need to undertake this study.

Garg and Kumar (2017) undertook a study, on the level of customer satisfaction by focusing on food outlets the case of Temptation food outlet in Taylor University, Malaysia. This was a quantitative study and 63 staff members and 231 students participated. It was found that quality of food and drinks, price of food and restaurant atmosphere influenced level of customer satisfaction. However, the study failed to identify service environment as an important factor affecting customer satisfaction.

Agnihotri and Chaturvedi (2018) investigated how physical servicescape impacts quality of services offered to customers in Kanpur. Structured questionnaire was employed in collecting data. It was found that physical servicescape is vital element that impacts customer perception of the quality of services offered in the restaurant.

While focusing on boutique hotels in Finland, Estonia and Netherlands, Kloosterman (2017) undertook a study on the impacts of physical servicescape on brand identity and image. The study found that the communicators are very critical to form the primary impression of the customers and the employees. It comprises of the tangible

items that can be seen by the customers and the employees and which communicate certain information in the regards to the entire company. For instance, a sign at the door which restricts smoking inside the building signifies a certain rule that is supposed to be followed by everyone regardless of the position. Additionally, artwork, quality painting and drawing and wall photographs can create symbolic thoughts and contribute to good image of a food service facility. The visible items become very important and enables a company to differentiate itself from the competitors and increase the market dominance.

According to Theron and Pelser (2017) symbols, artifacts and signs by Bitner 1992 can be simply be referred to forms of communicators in regard to physical servicescape. The loyalty of customers to a food service facility may be influenced by the nature of signage; which is an explicit communicator and portrays the image of the entire organization.

Nasiruddin and Ghani (2014) conducted a study on factors affecting selection of eating outlets among students in the Universiti Utara Malaysia. Structured questionnaire was used to collect primary data from 200 students in the university. The study revealed that quality of service, quality of food, menu, price, convenience and cleanliness significantly affects customer satisfaction. However, the study was conducted focusing on students in Malaysian universities presenting contextual gap.

Kwun (2011) investigated food service attributes in the university and how it influences perceived value, customer attitude and satisfaction. It was found that quality of service and products, facility appearance and menu affects perceived value, customer attitude and satisfaction. Nevertheless, the current study investigated how servicescape influences customer satisfaction presenting a conceptual gap. Kong and Jamil (2014) explored satisfaction level among health students visiting food outlets in Universiti Kebangsaan Malaysi in Malaysia. A structured questionnaire was self-administered to 86 students. Results of the study indicated that ambience conditions and service attributes were the most dissatisfied attributes. Enhancing menu variation could enhance satisfaction in the university food outlets. However, the study focused on cafeteria facilities in Malaysia. The state of food service facilities in Malaysian universities might be slightly different from food service facilities in Kenyan universities hence the need to undertake this study.

In a banking sector, Celik (2015) conducted a study in several banks in Turkey and included 150 participants by studying bank's hospitality and servicescape on satisfaction. The results of the study found that banks need to redesign their servicescape to enhance quality service delivery. The servicescape influence the satisfaction of customers and an improvement in the layout and exterior design of banks led to more new customers coming in to invest.

### 2.5 Research Gaps

Summary of the literature review gives a snapshot of the entire literature review by giving a review of the theoretical literature which includes theories. The conceptual framework focuses on the dependent variables and the independent variables. Empirical literature identifies recent studies in this thematic area that were undertaken by various scholars. A critique of the existing literature departs from the studies in the empirical literature was conducted to identify knowledge gaps of the study. A study by Kamau (2017) on how servicescape influences customer satisfaction among food outlet restaurants in Nairobi County focused on restaurants within the city. The study

focused on general restaurants in Nairobi County, current study focuses on universities food service facilities.

Mill (2002) conducted a study on a comprehensive framework in understanding customer satisfaction in the hospitality industry. However, the study relied largely on comprehensive desktop review to study customer satisfaction contrasting current study that wishes to quantitatively undertake the study by collecting actual data from customers thus presenting a methodological gap. A study by Khanau (2015) on the effect of hotel interiors on customers' loyalty to the facility was only operationalized servicescape using interior designs, however there are other critical aspects of servicescape influencing customer satisfaction like personal artifacts, signage and cleanliness hence the need to undertake the current study.

Kong and Jamil (2014) explored satisfaction level among health students visiting food outlets in Universiti Kebangsaan Malaysi in Malaysia. However, the study focused on cafeteria facilities in Malaysia. The state of food service facilities in Malaysian universities might be slightly different from food service facilities in Kenyan universities hence the need to undertake this study. Dipesh and Apil (2018) conducted a study on the impact of ambiance, food quality, service quality, and price rates on customer satisfaction of Nepalese restaurants operating in Finland. However, the study focused on Nepalese restaurants in Finland, contrasting current study that focuses on food facilities in Kenyan universities.

Chang and Suki (2018) conducted a study on the level of satisfaction among students at university food facilities. However, the study ambience as the most significant predictor of students' satisfaction of food services, there are many other aspects of servicescape that influence customer satisfaction that need to be studied. Theron and Pelser (2017) undertook a study on servicescape and customer satisfaction in university eating outlets. However, the study did not discuss the aspects of physical servicescape in relation to consumer satisfaction. Limited research if exist has been conducted on the influence of physical servicescape dimension on consumer satisfaction in universities.

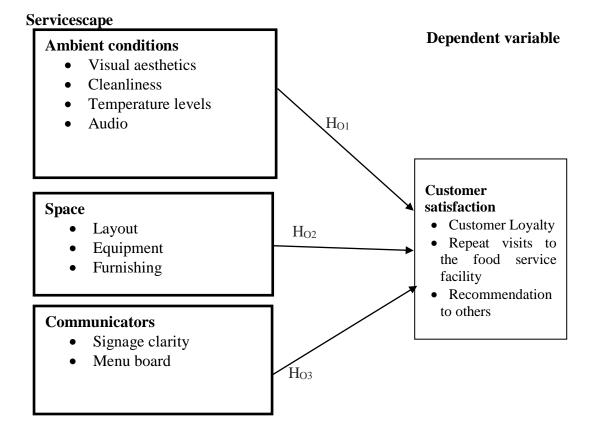
According to Kearney, Kennedy and Coughlan, (2007; 2012), many research studies done on servicescape originated from North America as well as a few from Europe. Kennedy et al, insist that; other studies have to be executed in various other countries in order to have feasible evaluations. As a result, offered the essential function played by servicescape or the physical servicescape offood service facilities, there is need to investigate the perceived influence of physical servicescape of food service facilities on customer satisfactionin selected universities, Nairobi Kenya.

It is evidently clear from the empirical literature that physical servicescape is an important area of concern in the hospitality industry. However, many hospitality service providers pay minimal or little attention to the possible influence of physical servicescape on customer satisfaction. Many hospitality service providers fail to observe good ambience conditions in terms of visual aesthetics, cleanliness, temperature and sound from inside the food service facility and surrounding. It is also common phenomenon that spacing of hotel chairs and seats, nature of furnishing and type of equipment receive little attention among hotel service providers. In addition, menu presentation and mode of signage as communicators need ultimate attention by hospitality service providers. It is against this revelation that the study sought to investigate the influence of physical servicescapeof food service facilities on customer satisfaction in selected universities, Nairobi Kenya.

## **2.6 Conceptual Framework**

A conceptual framework is a figurative representation of variables in a model and how they relate. Figure 2.3 is a figurative representation of the variables that were explored by the study.

# **Independent variables**



# **Figure 2.3: Conceptual Framework**

Sources: Adapted and modified from: Bitner (1992), p. 37 and Oliver (1980), p. 82

The independent variables include ambient conditions, space and communicators. The dependent variable is consumer satisfaction measured using as service expectations by customer loyalty, repeat visits to the food service facility and recommends to the food service facility. It is perceived that ambient conditions, space and communicators influence on consumer satisfaction.

#### CHAPTERTHREE

## **RESEARCH METHODOLOGY**

#### **3.0 Introduction**

This chapter presents the method that was employed in answering the research objectives and hypotheses. The chapter presents the research design adopted, study population, sample size and sampling techniques. It also presents tools used to collect data, procedures of data collection, pilot study, reliability and validity tests, data analysis technique and ethical consideration of the study.

### **3.1 Research Design**

Research design is a blue-print that enables the researcher to come up with solutions to problems and guides in the process of collecting, analyzing, and interpreting the data and observations (Bell, Bryman, & Harley, 2018). The study adopted a mixed method research design but specifically adopts descriptive and explanatory research designs. Descriptive research is used to describe characteristics of a population or phenomenon being studied. This methodology focuses more on the "what" of the research subject rather than the "why" of the research subject.

Explanatory research design is appropriate when establishing whether there is a significant association among variables (Kumar, 2019). Explanatory research design describes the "why" of the population by establishing the cause-and-effect relationship between the dependent variable (customer satisfaction) and the independent variables (ambient conditions, spatial layout and communicators). Descriptive design was also employed by Kamau (2017) on the influence of servicescape on customer satisfaction in restaurants within classified hotels in Nairobi County.

### **3.2 Target Population**

Population is refers to gathering of elements to be inferred in a study (Sekeran & Bougie, 2010). The target populationswere the universities in Nairobi County. However, the study purposively targets four universities: 2 public and 2 private universities. Purposive sampling is appropriate when the study population is always very busy and since may not be available at the time of the study. The inclusion of two public and two private universities ensured that the study population is representative in reflecting the situation of the university food service facilities in Kenya. The unit of observation were themain food service facilities of four universities in Nairobi County.

The unit of analysis was1,490 consumers visiting university catering on daily basis. The study also targeted96food cateringofficers of the main food service facilities of the four universities. Food cateringofficers have been included in the study because they possess crucial information regarding physical servicescape of university food service facilities. Table 3.1 shows the distribution for each university.

University food service facilities	Seating capacity
A	467
В	323
С	400
D	300
Total	1490

 Table 3.1: Target Population

**Source: Various Universities (2019)** 

# **3.3 Sample Population**

Sample is a portion of the target population (Desu, 2012). The study used the Fisher *et al.*, (2003) formula to calculate the sample size.

The Fisher formula is:

$$n = \frac{z^2 p(1-p)}{d^2}$$

Where;

*n*= sample size

z= Confidence level 95% level of confidence =1.96.

d= margin of error or level of precision at 0.05 for Confidence Interval at 90%

p= proportion to be estimated, Israel (2009) recommends that if you don't know the value of p then you should assume p=0.05

Therefore, sample size is arrived at as follows:

$$n = \frac{(1.96^2)(0.5)(1-0.5)}{(0.05)^2}$$

n = 384

If the population is less 10,000, adjust the sample size as indicated below:  $n_0 = n/(1 + ((n - 1)/N))$ 

 $n_0=384/(1+((384-1)/1490))$ 

no=305

University food service facilities	Target	Percentage	Sample size	Food catering Officers
A	467	31.47	96	1
В	323	21.64	66	1
С	400	26.89	82	1
D	300	20.00	61	1
Total	1490	100%	305	4

**Table 3.2: Sample Size Determination** 

### Source: Researcher (2019)

## **3.4 Sampling Procedure and Techniques**

Systematic random sampling method was employed in selecting 305 customers included in the study. Systematic sampling entails randomly selecting 1 unit from the first k units of the population and every k<sup>th</sup>entitysubsequently (Palinkas*et al.*, 2015). One customer was selected systematically after the 3<sup>th</sup>customer while a catering officer from each of the universities was purposively selected thus making a sample of 4 catering officers. This was proportionately distributed across the 4 universities.

The selection of customers was conducted by use of systematic random sampling method. The questionnaires were distributed during meal hours; breakfast, lunch and dinner. Four questionnaires during every meal hour were administered systematically to students who were willing to fill it across the four universities with help of two research assistants. One questionnaire was distributed to a customer, skip 3customers and issue another questionnaire until the four questionnaires were filled. The same process was conducted at lunch time and dinner. This means that the data collection process took approximately 30 days since a total of 12 questionnaires were distributed and filled daily. Table 3.2 shows the distribution of the sample size.

### **3.5 Research Instruments**

Three forms of instruments were employed in this study and include questionnaire, interview guide and observation checklist.Marshall and Rossman (2010) argues that questionnare is suitable in measuring attribute, feellings, perceptions and experinces that rae not easily observable. The questionnare contained questionnares structured in form of likert points.Likert scales are highly recommended in measuring values, attitude and perceptions (Upagade&Shende, 2012). In the context of this study, questionnaire could help elicit feelings and experiences regarding level of satisfaction in the university restaurants.

The questionnaire contained six parts. Part A of the questionnaire captured the general information of the customer,Part B influence of ambient conditions on customer satisfaction, Part C influence of space on customer satisfaction, Part D influence of communicators on customer satisfaction and PartEcustomer satisfaction.

Interview guide (Appendix II) was also developed as per the objectives guiding the study and administered to catering officers. Interviews are suitable when seeking information from a participant on one on one discussion regarding a research topic of interest. Interview guide is suitable in triangulating results from quantitative sources. Interview guide enabled the researcher to elicit more information from respondents regarding physical servicescape and customer satisfaction by probing.

Observation checklist of lighting fixtures, nature of lighting in the food service facilities; wall colour painting; arrangement of dining chairs and tables; menu and signage; sound and overall ambience conditions of the food service facility (Appendix III). Observation checklist is advantageous in observing elements or population in its natural setting (Veal, 2017).

#### **3.6 Data Collection Methods and Procedures**

Data collection procedure is a planned, systematic way of collecting data from the field (Leavy 2015). Structured questionnaire was employed in collecting data. Structured questionnaires were distributed to customers with help of two well-trained research assistants. The questionnaires were availed to the customers. The customers filled the questionnaire. Marshall and Rossman (2010) argues that questionnaire is suitable in measuring attribute, feellings, perceptions and experinces that rae not easiliy observable.

Interview guide was also be developed as per the objective guiding the study and administered to catering officers. Interview guide are suitable in triangulating results from quantitative sources. Interview guide enabled the researcher to elicit more information from respondents regarding physical servicescape and customer satisfaction by probing.

Digital camera was used to capture the nature of physical servicescape at the university food service facilities. The photos of the ceiling boards, chair arrangements and table layout, food service walls and wall hangings, floors and nature of lighting illumination in the food service facility were taken. In addition, photo pictures of signs and labels, presence of clear menu cards and boards and food presentation were also captured. These photos were used to depict the nature of at the university food service facilities.

## 3.7 Pilot Study

Pilot study is a small version of the main study to learn and get prepared for the main study. Pilot study is to identify any weakness in the questionnaire and correct them before actual data collection (Cooper &Schindler, 2011). During pilot study, the

reliability and validity of the instrument are tested. In ascertaining reliability, a pilot test was undertaken at Moi University and Catholic University of Eastern Africa. The respondents who participated in the pilot study excluded from participated in the main study. Kothari (2004) advises on piloting a study before embarking on the actual research. Kothari also advises that 10% of the sample is sufficient for pilot testing. Based on this advice, 31 questionnaires were pre-tested atMoi University and Catholic University of Eastern Africa. The pilot study respondents were excluded from the main population study sample.

#### 3.7.1 Validity

Validity indicates if the questionnaire can actually measure what is meant to measure (Heale&Twycross, 2015). According to Joppe (2010), validity determines the precision and purposefulness of the questionnaire in collecting sensible data. The three main type of validity are construct validity, content and criterion validity (Leung, 2015). This study employed construct and content validity by engaging expert in the food industry.

The questionnaire was subdivided into sections with aim of enhancing construct validity. Each of the subsection captured information as per the objective of the study and conceptual framework. In addition, the supervisors in charge of this study were provided with the sample template of the questionnaire to assess for its adequacy. The comments from the supervisor were employed to enhance the content validity of the questionnaire.

# 3.7.2 Reliability

Reliability defines the ability of the questionnaire to yield similar results when subjected to same population overtime and time (Heale & Twycross, 2015).

Reliability is meant to enhance the adequacy of the questionnaire to collect sensible data in a research (Cronbach, 1951). Cronbach's alpha is one of common method of testing reliability of a questionnaire (Cronbach, 1951; Sekaran & Bougie, 2016). Pilot study should at least be 10% of the sample size of the study according to Creswell and Creswell (2017) and Cronbach (1951). In line with this assertion, 31 customers (10 percent) of the sample population participated in the pilot test. The customerswereexcluded in the main research study. A Cronbach alpha of 0.7 or more is deemed to be reliable according to Cooper, *et al.* (2006), Creswell and Creswell (2017) and Gall, *et al* (2007). Table 3.3 shows reliability results.

Variable	Cronbach alpha	<b>Criterion alpha</b> α>0.7	Conclusion
Ambient Conditions	0.878	Yes	Reliable
Space	0.914	Yes	Reliable
Communicators	0.900	Yes	Reliable
Customer satisfaction	0.903	Yes	Reliable

Table	3.3:	Reli	iabil	ity ]	Results

Reliability results in Table 3.3 show that all variables attracted Cronbach alpha greater than seven. The reliability values were all above the cutoff point thus reliable. Ambient conditions having had Cronbach of .878, space (.914), Communicators (.900) and Customer satisfaction (.903). The instrument was thus adequate for the main study.

#### **3.8 Measurement of Variables**

Table 3.4 shows how each of the variables was measured.

Definition	Variable	Indicators	Scale measurement
of Variable	type		
Customer satisfaction	Dependent	Customer loyalty, repeat visits to the food service facility and recommends	Ordinal
Ambient conditions	Independent	Visual aesthetic Cleanliness Temperature	Ordinal
Space	Independent	Audio Layout Equipment Furnishings	Ordinal
Communicators	Independent	Signage Menu	Ordinal

 Table 3.4: Variable Measurement Matrix

Sources: Adapted from Bitner(1992) and Oliver (1980)

### **3.9 Data Analysis Techniques and Procedures**

Data analysis entail the process of subjected data collected in a research to further reasoning and assessment using mathematical tools to draw more in-depth reasoning and conclusions (Ott & Longnecker, 2015; Zikmund, *et al.*, 2010). Quantitative data gathered using questionnaire was enteredExceltemplate and imported to SPSS version 23.0 for further analysis. Quantitative analysis comprised descriptive and inferential statistics. Particular descriptive statistics includedmeans and standard deviation. Inferential statisticscomprised ofmultiple regression.Multiple regression measures the relationship between two variables by determining the nature of the relationship and the subsequent influence of one variable called independent on the other variable called (dependent variable).

Multiple regression model was used to measure the influence of physical servicescape on customer satisfaction in selected universities, Nairobi Kenya. Thus it enabled the study todetermine the effect of ambient conditions, space and communicators on customer satisfaction. Significant level of the coefficient values was tested at 95% confidence interval. The results from multiple regression were used to test the hypotheses of the study.

The particular multiple regression model is shown as;

 $\mathbf{Y} = \boldsymbol{\beta}_0 + \boldsymbol{\beta}_1 \mathbf{X}_1 + \boldsymbol{\beta}_2 \mathbf{X}_2 + \boldsymbol{\beta}_3 \mathbf{X}_3 + \boldsymbol{\epsilon}$ 

Where;

Y =Customer satisfaction

 $X_1$  = Ambient conditions

 $X_2 = Spatial layout$ 

 $X_3 = Communicators$ 

In the model,  $\beta_0$  = the constant term while the coefficient  $\beta_i = 1....3$  was used to measure the sensitivity of the dependent variable (Y) to unit change in the predictor variables X<sub>1</sub>, X<sub>2</sub> and X<sub>3</sub>. The error ( $\epsilon$ ) term capture the unexplained variations in the model.

To analyze data in the observation checklist, a camera was used to take photos of items of concern at the food service facilities. The photos were interpreted alongside quantitative data collected by use of questionnaire and qualitative data by use of interview guide. The qualitative data collected using the interview guide was analyzed using content analysis. Qualitative data was analyzed using content analysis where responses from interviewees were arranged as per themesreported and narrated in prose form, compared and triangulated with quantitative findings. The coding was labeled from KII 1, KII 2,KII 3 and KII 4 to represent each of the four Universities. Interview content analysis template and codes are tabulated in the table 3.5 based on key informant interviewees (KIIs).

Interview Question	KII 1	KII 2	KII 3	KII 4
Who decides on the servicescape features in this food				
service facility that is colour, lighting, music; layout,				
equipment's and furnishing; signage as well as the				
menu cards?				
How are ambient conditions of the food service				
facility influencing customer satisfaction in the				
university?				
How is space influencing customer satisfaction in the				
university?				
What are the types of communicators available in				
this food service facility and how are the				
communicators influencing customer satisfaction in				
the university?				
How important do you consider servicescape				
dimension in relation to customer satisfaction?				
What has been the reaction of customers to the				
servicescape dimensions in this food service facility				
Do you think this is an area food service facility				
management need to put a lot of emphasis?				

# 3.10 Hypothesis Testing

Hypothesis testing was done using p-value. The acceptance/rejection criterion was that, if the p-value calculated is less than the p-value critical of 0.05, the study rejects the Ho but if it's greater than 0.05, the study fails to reject the Ho (Sekaran&Bougie, 2016).

# **3.11 Assumption Tests**

Assumptions of regression have to be fulfilled before running regression models. Running regression model before testing assumptions may result to inaccurate coefficient estimates (Osborne & Waters, 2002). The assumption tests relevant and tested in this study includemulticollinearity, normality, linearity and Homoscedasticity tests.

# **3.11.1 Test for Multicollinearity**

Multicollinearity measures the strength of association between variables in a study. It is vital to test for multicollinearity because failure to do so may result to large standard errors that negate the precision of the model parameters(Daoud, 2017). Variance inflation factors (VIF) was used employed to check for collinearity in this study. According to Field (2009), VIF  $\geq$  5 indicate presence of collinearity whereas VIF < 5 implies absence of multicollinearity.

## **3.11.2** Normality Test

Kolmogorov-Smirnov test (K-S test) was employed to check the normality of the data. Kolmogorov-Smirnov test is appropriate when the sample size more than 100 observations. K-S test values greater than 0.05 imply that the null-hypothesis is normal and that is not rejected (Yap & Sim, 2011) otherwise, K-S test values less than 0.05 is an implication that data is not normal. This means that probability than is greater than 0.05, is considered to be normally distributed (Saunders, Lewis & Thornhill, 2012). When data is not normal, non-parametric test are conducted.

## **3.11.3 Linearity Test**

Linearity Test using scatter plot diagrams. Graphical method for observed versus predicted values. Data distribution should show a linear trend with a roughly constant variance.

#### **3.11.4 Heteroscedasticity Test**

Heteroscedasticity was tested using Breusch-Pagan/Godfrey test. When p-value<0.05, there is Heteroscedasticity, when p-value>0.05, there is no Heteroscedasticity.

### **3.12 Ethical Consideration**

Ethical considerations define all ethics and ways acceptable when conducting a research (Basit, 2013). Empirical studies borrowed in this study were referenced accordingly to reduce level of plagiarism. Turnit-in software was used to check the

level of plagiarism level and the report is attached in the appendices. All participants were requested for their consent before being included in the study.

Consent letter and Ethical Review Committee (ERC) was requested from the Moi University Ethical review Committee. Research Permit and authorization was sought from NACOSTI and the management of university food service facilities. The information collected from interviews regarding the state of the university food service facilities were kept confidential. The researcher also sought consent to publish the pictures taken from their catering outlets. Unique codes were used to identify participants of the study to conceal their identity.

### **CHAPTER FOUR**

#### DATA ANALYSIS, PRESENTATION AND INTERPRETATION

#### **4.0 Introduction**

The section presents results and interpretation on physical servicescape of food service facilities and customer satisfaction in selected universities, Nairobi Kenya. All completed questionnaires were edited for accuracy, uniformity, consistency and completeness.

## 4.1 Response Rate

A total of 305 questionnaires were distributed to consumers at the university food service facilities whereas 278 were returned. This represented 91.1% response rate. All the four catering officers participated in the interview sessions representing 100% participation rate.

## **4.2 Descriptive Results**

### 4.2.1 Personal details of the respondents

The study sought to present the demographic details of customers. Personal details investigated include gender, age, main customers, education level of customers, number of visits to the university food service facility and type of meal taken at the food service facility. The results are presented in table 4.1.

From Table 4.1, 65.5% of the respondents were female while 34.5% were male and majority 86.0% of the respondents were between the ages of 18-25 years. Also, majority (91%) of the respondents were pursuing undergraduate degrees, 5.0% of the respondents were pursuing diploma, 2.9% post graduate whereas 1.1% were pursing certificate programs. It was also established that majority 62.2% visited the University food service facility more than thrice a week, 15.1% thrice a week, 10.4% twice per

week and 12.2% once per week. The results imply that most customers were largely dependent on university food service facility for meals.

Personal details	Category	Frequency	Percent
Gender	Male	96	34.5
	Female	182	65.5
	Total	278	100.0
Age	18 – 25 years	239	86.0
	26–33years	23	8.3
	34–41 years	13	4.7
	42 – years - 49	3	1.1
	Total	278	100.0
Main customers	Students	254	91.4
	Staff	24	8.6
	Total	278	100.0
Education level	Certificate	1.1%	1.1
	Diploma	5.0%	5.0
	Undergraduate	91.0%	91.0
	Postgraduate	2.9%	2.9
	Total	278	100.0
Number of visits	Once per week	34	12.2
to the University	Twice per week	29	10.4
food service	Thrice a week	42	15.1
facility	More than thrice a week	173	62.2
•	Total	278	100.0
	Breakfast	38	13.7
Type of meal	Lunch	128	46
taken at the Food	Dinner	46	16.5
service facility	all the three (breakfast,		
	lunch and dinner)	66	23.7
	Total	278	100.0

Table 4.1: Personal details of the respondents

Source: Field survey (2020)

It was also established that most 46% of the respondents visited the university food service facility for lunch, 23.7% for breakfast, lunch and dinner, 13.7% for only breakfast and 16.5% for only dinner. The results imply that most of the customers visited the university food service facilities for lunch meals. The university food service facilities act as the readily available food providers for its customers especially during busy schedules especially during class time.

## **4.2.2 Ambient Conditions**

The study sought to assess the ambient conditions of food service facilities in selected universities, Nairobi Kenya. Likert scale was used where: 5= strongly agree 4= agree 3= unsure 2= disagree 1= strongly disagree. Ambient conditions were subdivided into visual aesthetic, cleanliness, temperature and audio. The descriptive results for visual aesthetic are shown in Table 4.2.

Visual aesthetic	Strongly				Strongly	Mean	
	Disagree	Disagree	Unsure	Agree	Agree	(M)	SD
There is enough lighting in the food							
service facility	0.0%	0.0%	4.0%	28.8%	67.3%	4.6	0.6
Light creates a warm atmosphere	0.7%	1.4%	10.1%	41.0%	46.8%	4.3	0.8
Lighting makes me feel welcome	0.0%	1.4%	7.6%	44.6%	46.4%	4.4	0.7
Lighting creates a comfortable							
atmosphere	0.0%	2.9%	6.5%	44.2%	46.4%	4.3	0.7
The colors painting of the food service							
facility is attractive.	0.7%	3.6%	15.1%	45.3%	35.3%	4.1	0.8
Colors used make me feel calm.	0.7%	3.6%	16.5%	45.3%	33.8%	4.1	0.8
Colors used create a warm atmosphere.	0.7%	1.8%	16.5%	51.8%	29.1%	4.1	0.8
Colors used create a comfortable							
atmosphere.	0.0%	1.1%	11.9%	56.8%	30.2%	4.2	0.7
The structural shape of the food service							
facility is attractive.	0.0%	1.8%	12.9%	52.5%	32.7%	4.2	0.7
Carpeting /flooring is attractive.	0.7%	2.5%	17.6%	47.1%	32.0%	4.1	0.8
Carpeting /flooring makes me feel							
comfortable.	0.7%	4.0%	19.4%	43.2%	32.7%	4.0	0.9
Ceiling décor is attractive.	2.2%	5.8%	16.2%	48.6%	27.3%	3.9	0.9
Wall décor is visually appealing.	0.0%	4.0%	14.4%	51.1%	30.6%	4.1	0.8
Plants /flowers makes me feel welcome	1.4%	2.9%	18.0%	44.6%	33.1%	4.1	0.9
Painting /pictures are attractive.	0.7%	2.5%	25.5%	41.4%	29.9%	4.0	0.8

## Table 4.2: Visual aesthetic

With regard tovisual aesthetic dimension, the results in table 4.2 show that majority of customers agreed that there is enough lighting in the food service facility (M=4.6; SD=0.6), light creates a warm atmosphere (M=4.3; SD=0.8) and lighting makes me feel welcome (M=4.4; SD=0.7). Majority of customers at the university food service facility agreed that lighting creates a comfortable atmosphere (M=4.3; SD=0.7), the colors painting of the food service facility is attractive (M=4.1; SD=0.8), colors used

make me feel calm (M=4.1; SD=0.8), colors used create a warm atmosphere (M=4.1; SD=0.8). Majority of customers also agreed that colors used create a comfortable atmosphere (M=4.2; SD=0.7), the structural shape of the food service facility is attractive (M=4.2; SD=0.7), carpeting /flooring is attractive (M=4.1; SD=0.8), carpeting /flooring makes me feel comfortable (M=4.0; SD=0.9), ceiling décor is attractive (M=3.9; SD=0.9), wall décor is visually appealing (M=4.1; SD=0.8), plants /flowers makes me feel welcome (M=4.1; SD=0.9) and that painting /pictures are attractive (M=4.0; SD=0.8).

Table 4.2a shows descriptive results for cleanliness.

Cleanliness	Strongly				Strongly	Mean	ı —
	Disagree	Disagree	Unsure	Agree	Agree	<b>(M)</b>	SD
The detergents used to wash the food							
service facility has pleasant scent	1.8%	7.6%	34.1%	29.0%	27.5%	3.7	1.0
The beautiful fragrance/scent from the							
food service facility makes me to stay							
more in the facility	1.1%	14.7%	13.3%	34.2%	36.7%	3.9	1.1
The food service facility maintains clean							
food service areas	0.7%	2.5%	9.0%	38.1%	49.6%	4.3	0.8
The food service facility maintains clean							
rest rooms	0.7%	3.2%	14.4%	44.6%	37.1%	4.1	0.8
The food service facility maintains clean							
walkaways, corridors and exits	1.1%	0.0%	6.8%	43.5%	48.6%	4.4	0.7
Scent /oduor in the food service facility							
is pleasant	1.1%	3.2%	8.3%	44.2%	43.2%	4.3	0.8
Aroma in the food service facility is							
enticing.	0.0%	1.8%	16.9%	42.8%	38.5%	4.2	0.8
The quality of the air conditioning							
makes me comfortable in the food							
service facility.	1.1%	0.0%	15.1%	45.7%	38.1%	4.2	0.8
Air quality in the restaurant is fresh	0.0%	1.8%	7.2%	43.2%	47.8%	4.4	0.7
The staff of this food service facility are	0.070	1.070	7.270	43.270	47.070		
always wearing clean appropriate							
catering attire	0.7%	0.0%	6.8%	49.3%	43.2%	4.3	0.7
catering attre	0.770	0.070	0.070	ч <i>у.</i> 370	<i>ч3.2</i> /0	т.Ј	0.7
Clean employees make me feel welcome	0.7%	1.1%	8.6%	36.3%	53.2%	4.4	0.8
						4.4	0.7
Overall, the facility s clean	0.7%	0.0%	9.0%	42.1%	48.2%	7.7	0.7

#### Table 4.2a: Cleanliness

In terms of clean liness, majority of the customers were in agreement that the detergents used to wash the food service facility has pleasant scent (M=3.7; SD=1.0), the beautiful fragrance/scent from the food service facility makes me to stay more in the facility (M=3.9; SD=1.1) and that the food service facility maintains clean food

service areas (M=4.3; SD=0.8). Majority of customers at the university food service facility agreed that the food service facility maintains clean rest rooms (M=4.1; SD=0.8), the food service facility maintains clean walk-ways, corridors and exits (M=4.4; SD=0.7), scent /odor in the food service facility is pleasant (M=4.3; SD=0.8), the Aroma in the food service facility is enticing (M=4.2; SD=0.8). Majority of customers also agreed that the quality of the air conditioning makes me comfortable in the food service facility (M=4.2; SD=0.8), the air quality in the restaurant is fresh(M=4.4; SD=0.7), the staff of this food service facility are always wearing clean appropriate catering attire(M=4.3; SD=0.7), clean employees make me feel welcome(M=4.4; SD=0.7), overall, the facility s clean(M=4.4; SD=0.7).

Table 4.2b shows descriptive results of temperatures at the food facilities.

Temperature	Strongly				Strongly	Mean	S
	Disagree	Disagree	Unsure	Agree	Agree	( <b>M</b> )	D
The food service facility is hot	20.9%	25.2%	19.1%	24.1%	10.8%	2.4	1.3
The food service facility is cold	18.7%	25.9%	25.2%	21.9%	8.3%	2.3	1.2
The food service facility is warm	1.8%	5.8%	24.1%	44.6%	23.7%	3.8	0.9
The temperature in the food service							
facility is comfortable	0.0%	1.8%	12.2%	49.3%	36.7%	4.2	0.7
The air temperature in food service							
facility is good	2.9%	1.8%	14.7%	48.9%	31.7%	4.0	0.9

 Table 4.2b:Temperature

The study also presented the deceptive results of the ambient conditions with focus on temperatures. Most of the customers at the university food service facility disagreed that the temperature in the food service facility is hot (M=2.4; SD=1.3), the temperature in the food service facility is cold(M=2.3; SD=1.2). Majority of customers agreed that the temperature in the food service facility is warm (M=3.8; SD=0.9),the temperature in the food service facility is comfortable(M=4.2; SD=0.7).

Majority of customersalso agreed that air temperature in food service facility is good(M=4.0; SD=0.9).

Table 4.2c shows descriptive results for audio at the food facilities.

<b>T</b> 11		•	<b>A</b> /	•
Tabl	e 4	20.		1610
I and	υт	·40·	TATC	1910

Audio	Strongly				Strongly	Mean	
	Disagree	Disagree	Unsure	Agree	Agree	<b>(M)</b>	SD
There is music in the food service							
facilitythat makes my stay						2.3	1.2
comfortable.	30.9%	19.1%	25.5%	10.4%	14.0%		
Background music is pleasing.	29.9%	19.1%	21.9%	13.7%	15.5%	2.4	1.4
Background music makes me want to							
stay longer.	30.9%	16.2%	21.2%	14.0%	17.6%	2.3	1.3
Background music relaxes me.	27.7%	18.7%	21.6%	15.1%	16.9%	2.2	1.4

Under music, majority of the customersdisagreed that the music in the food service facility makes my stay comfortable(M=2.3; SD=1.2), background music is pleasing (M=2.4; SD=1.4) and that background music make me want to stay longer (M=2.3; SD=1.3). Majority of customers at the university food service facility disagreed that the background music relaxes (M=2.2; SD=1.4).Respondents were asked to comment about the ambience of this food service facility. Through open ended questions, respondents indicated that;

"Lighting of the food facility was appropriate. Flooring is attractive. Coloring of some food service facilities was appealing to the eyesight though some food service facilities had worn out color paint. The food service facilities were clean. The temperatures of food facilities welcoming at room temperature. The sounds from musical instruments and surrounding were not too loud."

Ambient conditions are employed by customers to evaluate the state of a food service facility for comfort. In view of the foregoing, ambient conditions have been affirmed as influential factors on customer responses. The ambient conditions are therefore very significant factors that result to customer satisfaction in the university. By demonstrating that a specific ambient stimulus of a servicescape activates a customer's sensory system and ultimately forming certain emotional, cognitive and behavioural responses towards a firm, it is posited that sensory cues may affect customer commitment which in turn impacts customer satisfaction.

# 4.2.3 Space of the food service facility

The study further asked questions with regard to the space of food service facilities in selected universities, Nairobi Kenya. A Likert scale was used where: 5= strongly agree 4= agree 3= unsure 2= disagree 1= strongly disagree. Indicators of space included the layout, equipment and furnishing of the food service areas. The results on the layout at the university food facilities are summarized in Table 4.3.

	Strongly				Strongly		
Layout of the food service facility	Disagree	Disagree	Unsure	Agree	Agree	Mean	SD
The layout of this food service facility							
makes it easy for me to move around.	1.1%	2.2%	5.8%	46.8%	44.2%	4.3	0.8
The layout of this food service facility							
is appealing to the eyes.	1.8%	2.9%	14.7%	40.3%	40.3%	4.1	0.9
The layout of the food service facility							
makes it easy to get to the food service							
area.	0.0%	0.7%	5.8%	51.8%	41.7%	4.3	0.6
The layout of the food service facility							
makes it easy to get to the sitting area.	1.1%	0.7%	4.3%	46.4%	47.5%	4.4	0.7
The layout gives enough space.	1.4%	3.6%	8.6%	43.5%	42.8%	4.2	0.9
The facility layout makes it easy to get	1.470	5.070	0.070	ч <i>3.37</i> 0	42.070		
to the restrooms.	0.0%	3.6%	15.8%	45.0%	35.6%	4.1	0.8
The seating arrangement in the food	0.070	5.070	15.070	+5.070	55.070	7.1	0.0
service facility gives me enough space							
to move around.	0.0%	5.0%	7.6%	44.2%	43.2%	4.3	0.8
This food service facility has sufficient	0.070	5.070	7.070	<i>2</i> /0	43.270	т.5	0.0
and appropriate walkways to allow							
easy movement in and out of the						4.4	0.8
facility	0.0%	3.6%	6.5%	39.6%	50.4%	7.4	0.0
Tachity	0.070	5.070	0.570	57.070	50.470		

Table 4.3a: Layout of the food service facility

The results in table 4.3a show that majority of customers agreed that the layout of this food service facility makes it easy for them to move around (M=4.3; SD=0.8), the layout of this food service facility is appealing to the eyes (M=4.1; SD=0.9) and that the layout of the food service facility makes it easy to get to the food service area (M=4.3; SD=0.6). Majority of customers at the university food service facility agreed that the layout of the food service facility makes it easy to get to the sitting area(M=4.4; SD=0.7), the layout gives enough space (M=4.2; SD=0.9), the facility

layout makes it easy to get to the restrooms (M=4.1; SD=0.8), the seating arrangement in the food service facility gives me enough space to move around (M=4.3; SD=0.8). Majority of customers also agreed that the food service facilities have sufficient and appropriate walkways to allow easy movement in and out of the facility (M=4.4; SD=0.8).

Table 4.3b shows descriptive results regarding equipment at the food facilities.

Equipmentat the food service	Strongly				Strongly		
facility	Disagree	Disagree	Unsure	Agree	Agree	Mean	SD
The sinks are well positioned for							
easy washing of hands	4.3%	2.5%	10.1%	37.1%	46.0%	4.2	1.0
The spacing between eating tables is							
adequate for easy movement	0.7%	1.8%	8.6%	40.3%	48.6%	4.3	0.8
The payment counters are							
strategically positioned with							
adequate space allowing easy						4.1	1.0
making of payments	4.0%	5.0%	9.4%	41.7%	39.9%		
The service area is sufficiently large							
enough with minimal congestion	1.1%	3.2%	11.2%	47.8%	36.7%	4.2	0.8
The arrangement of equipment's is							
appropriate enhancing comfort in							
this food service facility	1.1%	2.9%	5.4%	51.1%	39.6%	4.3	0.8

### Table 4.3b: Equipment

Under the dimension of equipment, majority of the customersagreed that the sinks were well positioned for easy washing of hands(M=4.2; SD=1.0), the spacing between eating tables is adequate for easy movement (M=4.3; SD=0.8) and that the payment counters are strategically positioned with adequate space allowing easy making of payments (M=4.1; SD=1.0). Majority of customers at the university food service facility agreed that the service area is sufficiently large enough with minimal congestion(M=4.2; SD=0.8), the arrangement of equipment's is appropriate enhancing comfort in this food service facility (M=4.3; SD=0.8). Table 4.3c shows nature of furnishing at the food service facilities.

	Strongly				Strongly		
Furnishing	Disagree	Disagree	Unsure	Agree	Agree	Mean	SD
The furnishing in the food service facility enhances my comfort ability. The design of the furniture can	1.4%	8.3%	11.5%	48.2%	30.6%	4.0	0.9
accommodate all sorts of persons (gender sensitive, children and disable).	2.9%	10.1%	11.9%	42.4%	32.7%	3.9	1.1
The furnishing design food service facility is attractive.	3.2%	7.6%	12.6%	46.8%	29.9%	3.9	1.0
Seats and dining tables are					_, ., ,	4.0	1.0
comfortable. Seating arrangements gives enough	4.0%	5.8%	7.9%	48.2%	34.2%		
space There are sufficient chairs and tables	0.0%	2.9%	9.7%	52.2%	35.3%	4.2	0.7
in the food service facility	0.0%	5.0%	2.9%	52.5%	39.6%	4.3	0.7

### Table 4.3c: Furnishing

The study also presented the descriptive results regarding space with focus on furnishing. Majority of the customers at the university food service facility agreed that the furnishing in the food service facility enhances my comfort ability (M=4.0; SD=0.9), the design of the furniture can accommodate all sorts of persons (gender sensitive, children and disable) (M=3.9; SD=1.1). Majority of customers agreed that the furnishing design food service facility is attractive(M=3.9; SD=1.0),the seats and dining tables are comfortable (M=4.0; SD=1.0). Majority of customers also agreed that there are sufficient chairs and tables in the food service facility (M=4.3; SD=0.7). From the open ended questions, the respondents indicated that;

"Seating arrangement of some food service facility had enough space for easy movement within the facility. However, some food service facilities were to squeezed and congested with chairs and chairs that hindered easy movement. The furnishings of some food service facilities were so pleasant that enhanced comfortability. However, some furnishing of food service facilities in some universities was worn out".

The provision of adequate space provides ease of entry and exit and accessibility to ancillary services. Space is essentially important for self-service organizations where the customer is almost a co-producer and hence needs to be facilitated in the accomplishment of his goals of visiting the service organization. Customer comfort in a service point depends much on the space of the physical servicescape. Both the customers' and employees' needs are considered during spatial layout and design to ensure that the equipment and furnishings promote optimal functioning, based on the latter's degree of interaction with the environment.

#### **4.2.4 Communicators at the food service facility**

The study assessed the communicators of food service facilities in selected universities, Nairobi Kenya. Likert scale was used where: 5= strongly agree 4= agree 3= unsure 2= disagree 1= strongly disagree. Communicators were subdivided into signage and menu. The results on communicators are shown in Table 4.4.

Signageat the food service	Strongly				Strongly		
facility	Disagree	Disagree	Unsure	Agree	Agree	Mean	SD
There are sufficient directional							
signs to entrance, exit and						3.9	1.0
washrooms.	2.9%	8.6%	15.5%	40.6%	32.4%		
The directional signs given in							
this food service facility are easy							
to comprehend and follow	1.1%	4.7%	17.3%	43.5%	33.5%	4.0	0.9
Directional signs provideclear							
guidelines of how to move in the							
food service facility	2.2%	5.8%	14.0%	47.8%	30.2%	4.0	0.9
The guidelines in this food							
service facility are visually						4.0	1.0
visible to be seen.	4.0%	6.5%	9.7%	46.4%	33.5%		
There are rules of engagement in							
this food service facility	0.0%	2.9%	19.8%	47.5%	29.9%	4.0	0.8
The rules of engagement in this							
food service facility are						4.0	1.0
understandable.	2.9%	3.6%	16.5%	42.4%	34.5%		

 Table 4.4: Signage at the food service facility

The study assessed customer responses regarding signage and the results in table 4.4 show that majority agreed that there are sufficient directional signs to entrance, exit and washrooms (M=3.9; SD=1.0), the directional signs given in this food service facility are easy to comprehend and follow (M=4.0; SD=0.9) and that the directional signs provide clear guidelines of how to move in the food service facility (M=4.0; SD=0.9). Majority of customers at the university food service facility also agreed that the guidelines in this food service facility are visually visible to be seen (M=4.0; SD=1.0) and that there are rules of engagement in this food service facility (M=4.0; SD=1.0) and that there are rules of engagement in this food service facility (M=4.0;

SD=0.8). Majority of customers also agreed that the rules of engagement in this food service facility are understandable (M=4.0; SD=1.0).

Table 4.4a shows descriptive results regarding menu at the food service facilities.

Menu	Strongly				Strongly		
at the food service facility	Disagree	Disagree	Unsure	Agree	Agree	Mean	SD
Menu board/card/brochures are attractive.	7.9%	17.6%	24.1%	26.3%	24.1%	3.5	1.2
The names of menu items are clear and detailed	5.4%	10.4%	17.6%	42.4%	24.1%	3.7	1.1
Menu items are appealing to the eye. There is variety of food items in the	9.4%	11.9%	17.3%	39.2%	22.3%	3.5	1.2
menu The menu design in the food service	8.6%	12.6%	12.9%	40.6%	25.2%	3.6	1.2
facility is eye appealing Diversity and difference in menus	9.0%	15.5%	23.0%	28.4%	24.1%	3.5	1.3
designs affects customer satisfaction Food presentation is visually	4.3%	10.4%	12.2%	39.6%	33.5%	3.9 3.7	1.1 1.1
attractive	4.7%	12.2%	18.0%	36.3%	28.8%		

Table 4.4a: Menu at the food service facility

Under menu dimension as a communicator, majority of the customers agreed that the menu board/card/brochures are attractive (M=3.5; SD=1.2), the names of menu items are clear and detailed (M=3.7; SD=1.1) and that the Menu items are appealing to the eye (M=3.5; SD=1.2). Majority of customers at the university food service facility agreed that there is variety of food items in the menu (M=3.6; SD=1.2), the menu design in the food service facility is eye appealing (M=3.5; SD=1.3), the Menu items are appealing to the eye (M=3.5; SD=1.2). Majority of customers at the university food service facilities agreed that the diversity and difference in menus designs affects satisfaction (M=3.9: SD=1.1), food presentation customer is visually attractive(M=3.7; SD=1.1).Customers were further asked to comment regarding communicators in the food service facilities and indicated that;

"The signs and directions in some of food service facilities were clear and communicative. The exit and entry signs were clear. Signs and labels to eating areas and washroom were properly placed. However, in some food service facilities areas signs and directions were not properly placed hence customers could not understand directions. The menu items in some food service facilities were clear and clean. In addition, menu board of some food service facilities were worn out and torn".

Communicators are very important since they are the ones which guide on how to move around and communicate important information that one needs to know within the food service facility. Signage are explicit communicators and may include labels of departments, name plates, identity cards, directional material-arrows, and also rules of engagement no smoking, danger zone, adults must accompany children, silence. Signage can play an important part in communicating firm image.

Menus are considered as an important factor in getting the food service facility competitive benefit in the market compared with competition restaurants by having competitive advantages for submission of quality services at affordable prices and the amount of a healthy balanced diet served or offered by competent skilled or experienced persons in this sector. A well-designed menu is a map that navigates the customer to reach their satisfaction and exceed their expectation. Menu is guidance for the customers to rely on for making the food selection.

## 4.2.5 Customer Satisfaction at the food service facility

The study sought to determine the level of customer satisfaction at the main food service facilities in selected universities, Nairobi Kenya. Likert scale was used where: 5= always 4= sometimes 3= neutral 2= rare 1= not at all. Customer satisfaction was subdivided into customer loyalty, repeat visits to the food facility and customer recommendations. The results on communicators are shown in Table 4.5.

Under customer loyalty as a measure of customer satisfaction, majority of customers always trusted the nature of services offered in this food facility (M=4.3; SD=0.8), will always visit this food facility to take my meals (M=4.1; SD=1.0) and are not ready to change from consuming services and products from this food facility to

another (M=3.8; SD=1.1). Majority of customers at the university food service facility always enjoyed spending time in this restaurant (M=4.0; SD=1.1).

	Not at						
Customer Satisfaction	all	Rare	Neutral	Sometimes	Always	Mean	SD
Customer loyalty							
I trust the nature of services offered							
in this food facility	0.0%	2.5%	16.5%	25.2%	55.8%	4.3	0.8
I will always visit this food facility to							
take my meals	3.6%	5.8%	12.2%	37.8%	40.6%	4.1	1.0
I am not ready to change from							
consuming services and products							
from this food facility to another	4.0%	5.4%	28.8%	30.6%	31.3%	3.8	1.1
I enjoy spending time in this						4.0	1.1
restaurant	4.3%	5.8%	17.3%	27.7%	45.0%		
Repeat visits							
I will be pleased to visit this food							
facility again to purchase products						4.3	0.9
and services	1.8%	3.2%	14.7%	27.3%	52.9%		
I will be pleased to visit this food							
service facility again because it puts							
me in a good mood	3.2%	5.8%	19.4%	26.3%	45.3%	4.0	1.1
Overall, I am satisfied with this food							
service facility products and services	1.8%	5.0%	10.4%	29.1%	53.6%	4.3	1.0
Customer Recommendations The							
services offered in this food facility						4.3	0.9
are satisfactory	2.9%	0.7%	10.4%	31.3%	54.7%		
I shall talk good of this food facility							
since the services and products offer							
met my desired standard of quality	2.2%	5.0%	11.2%	24.8%	56.8%	4.3	1.0
I will endorse my friends to this food							
facility	4.4%	1.1%	18.9%	22.5%	53.1%	4.2	1.1

 Table 4.5:Customer Satisfaction at the food service facility

Under repeat visit as a measure of customer satisfaction, majority of the customersare always pleased to visit this food facility again to purchase products and services (M=4.3; SD=0.9), are always pleased to visit this food service facility again because it puts me in a good mood (M=4.0; SD=1.1). Also, majority of customers at the university food service facility were always satisfied with this food service facility products and services (M=4.3; SD=1.0).

The study also presented the responses on customer recommendations to the food service facility by previous customers. Majority of the customers at the university food service facility noted that the services offered in this food facility are always satisfactory (M=4.3; SD=0.9), will always talk good of this food facility since the

services and products offer met my desired standard of quality (M=4.3; SD=1.0). Majority of customerswill always endorse my friends to this food facility (M=4.2; SD=1.1). From the open ended questions, the respondents indicated that;

"Customers are loyal to university food facilities that meet their food and service desires. Customer loyalty informs repetitive purchasing of a product and service. Highly satisfied customers tend to be more loyal than the customers who are merely satisfied".

Customer loyalty may lead to an increase in both sales and profitability of an organization. Also, respondents indicated to often visit the university food facility that provides satisfactory food and services. Repeat visits to the food service facility refer to the desire by a customer to buy and consume a product or service from the same service provider again and again. Repeat visit is an outcome of customer satisfaction. Customer's repeat visit is closely associated with his or her satisfaction with an initial purchase. Customer satisfaction after consumption is likely to influence recommendation of the same service or product to a new customer. Respondents indicated that they recommended other visitors to the university food facility mainly by word-of-mouth if satisfied by nature of products and services.

#### 4.3 Assumption of Regression

Assumptions of regression have to be fulfilled before running regression models. Running regression model before testing assumptions may result to inaccurate coefficient estimates (Osborne & Waters, 2002). The assumption tests relevant and tested in this study include multicollinearity, normality, linearity and Homoscedasticity tests.

## **4.3.1 Test for Multicollinearity**

Multicollinearity measures the strength of association between variables in a study. It is vital to test for multicollinearity because failure to do so may result to large standard errors that negate the precision of the model parameters(Daoud, 2017). Variance inflation factors (VIF) was employed to check for collinearity in this study. According to Field (2009), VIF  $\geq$  5 indicate presence of collinearity whereas VIF < 5 implies absence of multicollinearity. Table 4.6 shows the collinearity results.

Variable	VIF
Ambient Conditions	1.590
Space	1.578
Communicators	1.715
Mean VIF	1.628

 Table 4.6: Multicollinearity Test

Collinearity statistics (Table 4.6) indicates a Variance Inflation Factor (VIF) <10 for all the variables thus an indication that the variables were not highly correlated, hence no existence of Multicollinearity. This is an indication of the suitability of the variables for multiple regression analysis.

## **4.3.2 Test for Normality**

Kolmogorov-Smirnov test (K-S test) was employed to check the normality of the data. The normality test results are illustrated in Table 4.7.

	Kolmogorov-Smirnov <sup>a</sup>					
Variable	Statistic	Df	Sig.			
Ambient Conditions	.931	278	.151			
Space	.835	278	.226			
Communicators	.835	278	.261			
Customer satisfaction	.796	278	.261			

Table 4.7: Kolmogorov–Smirnov Test for Normality

When non-significant results (>0.05) are obtained for a score it implies the data fits a normal distribution (Tabachnik & Fidell, 2007). The data in Table 4.7 highlighted the results of the Kolmogorov-Smirnov test. The normality test results in the table above indicate that the data in relation to each variable is normally distributed as the

significance value in all cases is greater than 0.05. This implies the data is suitable for analysis using correlation and regression analysis.

## 4.3.3 Tests of Linearity

Scatter plots were used to test for linearity and to visually show whether there was a linear or curvilinear relationship between two continuous variables before carrying out regression analysis. Regression models can only accurately estimate the relationship between dependent and independent variables if the relationship is linear (Osborne & Waters, 2002). The scatter plot of the relationship between the dependent and independent variables is shown below in Figure, 4.1-4.3.

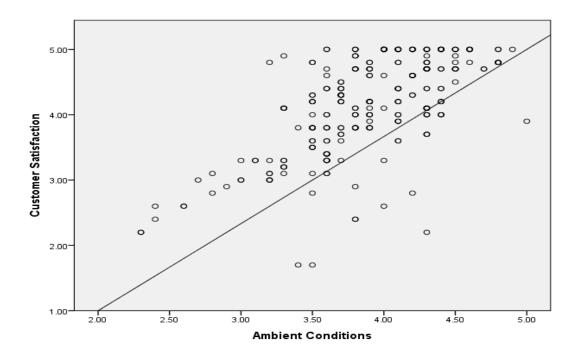


Figure 4.1: Scatter Plot for the Relationship between Ambient conditions and customer satisfaction

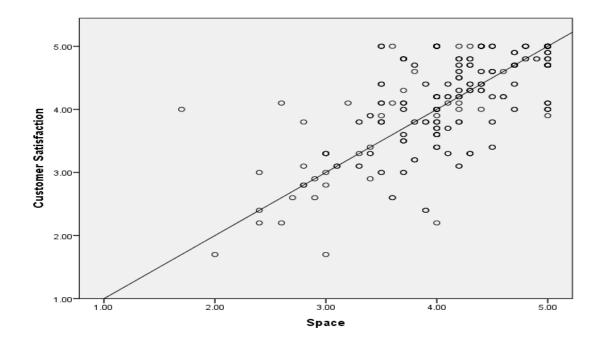


Figure 4.2: Scatter Plot for the Relationship between Space and customer satisfaction

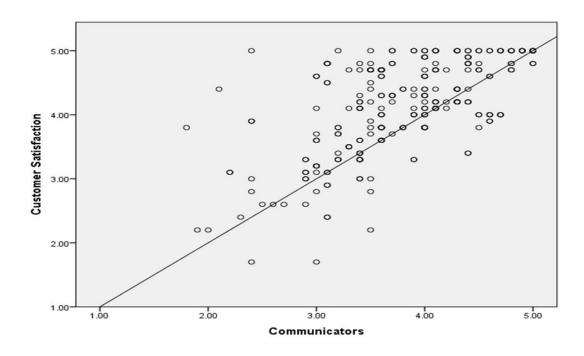


Figure 4.3: Scatter Plot for the Relationship between Communicators and customer satisfaction

The linearity test indicates the relationship between dependent and independent variables. For linear regression to be conducted, the relationship between the independent and dependent variables needs to be linear. The linearity assumption can best be tested with scatter plots and graphs. The linearity test results show that the data set was exhibiting linear pattern hence linear regression modeling could be conducted.

As shown in the scatter plots in Figure 4.1-4.3 there was a linear and positive relationship between ambient conditions and customer satisfaction and also between space and customer satisfaction. There was also a linear and positive relationship between communicators and customer satisfaction.

The linearity test indicates the relationship between dependent and independent variables. For linear regression to be conducted, the relationship between the independent and dependent variables needs to be linear. The linearity test results indicates that the data set was exhibiting linear pattern hence linear regression modeling could be conducted. Linear regression modeling could thus be conducted to investigate the influence of physical servicescape on customer satisfaction among consumers in the main food service facilities in selected universities in Nairobi County Kenya.

## 4.3.4 Heteroscedasticity Test

The Breuch-Pagan/Cook-Weisbergtest was carried out to confirm if the error variance was not constant in which case there could have been heteroscedasticity in the data. Running a regression model without accounting for heteroscedasticity may lead to biased parameter estimates. To test for heteroscedasticity, it was necessary to make a hypothesis in respect to the error variance and test the error variances to confirm or reject the hypothesis. For the purposes of applying the Breusch-Pagan/Cook-Weisberg test, a null hypothesis (H<sub>0</sub>) of this was formulated that the error variance is not heteroscedastic while the alternative hypothesis (H<sub>a</sub>) was that the error variance is heteroscedastic. Table 4.8 shows the results obtained when the Breusch-Pagan/Cook-Weisbergtest was performed.

 Table 4.8: Heteroscedasticity Test

H <sub>o</sub> : Constant variance		
chi2(1) = 0.010		
Prob > chi2 = 0.9287		

The results in Table 4.8 indicate that the p value is greater than 0.05 (0.9287) and so the null hypothesis set up for this test is supported. It was found that the variables under this study did not suffer from heteroscedasticity and so the required regression analysis for this study could be carried out without the results being distorted.

## 4.4 Regression analysis

The results presented in Table 4.9 indicate the fitness of model used of the regression model in explaining the study phenomena.

**Table 4.9: Model Fitness** 

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate			
1	.785ª	.617	.613	.45588			
a. Predictors: (Constant), Communicators, Space, Ambient Conditions							

From the results on Table 4.9, shows that ambient conditions, space and communicators are satisfactory variables in explaining satisfaction in selected universities, Nairobi Kenya. This fact is supported by coefficient of determination also known as the R square of .617. This implies that ambient conditions, space and communicators explain 61.7% of the variations in the dependent variable, which is on customer satisfaction in selected universities in Nairobi. The influence of physical servicescape on customer satisfaction is an issue of great importance in the hospitality industry. The physical servicescape of the restaurant is the first element that

customers will experience after entering a food service facility, forming a key factor for customers. For this reason, the food service facility's physical servicescape needs to provide elements of interest to customers. According to catering officers in the universities, the managementdecides on servicescape features in this food service facility. The catering officers identifiedthermal temperature, interior finishes andcolours, lighting/lighting fixtures, cleanliness, music, space, layout, signage and menuas very important servicescape dimensions impacting customer satisfaction in the university food service facilities. Table 4.10 gives the results of the analysis of variance (ANOVA).

 Table 4.10: Analysis of Variance

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	91.715	3	30.572	147.101	.000 <sup>b</sup>
1	Residual	56.945	274	.208		
_	Total	148.660	277			

a. Dependent Variable: Customer Satisfaction

b. Predictors: (Constant), Ambient Conditions, Space, Communicators,

The outcomes of the analysis of variance show that the general model was statistically significant. Further, the outcomes suggest that ambient conditions, space and communicators are satisfactory indicators of customer satisfaction in food service facilities. This was supported by an F statistic of 147.101and the reported p value (0.000) which was less than the conventional probability of 0.05significance level. The importance of creating an attractive physical servicescape that include ambient conditions, space and communicators are critical in attracting and satisfying customers in hospitality industry. Ambient conditions, space and communicators play critical role in differentiating service firms and influencing their image and consumer satisfaction. The importance of physical servicescape to create an image by attracting and satisfying customers is particularly pertinent in the hospitality industry. The regression coefficient result isshown in Table 4.11.

			ndardized fficients	Standardized Coefficients		
Moo	lel	В	Std. Error	Beta	t	Sig.
	(Constant)	.475	.235		2.023	.044
1	Ambient Conditions	.494	.071	.326	6.920	.000
1	Space	.384	.054	.336	7.146	.000
	Communicators	.296	.052	.280	5.727	.000

### Table 4.11: Regression coefficient analysis

a. Dependent variable: Customer satisfactionat food service facilities in selected universities in Nairobi County

The beta coefficients of the multiple regression model predictingcustomer satisfaction

in selected universities, Nairobi Kenyaispresented as ;

 $Y = .475 + .494X_1 + .384X_2 + .296X_3$ 

Where

Y = Customer satisfaction at food service facilities in selected universities in Nairobi County

X<sub>1</sub> =Ambient Conditions

 $X_2 = Space$ 

X<sub>3</sub>= Communicators

Basing on the predictive model, ambient conditions( $\beta$ =.494) had the highest positive effect on customer satisfaction in selected universities, Nairobi Kenya. Space had the second highest positive effect ( $\beta$ =.384) oncustomer satisfaction in selected universities Nairobi Kenya, followed by communicators( $\beta$ =.296).

The results also revealed that the coefficient of ambient conditionshave a positive and significant ( $\beta$ =.494, p=0.000<0.05) influence oncustomer satisfaction in selected universities, NairobiKenya. The regression of coefficient implies that ifambient conditions by one unit, customer satisfaction in selected universities, Nairobi Kenyaimproves by .494 units. The hypothesis was tested using p-value method. The acceptance/rejection criterion was that, if the p value is greater than the significance level of 0.05, we fail to reject the Ho<sub>1</sub> but if it's less than 0.05 level of significance,

the Ho<sub>1</sub> is rejected. Results in Table 4.11 shows that ambient conditions and customer satisfaction in selected universities are positively and significantly related with p value=0.000 < 0.05. The null hypothesis was therefore rejected and concluded that there is significant influence of ambient conditions on customer satisfaction in selected universities, Nairobi Kenya.

The coefficient of space ( $\beta$ =.384) positively and significantly (p=0.000<0.05) influences customersatisfaction in selected universities, Nairobi Kenya. The regression of coefficient implies that an increase in adequate space availability by one unit, results to a subsequent rise customer satisfaction in selected universities, Nairobi Kenya by 384 units. The hypothesis was tested using p-value method. The acceptance/rejection criterion was that, if the p value is greater than the significance level of 0.05, we fail to reject the Ho<sub>2</sub> but if it's less than 0.05 level of significance, the Ho<sub>2</sub> is rejected. Results in Table 4.12 shows that space and customer satisfaction in selected universities are positively and significantly related with p value=0.000<0.05. The null hypothesis was therefore rejected and concluded that there is significant influence of space on customer satisfaction in selected universities, Nairobi Kenya.

The amount of space between equipment is an important dimension as it affects the ease with which consumers who enter and exit the facility. If the space is too narrow, attendance would be difficult, thus causing unnecessary service delay hence consumer dissatisfaction. A well-designed layout with adequate moving space will significantly enhance the perception of the business and increase rate of the repetitive customers. Layout at the food service facility that is very comfortable and appealing is believed

to be very attractive and changes the emotions of the customers and thus creates a good reputation.

Coefficient of communicators revealed a positive and significant influence oncustomer satisfaction in selected universities, Nairobi Kenya ( $\beta$ =.296, p=0.000<0.05). The regression of coefficient implies that an enhancement of communicators by one unit, increases customer satisfaction in selected universities, Nairobi Kenya improves by .296 units. The hypothesis was tested using p-value method. The acceptance/rejection criterion was that, if the p value is greater than the significance level of 0.05, we fail to reject the Ho<sub>3</sub>but if it's less than 0.05 level of significance, the Ho<sub>3</sub> is rejected. Results in Table 4.12 shows that communicators and customer satisfaction in selected universities are positively and significantly related with p value=0.000<0.05. The null hypothesis was therefore rejected and concluded that communicators significantly influence customer satisfaction in selected universities, Nairobi Kenya.

Signage is a potent means of communicating the image of a service. Signage can play an important part in communicating hotel images and symbols. Signs have even been found to reduce perceived crowding and stress in a jail lobby setting.

### 4.5 Perceptions of the catering officers regarding physical servicescape

An interview guide was used to answer the perceptions of the catering officers regarding physical servicescape and how it influences customer satisfaction selected universities, Nairobi Kenya. Interview sessions was held with catering officers.

In an interview with KII 1; had this to indicate;

'Ambient conditions particularly temperature, visual aesthetic, cleanliness and audio help in creating physical comfort and emotional pleasure of consuming service and thus motivate the customers to spend more of their time in this university food service facility. We are also been keen in ensuring that the food service facility is always clean. Eating area, kitchens and washrooms are cleaned with cleaning detergents. Walls of the food facility are also periodically wiped to remove dust' KII 1, [Key Informant Interviewee 1, 2020].

Ambient conditions are employed by customers to evaluate the state of a food service facility for comfort. In view of the foregoing, ambient conditions have been affirmed as influential factors on customer responses. The ambient conditions are therefore very significant factors that result to customer satisfaction in the university. By demonstrating that a specific ambient stimulus of a servicescape activates a customer's sensory system and ultimately forming certain emotional, cognitive and behavioral responses towards the food service provider, it is posited that sensory cues may affect customer commitment which in turn impacts customer satisfaction. The décor of walls also portrays the ambience of the food service facility. In an interview with KII 3, said;

'The walls of the food facility are periodically painted to maintain their eye pleasing appearance. Glass walls are also cleaned and wiped on daily basis to get rid of dust particles. KII 3, [Key Informant Interviewee 3, 2020]

Wall decorations serve to enhance the perceived quality of the physical servicescape. Customers tend to appreciate the servicescape dimensions in the restaurant, especially the wall hangings and drawings on the walls.

Temperatures of the surrounding food service facility are also an important ambience condition that predicts comfort ability of the facility.

In an interview with KII 4; said;

'The temperatures of the food facilities in this university are regulated by use of open window. The walls of the food facility are also made of material that minimize loud sounds from external' KII 4, [Key Informant Interviewee 4, 2020]. Temperature is a very important detail for customers in restaurants, and customers get chilly at certain temperatures. Certain temperatures are associated with negative emotions. At certain temperatures customers think of the restaurant negatively and in return, this renders a return visit unlikely. Too extreme temperatures make food service facility unpleasant for food consumption. Likewise, too low temperatures likewise make the food service facility uncomfortable to stay in. Lighting at the food service facility is also a critical determinant of the ambience conditions. From observation check list, plate 4.5 shows nature of lighting in four selected university food service facilities in Nairobi Kenya. Likewise, the spacing in food service facilities is critical, the amount of space between equipment is an important dimension as it affects the ease with which consumers who enter and exit the facility. If the space is too narrow, attendance would be difficult, thus causing unnecessary service delay hence consumer dissatisfaction

In an interview with KII 1; she had this to indicate;

'Space in this university food service facility is often a problem especially when schools are open and drive some customers to seek the service from elsewhere because of too much congestion. We have to properly arrange seats and eating tables in a way to create adequate walking space for our customers KII 1, [Key Informant Interviewee 1, 2020].

A perfect furnish also influences the customer satisfaction of institutional consumers eating in the university food service facilities and thus enhance perception of a quality service and positive attitude towards the services.In an interview with KII 2, had this to say;

'Our university is much constrained with space. The university food facility is small with limited space and is often characterized by huge congestions of customers. The equipment including eating tables and chairs are also limited because there is no enough space to install them' KII 2, [Key Informant Interviewee 2, 2020].

'The chairs are comfortable and of good quality, and this make customers want to come again and again'KII 4, [Key Informant Interviewee, 2020].

The arrangement of tables and chairs influence sitting arrangement and customer comfort. Food service facilities have to invest on good furnishing, as these increases customer level of satisfaction. In addition to arrangement of tables and chairs, signage in restaurants is essential for purpose of direction, warning and communication. In an interview with KU 2: he had this to say:

interview with KII 2; he had this to say;

'This university catering facility has clear signage to help guide our customers around the facility. We have clearly labeled eating tables, food service areas, directions to washrooms, exit and entry doors' KII 2, [Key Informant Interviewee 2, 2020].

Signage is a potent means of communicating the image of a service. Signage can play

an important part in communicating hotel images and symbols. Signs have even been

found to reduce perceived crowding and stress in a jail lobby setting. In an interview

with KII 3; had this to say;

'The menus in this food facility are well designed clearly showing the type of food and drinks available against their pricing. Welldesigned menu is a map that navigates the customer to reach their satisfaction and exceed their expectation' KII 3, [Key Informant Interviewee 3, 2020].

### Table 4.12:Content analysis

Interview Question	KII 1	KII 2	КП 3	KII 4
Who decides on the servicescape features in this food service facility that is colour, lighting, music; layout, equipment's and furnishing; signage as well as the menu cards?	The management	The management of university food service facilities	The management of university food service facilities	The management of university food service facilities
How are ambient conditions of the food service facility influencing customer satisfaction in the university?	Ambient conditions particularly temperature, visual aesthetic, cleanliness and audio help in forming a physical and emotional of consuming a particular product or service and thus motivate the customers to spend more of their time in in this university food service facility	Ambience conditions enhance the comfort of customers in the food service facility. The aesthetic features like lighting, colors, presence of plants, flowers, painting influences customer satisfaction at food service facility. Cleanliness of a food service facility creates positive impression among consumers and makes them stay longer in the food service facility.	Within a restaurant environment, ambience conditions enable customers to experience excitement, pleasure, and a sense of personal well-being.	Ambient conditions including the background characteristics of the restaurants which are the exterior appearance interior décor, lighting, tempo, music as well as odors\aromas enhances comfort and pleasurably feeling by customers
How is space influencing customer satisfaction in the university?	Properly arrange seats and eating tables create adequate walking space for our customers.	The amount of space between equipment is an important dimension as it affects the ease with which consumers who enter and exit the facility. If the space is too narrow, attendance would be difficult, thus causing unnecessary service delay hence consumer dissatisfaction.	A well designed layout with adequate moving space will significantly enhance the perception of the business and increase rate of the repetitive customers.	The amount of space between rows of seats is an important dimension, in that it affects the ease with which customers may exit their seats to use ancillary service areas.
What are the types of communicators available in this food service facility and how are the communicators influencing customer satisfaction by consumers in the university?	menu, signs and symbols to inform the consumer and give directions	Wall labeling, signs and symbols to give directions. There are also rules of engagement including wall drawings and signs that warns visitors against engaging in certain behaviors like smoking.	Signs and symbols to give directions to dining area, washroom, entrance and exit.	Wall labeling, signs and symbols to give directions

How important the following servicescape dimensions are in relation to customer satisfaction?	Lights, colors, shape, fragrances, a soft and cozy ambience can create mood thus influencing customer satisfaction, help in forming physical and emotional states of exhibitors	Cleanliness of the food service facility and affection that improves the atmosphere which affects the customers feeling towards the food service facility.	Cleanliness of the food service facilities create an image of comfort and luxury in the customer's mind due to which customers stay for more time in the food service facility and make more purchases.	Temperature is a very important detail for customers in restaurants, and customers get chilly at certain temperatures. Unsurprisingly, extreme temperatures make a food service facility unpleasant for food consumption.
What has been the reaction of customers to the servicescape dimensions in this	Physical servicescape particularly ambient	The spacious arrangement of furniture influences the repeat visit	The physical servicescape of this food service facility require	The level of customer comfort in a service point depends
food service facility	conditions make this food	of customers to the food service	enhancement in terms of aesthetic values and	much on the space of the
	eating facility comfortable.	facility.	aesthetic values and informative signage.	physical surrounding. The arrangement of seats and
				tables makes customer feel comfortable here.
Do you think this is an area food service facility management need to put a lot of	Yes, the layout arrangement of chairs and tables is not	Lighting in the food service facility is dim. There is need for lighting	Furnishing of this food service facility is worn out. The	Signs and symbols are not clearly labeled in this food
emphasis?	appealing. There is a lot of	improvement in this food service	management of this food	service facility. There is need
	crowding.	facility.	service facility may need to consider repainting this facility.	to improve this labeling to be more informative.
			1 2	

### 4.6 Nature of physical servicescape on customer satisfaction

Plate 4.1 shows picture of wall of selected university food service facilities in Nairobi Kenya.

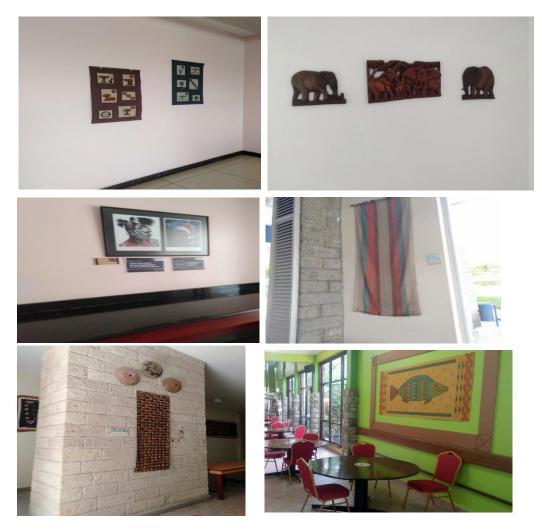


**Plate 4.1: Pictures of the walls of the selected food service facilities** Source: Author (2020)

As observed in plate 4.1, the walls of the food service facilities in the universities are made of attractive materials appealing to the eye. The painting is magnificent attractive and appealing to the customers aspiring to eat in these food service facilities. Glass all was clean. Wall decoration is an act of beatifying rooms and other indoor areas of a house so that they become attractive, comfortable and useful

Walls are often decorated using, carpets and rugs, draperies or curtains, lightings, paints, wall coverings, as well as many other items that may constitute to the creation

of an interior that is beautiful. Wall decorations are often accompanied with pictures and wall hangings to enhance their attractiveness. Plate 4.2 shows pictures and wall hanging of four selected university food service facilities in Nairobi Kenya.



**Plate 4.2: Pictures and wall hanging** Source: Author (2020)

Plate 4.2 shows that the pictures and wall hanging of food service facilities of the selected universities. The pictures and wall hangings are really attractive and eye appealing. The pictures and wall hangings stimulates the cognitive and aesthetic feeling of customers which may influence their overall satisfaction. The ceilings of the food service facility need to be clean, attractive and eye appealing. Decorative

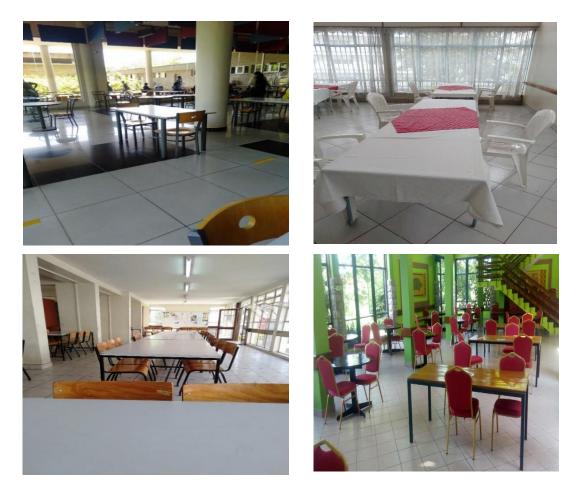
ceilings tend to influence customer satisfaction. Plate 4.3 shows ceiling decorations of the four selected university food service facilities in Nairobi Kenya.



**Plate 4.3: Pictures showing type of ceiling in food service facility** Source: Author (2020)

Plate 4.3 shows that ceilings forfood service facilities of some universities studied. From pictures, above the ceilings are well painted with attractive colours however some hav worn out paint. The painting of the ceiling is meant to enhance customers cognitive feeling thus satsication. In addition, the design of the ceilings above are beautiful and appealing to the eyes of the customers. The attractiveness of the ceilings also goes hand in hand with the attractiveness of the floors of the food service facilities. Plate 4.4 shows floor decorations of four selected university food service facilities in Nairobi Kenya.

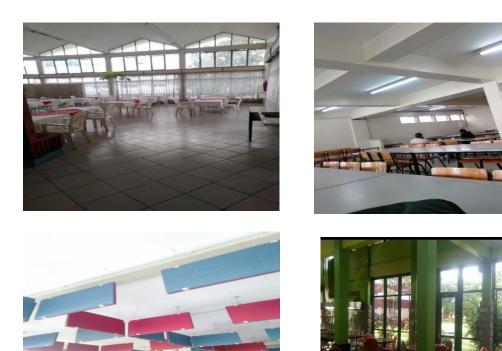




**Plate 4.4: Pictures of photos showing floors in selected food service facilities** Source: Author (2020)

The floors of some of food service facilities studied revealed attractive floors. Through observation most of floor surfaces in the restaurants were tiled which made them look attractive. This implies that the customers' value well decorated floors therefore food service facilities need to invest on good quality and attractive floors. These findings have been held by Lam *et al.*, (2011) and Egle and Maria, (2012) who argue that restaurants should be designed to deliver a prestigious image to attract customers and that high quality floors and floor coverings influence perceptions of the overall restaurant physical servicescape.

Temperatures of the surrounding food service facility are also an important ambience condition that predicts comfort ability of the facility. At certain temperatures customers think of the restaurant negatively and in return, this renders a return visit unlikely. Too extreme temperatures make food service facility unpleasant for food consumption. Likewise, too low temperatures likewise make the food service facility uncomfortable to stay in. Lighting at the food service facility is also a critical determinant of the ambience conditions. From observation check list, plate 4.5 shows nature of lighting in four selected university food service facilities in Nairobi Kenya.



**Plate 4.5: Pictures showing nature of lighting in selected food service facilities** Source: Author (2020)

Plate 4.5 shows that lighting in the selected food service facility services adequate and appropriate. The lighting is not to bright nor too dim. Lighting help to create excitement, to change a customers' mood and help improve the restaurant image. Through observation it was clear many restaurants had really used lighting to bring out different effects of lighting and highlight some areas of interest. Moreover, noise and sound of music also affect customers' emotions in restaurants; when music or ambient noise is

loud, fast, or discomforting, people are likely to spend less time in a restaurant. The surrounding of an eating service facility needs to be absence of extreme loud noise and disturbing sounds for enhanced comfort.

Plate 4.6 shows table layout at the four selected university food service facilities in Nairobi Kenya.



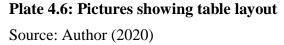


Plate 4.6 shows that the table layouts of the food service facilities are neatly arranged. The spacing for movement is adequate. The table layout is attractive and eye appealing and probably may enhance customer satisfaction. Restaurants should provide ample space to facilitate exploration and stimulation within the physical servicescape. A perfect furnish also influences the customer satisfaction of institutional customers eating in the university food service facilities and thus enhance perception of a quality service and positive attitude towards the services.

The arrangement of tables and chairs influence sitting arrangement and customer comfort. This implies that the food service facilities have to invest on good quality and comfortable dining chairs, these increases customer level of satisfaction and makes them stay.

Plate 4.7 shows picture of dining chairs in the four selected university food service facilities in Nairobi Kenya.







**Plate 4.7: Pictures showing dining chairs** Source: Author (2020)

The nature of materials used to make chairs may influence sitting comfort. Chairs made of hard materials like wood may not be very comfortable for customers. Chairs made of soft linen material are very comfortable are likely to attract customers. Makingeatingatmospheres that make customers feel contented is importanttoinventers and operators. Seat comfort can be influenced by the physical seat itself as well as the space between the seats. Some seats may be uncomfortable because of their design (for instance, hard benches without back support) or condition (deteriorating or wet). Chairs may be also uncomfortable because of their proximity to other seats. Customers may physically and psychologically feel uncomfortable if they sit too close to the customers next to them.

Plate 4.8 shows pictures showing signage of four university food service facilities studied. Signage are explicit communicators and may include labels of departments, directional material-arrows, and also rules of engagement no smoking, danger zone.



### Plate 4.8: Pictures showing signage Source: Author (2020)

Signage is meant to communicate some important information to customers or users of a particular service or product. Plate 4.8 shows various signs and symbols meant to enhance safety of customers at the selected food service outlets in the selected universities. The second picture at the top right corner is meant to enhance social distancing in the current mid of Covid-19 disease. The third picture in the left bottom warns customers against smoking at the food service facility. The fourth picture in the right bottom is meant to direct customers to where fire extinguisher is in case of fire outbreak at the food service facility. It is evidently clear that the signs and symbols used in plate 4.8 are clear, visible and understandable to all customers. However, some of the signage was not clearly and properly placed in areas easily visible to all customers. In addition, the signs may not be useful for the blind and customers who cannot read. Menu design and display also depicts the nature of hospitality services and products being offered in a food service facility. Plate 4.9 shows pictures showing menu cards in the four university food service facilities studied.





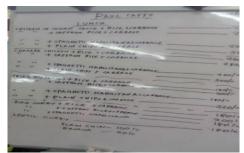


Plate 4.9: Pictures showing Menu cards Source: Author (2020)

Some menu boards are not appealing especially those written on chalkboard. Modern menu cards are designed as small booklets. Menu that is not clearly visible may not be liked by many customers. Menus is considered as an important factor in getting the food service facility competitive benefit in the market compared with competition restaurants by having competitive advantages for submission of quality services at affordable prices and the amount of a healthy balanced diet served or offered by competent skilled or experienced persons in this sector. A well-designed menu is a map that navigates the customer to reach their satisfaction and exceed their expectation. The menus at any food facility should be well designed clearly showing the type of food and drinks available against their pricing. Food presentation is should also be visually attractive. Plate 4.10 shows the presentation of food in the four university food service facilities studied.



**Plate 4.10: Pictures Showing Food presentation** Source: Author (2020)

Food presentation is very important because the sight on how food is packed, arranged and displayed appeals customer. The manner in which food is presented or displayed at the serving area is an important determinant of food quality as well as the satisfaction of the customer. Good food presentation is appealing to customers implying that food service facilities at the university need to seriously relook on how food is presented to the customers. Presentation of food acts as first impression in making decision of eating in a particular restaurant. Table 4.13 shows a summary of observation checklist.

	Construct	Attributes	Observations
1.	Temperature	Thermal conditions cold, warm or hot	Temperatures of the FSFs was very comfortable, at room temperature, since most FSF have opened glass window, and some had space between glasses to control temperature in the facility.
2.	. Visual aestheticLighting.		Lighting of food service facilities is adequate and pleasant and brightness is in moderation.
		Color	Color painting is of attractive colors. Paint used is of quality and of university theme. Though some food service facilities had worn out paint.
		Carpeting and flooring	Floors of food service facilities are made of beautiful tiles, which is also comfortable and attractive.
		walls and ceiling	Walls are attractive and well painted. The materials used to build walls are quality and beautiful. The pictures and wall hangings are really attractive and eye appealing. The ceilings are attractive. the design of the ceilings above are faily beautiful and appealing to the eyes of the customers
3.	Cleanliness	Scent, detergent, fragrance, Staff appearance in neatness; wearing uniform, Appearance of food service facility.	The scent from some of the food service facilities was really good. Detergents were used to clean the food service facility and cutlery. The staffs were neat wearing uniform. However, some food facilities had dirty floors.
4.	Audio	rhythm, nature of music played, is sound loud, soft	there was no music played in any of the FSF
5.	Space	Layout	Layouts of the food service facilities are neatly arranged. The spacing for movement is adequate.
		Tables and chairs	The nature of materials used to make chairs may influence sitting comfort. The chairs were comfortable however some were mounted and cannot allowing easy movement. The table layout is attractive and eye appealing. And comfortable.
6.	Communicator	rsClear understandable signage and menu	Signs and directions are clear in some food facilities. Some menu boards are not appealing especially those written on chalkboard.

 Table 4.13: Summary of observation checklist

#### **CHAPTER FIVE**

### SUMMARY OF FINDINGS, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

### **5.0 Introduction**

This chapter presents the discussion on findings of the study. The previous four chapters provided the premise of this study which investigated the perceived influence of physical servicescape of food service facilities on customer satisfaction in selected universities, Nairobi Kenya. This chapter is organized in three sections: discussion, conclusions and recommendations.

### 5.1 Summary of Findings

Based on the predictive model, ambient conditions( $\beta$ =.494) had the highest positive effect on customer satisfaction in selected universities, NairobiKenya. Moreover space had the second highest positive effect ( $\beta$ =.384) on customer satisfaction in selected universities, Nairobi Kenya, followed by communicators( $\beta$ =.296). The coefficient of determination results showed that shows that ambient conditions, space and communicators are satisfactory variables in explaining customer satisfaction. Ambient conditions, space and communicators explain 61.7% of the variations in the dependent variable, which is on customer satisfaction in selected universities, Nairobi Kenya.

The specific ambient conditions aspects identified in the study includevisual aesthetic, cleanliness, temperature and music. Majority of respondents (customers) in the study agreed that visual aesthetic, cleanliness, temperature and music are key indicators that predict customer satisfaction in the food service facilities. The coefficient of ambient conditions reveals a positive and significant influence oncustomer satisfaction in selected universities, Nairobi Kenya. The null hypothesis that ambient conditions of

food service facilitieshas no significant influence on customer satisfaction in selected universities in Nairobi, Kenya was rejected. The conclusion therefore is that there is a significant influence of ambient conditions of food service facilities on customer satisfaction in selected universities in Nairobi, Kenya.

The main space indicators included in the study are layout, equipment and furnishing. Majority of respondents (customers) in the study agreed that layout, equipment and furnishing are key indicators that predict customer satisfaction. The coefficient of space positively and significantly influences customer in selected universities, NairobiKenya. The null hypothesis that spaceof food service facilities no significant influence on customer satisfaction in selected universities, Nairobi Kenya was rejected. Alternative hypothesis was thus accepted that there is significant influence of spaceof food service facilities customer satisfaction in selected universities, Nairobi Kenya.

The main kinds of communicators identified in the study are signage and menu. Majority of customers agreed that signage and menu are vital predictors of customer satisfaction. The coefficient of communicators indicated a positive and significant influence oncustomer satisfaction in selected universities, Nairobi Kenya. The null hypothesis that communicators of food service facilitieshas no significant influence on customer satisfaction in selected universities, Nairobi Kenya was rejected and concluded that there is significant influence of communicators food service facilities on customer satisfaction in selected universities, Nairobi Kenya. Communicators (signage and menu) are very important in determining customer satisfaction in the restaurants and others places that requires loyalty. Communicators indicate provide customers with information about service facilities. These cues are believed to portray the image of the company and define its unspoken rules and regulations to the entire consumers.

### **5.2 Discussion**

# 5.2.1 Influence of the ambient conditions of food service facilitieson customer satisfaction in selected universities, Nairobi Kenya

The first objective of the study was to examine the influence of the ambient conditions of food service facilities customer satisfaction in selected universities, Nairobi Kenya. The major ambient conditions identified in the study are visual aesthetic, cleanliness, temperature and music. Majority of respondents (customers) in the study were agreeing that visual aesthetic, cleanliness, temperature and music are key indicators that predict customer satisfaction. Ambient conditions encompass an array of background characteristics of the environment such as temperature, lighting, noise, music, and scent.

On the other hand, visual aesthetic include lighting, colors, shapes floor, ceiling and have significant influence on consumer satisfaction. Lights, colors, shape, fragrances, a soft and cozy ambience can create mood thus influencing customer satisfaction, help in forming physical and emotional states of exhibitors and encourage customers to spend more time in servicescape. According to Çetinsöz(2019) in a study on the influence of physical servicescape on customer satisfaction and loyalty in upscale restaurants lighting in terms of the physical servicescape elements was the most perceived dimension influencescustomer satisfaction and loyalty. Visual aesthetic are used by customers as part of auditory components of their evaluations of an environment, whereas management can use them as effective tools to reduce the negative consequences of waiting in any service operation.

The results agree with a study conducted by Hendriyani (2018) who found that facility's aesthetic factor is a vital determining factor of customer satisfaction. The results also concur with Bekar, and Sürücü (2017) who established that there was a positive and significant relationship between aesthetic value of restaurants and aesthetic experiences of customers and that positive aesthetic value and aesthetic experiences increased revisit intentions of customers. Moreover, Velasco *et al.*, (2016) opined that food aesthetics plays a decisive role for consumers. Likewise, food aesthetic may be tied to the level of cleanness of the restaurant.

Cleanliness is the appearance of the food service facility and affection that improves the atmosphere which affects the customers feeling towards the food service facility. Customers create positive or negative word of mouth about facility by looking at the cleanliness. Cleanliness of a food service facility creates positive impression among customers and makes them stay longer in the food service facility. Product display and cleanliness are very important for the food service facility selection. Cleanliness of the food service facilities create an image of comfort and luxury in the customer's mind due to which customers stay for more time in the food service facility and make more purchases. The degree of cleanliness carries special importance, as it has the potential to impact customers' first impression of the service, and, thereby, their intentions to revisit. The results concur with Kwong (2016) who conducted a study on the role of servicescape in Hotel Buffet Restaurant and found that cleanliness has a positive effect on customer satisfaction. Likewise, Nasiruddin and Ghani (2014) who conducted a study on factors affecting choice of cafeteria among Universiti Utara Malaysia students established that cleanliness has significant influence on customer satisfaction. Also Kamau (2017) found that ambient conditions did not significantly influence customer satisfaction. This study found that ambience conditions positively

and significantly influences customer satisfaction. Ambience conditions are vital elements of physical servicescape and it is presumed to have significant impact on the level of customer satisfaction.

Literature suggests that temperature is a very important detail for customers in restaurants, and customer's reacts differently to certain temperatures. In additioncertain temperatures are associated with negative emotions. At certain temperatures customers think of the restaurant negatively and in return, this renders a return visit unlikely. Too extreme temperatures make a hotel facility unpleasant for food consumption. Likewise, too low temperatures make the hotel facility uncomfortable to stay in. The results in the studyconcur with Shashikala and Suresh (2018) who conducted a study on the impact of servicescape on customer perceived value in fine dining restaurants and found that room temperatures of the food service facility essentially plays a critical role in creating and enhancing customer value. Also Dipesh and Apil (2018) in a study on how ambiance affects customer satisfaction in Nepalese Restaurants in Finland revealed that room temperatures affected customer satisfaction. The findings also concur with Chiguvi (2017) who conducted a study on the impact of ambiance conditions on customer satisfaction in the restaurant industry, the case of Debonairs Pizza outlets in Botswana and found that there is a significant impact of temperatures on customer satisfaction at Debonairs Pizza outlets in Gaborone Botswana. However, the results do not concur with Hendriyani (2018) who conducted a study on the importance of physical servicescape for guest satisfaction on restaurant in Bali and found that room temperatures are not statistically significant predictors of customer satisfaction.

Music also affect customers' emotions in restaurants; when music or ambient noise is loud, fast, or discomforting, people are likely to spend less time in a restaurant.

Whereas music is soft, people eat slowly, spend longer time at a restaurant, and eat or drink more. The surrounding of an eating service facility need to be absence of extreme loud noise and disturbing sounds for enhanced comfort. The results in this study concur with Raab, Zemke, Hertzman and Singh (2013) who investigated restaurant customers' perceptions of noise and their satisfaction and loyalty behaviors and found that noise level factors such as effects of noise and appropriateness of noise levels, influenced overall satisfaction

Coefficient of results from the model also revealed that ambient conditions positively and significantly influence customer satisfaction in selected universities. Ambience has a paramount influence on customers' evaluation of a service experience. The ambient conditions are categorized as the intangible background features that stimulates the common human sensations that drive exhibitor's perception and the response to the surrounding through ambient (temperatures) and the audio (music and noise). More so, the music, color, lights, displays help in forming a physical and emotional of consuming a particular product or service and thus motivate the customers to spend extra of their time in the servicespace and enhance product and service satisfaction.

Ambient conditions are employed by customers to evaluate the state of a food service facility for comfort. In view of the foregoing, ambient conditions have been affirmed as influential factors on customer responses. The ambient conditions are therefore very significant factors that result to customer satisfaction in the food service facilities in the university. By demonstrating that a specific ambient stimulus of a servicescape activates a customer's sensory system and ultimately forming certain emotional, cognitive and behavioural responses towards a firm, it is posited that sensory cues may affect customer commitment which in turn impacts customer satisfaction. The results agree with Chang and Suki (2018) who conducted a study on students' satisfaction of food services at the university cafeteria and found that ambience as the most significant predictor of students' satisfaction of food services at the university cafeteria in both UMS and MBU settings, followed by aspects of staff performance and food quality The results also concur with Nasiruddin and Ghani (2014) who conducted a study on factors affecting choice of cafeteria among Universiti Utara Malaysia students and revealed that food quality, service quality, menu, price, convenience and cleanliness have significant influence on customer satisfaction. According to Berglund and Halvarsson (2008) a carefully managed physical servicescape can attract potential, and maintain previous customers.

## 5.2.2 Influence of the space of food service facilitieson customer satisfaction in selected universities, Nairobi Kenya

The second objective of the study was to establish the influence of spaceof food service facilities on customer satisfaction in selected universities in Nairobi County Kenya. The main space indicators identified in the study are layout, equipment and furnishing. Majority of respondents (customers) in the study were agreeing that layout, equipment and furnishing are key indicators that predict customer satisfaction in the food service facilities. The layout refers to the arrangement of the objects that are used in a commercial place: restaurants, shops, supermarkets like the furniture, machinery, equipment and the service areas that are needed by the company to deliver its goods and services more efficiently. A well-designed layout like the convenience access to the facilities used by the customers will significantly enhance the perception of the business and increase rate of the repetitive customers. Layout that is very comfortable and appealing is believed to be very attractive and changes the emotions of the customers and thus creates a good reputation.

The results concur with Kamau (2017),and revealed that there was a statistically significant influence of spatial layout on customer satisfaction. Also Khanau (2015) in a study on the impact of hotel interiors on customer's loyalty intentions noted that layout influences service quality in the restaurant. According to Ferrera, (2015) space layout is very important in attracting more customers and ought to be one of the primary needs of organization, since it can delineate the organization's capacity and be utilized as a differentiator among contenders.

The amount of space between equipment is an important dimension as it affects the ease with which consumers who enter and exit the facility. If the space is too narrow, attendance would be difficult, thus causing unnecessary service delay hence consumer dissatisfaction. Both the customers' and employees' needs are considered during spatial layout and design to ensure that the equipment promote optimal functioning, based on the latter's degree of interaction with the environment. Furniture serves as a link between the space and its occupants while conveying a firm's personality and influencing individuals' affective responses, particularly of comfort. Concurring with Awasthi and Suvivastava (2014), the level of customer comfort in a service point depends much on the space available and on the arrangement of equipment in the physical servicescape. The results also concur with Özdemir-Güzel and Dincer (2018) who investigated how physical servicescape of the restaurant affects satisfaction of customers and perceived value and found that aesthetics, staff and layout positively influences customer satisfaction. However, the results do not align with those of Phan and Nguyen (2016) who conducted a study, an analysis of factors impact on customer satisfaction in Vietnam Restaurants and established that equipment is not a significant predictor of customer satisfaction.

Furnishing which is very comfortable and appealing is believed to be very attractive and changes the emotions of the customers and thus creates a good reputation. A perfect furnish will influence the customer satisfaction thus enhance perception of a quality service and positive attitude towards the services. The impact of furnishing can be evidenced through the affective response of comfort. The results concur with Khanau (2015) conducted a study on the impact of hotel interiors on customer's loyalty intentions and found that furnishings impact customer's loyalty. Mohammad (2018) who conducted a study on the role of physical servicescapeand social environment of hotel servicescape in guests' place attachment and satisfaction, the case of Persian Azadi Hotels Complex of Ramsar and found that equipment are significant predictors of customer satisfaction.

The coefficient of space positively and significantly influences customer satisfaction in selected universities, NairobiKenya. The null hypothesis that there is no significant influence of space of food service facilitieson customer satisfaction in selected universities, Nairobi Kenya was rejected and concluded that there is significant influence of space of food service facilitieson customer satisfaction in selected universities Nairobi Kenya.

Space is defined as the arrangement of rooms, equipment and furnishings, along with the spatial relationships among them. An adequate space provides ease of entry and exit and accessibility to ancillary services. Space is essentially important for selfservice organizations where the customer is almost a co-producer and hence needs to be facilitated in the accomplishment of his goals of visiting the service organization. The comfortability of a customer in a service point depends much on the space of the physical servicescape. Both the customers' and employees' needs are considered during spatial layout and design to ensure that the equipment and furnishings promote optimal functioning, based on the latter's degree of interaction with the environment. The amount of space between rows of seats is also an important dimension, in that it affects the ease with which customers may exit their seats to use ancillary service areas like restrooms, concession areas. Furthermore, when rows are too narrow other customers are frequently forced to stand or shift in their seats to let other customers pass by. The results agree with Sabir, Ghafoor, Hafeez, Akhtar and Rehman (2014) who conducted a study on the factors affecting customer's satisfaction in restaurant industry in Pakistan and showed that service quality and the environment have a positive significant influence on customer consumption levels and that space layout positively impacts customer satisfaction. The results also concur with Aliyu (2017) who found that the customers' food consumption and satisfaction is dependent on food quality than atmospherics or service quality in hotels in Kaduna Metropolis, Nigeria and that spatial layout, defined as the arrangement of the rooms, equipment and the furnishing of the whole premise fulfill the needs of an individual and significantly influences customer satisfaction.

# 5.2.3 Influence of the communicators of food service facilities on customer satisfaction in food service facilities

The third objective of the study was to examine the influence of communicators of food service facilities customer satisfaction in selected universities, Nairobi Kenya. Communicators are very important in determining customer satisfaction in the restaurants and others places that requires loyalty. The main kinds of communicators identified in the study are signage and menu. Majority of customers agreed that signage and menu are vital predictors of customer satisfaction among consumers in the food service facilities.

Signage is a potent means of communicating the image of a service organization (Hanaysha, 2018). Signage are explicit communicators and may includelabels of departments, name plates, identity cards, directional material-arrows, and also rules of engagement no smoking, danger zone, adults must accompany children, silence. Signage can play an important part in communicating hotel images and symbols. Signs have even been found to reduce perceived crowding and stress in a jail lobby setting. The results concur with Kloosterman (2017) who undertook a study on the impacts of servicescape on the Brand Image and Brand Identity of Boutique Hotels in Netherlands, Estonia and Finland and found that signs communicate certain important information to customers like direction and mode of conduct at the food service facility. According to Theron and Pelser (2017) the loyalty of customers to a food service facility may be influenced by the nature of signage.

Menus is considered as an important factor in getting the food service facility competitive benefit in the market compared with competition restaurants by having competitive advantages for submission of quality services at affordable prices and the amount of a healthy balanced diet served or offered by competent skilled or experienced persons in this sector. A well-designed menu is a map that navigates the customer to reach their satisfaction and exceed their expectation. The results of the study align with those of Nasiruddin and Ghani (2014) who conducted a study on factors affecting choice of cafeteria among Universiti Utara Malaysia students and found that menu has significant influence on customer satisfaction. Likewise, Kwun (2011) did a study on the effects of campus foodservice attributes on perceived value, satisfaction, and consumer attitude and found that menu has favorable effects on perceived value, satisfaction and, ultimately, on consumer attitude. Also Kong and Jamil (2014) in a study on the level of satisfaction among postgraduate health sciences students on the cafeteria facilities in Universiti Kebangsaan Malaysia, Kuala Lumpur Campus it was found that increasing menu variation and introducing franchise outlet were the two supplementary factors that may increase satisfaction level.

Coefficient of results further showed that communicators positively and significantly influence customer satisfaction in selected universities. The null Ho<sub>3</sub> was therefore rejected and concluded that communicators of food service facilities significantly influencecustomer satisfaction in selected universities, Nairobi Kenya.Communicators (signage and menu) are very important in determining customer satisfaction in the restaurants and others places that requires loyalty. Communicators indicate provide customers with information about service facilities. These cues are believed to portray the image of the company and define its unspoken rules and regulations to the entire consumers.

Communicators are very important since they are the ones which guide on how to move around and sometimes symbols communicate important information that one needs to know within the food service facility. The results concur with Theron and Pelser (2017) who undertook a study, using servicescape to manage student commitment towards a higher education institution and indicated that the physical servicescape dimensions 'communicators' and 'virtual servicescape' most significantly influenced overall student commitment. The results also agree with Garg and Kumar (2017) who undertook a study, exploring customer satisfaction with university cafeteria food services, an empirical study of Temptation Restaurant at Taylor's University, Malaysia and found that the various quality factors considered in the study are positively correlated with customer satisfaction and have a significant impact on the satisfaction level of both students and staff who dined at the university food service facilities.

## 5.2.4 Perceptions of the catering officers regarding physical servicescape and how it influences customer satisfaction in selected universities, Nairobi Kenya

Catering officers had varied opinions regarding physical servicescape of the food service facilities and how it influences level of customer satisfaction. In an interview with key informant one, it was established that the ambient conditions particularly temperature, visual aesthetic, cleanliness and music help in creating physical comfortand emotional of consuming a particular product or service and thus motivate the customers to spend more of their time in the university food service facility. Catering officers are also been keen in ensuring that the food service facility is always clean. Eating area, kitchens and washrooms are cleaned with cleaning detergents. Walls of the food facility are also periodically wiped to remove dust. Key informant three also indicated that glass walls are often cleaned and wiped on daily basis to get rid of dust particles.

Regarding internal temperatures and sound at the food service facilities, key informant four indicated that the temperatures of the food facilities in the university are regulated by use of open window. The walls of the food facility are also made of materials that minimize loud sounds from external.

Some university food service facilities have clear signage to help guide customers around the facility. The eating tables, food service areas, directions to washrooms, exit and entry doors are clearly labeled. The menus in this food facility are well designed clearly showing the type of food and drinks available against their pricing. However, it was established that space in some university food service facility is often a problem especially when all schools are open and drive some customers to seek the service from elsewhere because of too much congestion. The food service facility employees have to properly arrange seats and eating tables in a way to create adequate walking space for our customers. The equipment including eating tables and chairs are also limited because there is no enough space to install them.

### **5.3 Conclusions**

The null hypothesis that ambient conditions of food service facilitieshas no significant influence on customer satisfaction in selected universities ,Nairobi Kenya was rejected and concluded that there is significant influence of ambient conditions of food service facilitieson customer satisfaction in selected universities, Nairobi Kenya.Ambient conditions positively and significantly influence customer satisfaction in selected universities. The study concludes that ambient conditions that include aesthetic, cleanliness, temperature and music are essential predictors of customer satisfaction in a food service facility.Ambient conditions are employed by customers to evaluate the state of a food service facility for comfort. In view of the foregoing, ambient conditions have been affirmed as influential factors on customer responses. By demonstrating that a specific ambient stimulus of a servicescape activates a customer's sensory system and ultimately forming certain emotional, cognitive and behavioural responses towards the food service facility, it is posited that sensory cues may affect customer commitment which in turn impacts customer satisfaction.

The aesthetic features like lighting, colors, presence of plants, flowers, painting influences customer satisfaction at food service facility. Cleanliness of a food service facility creates positive impression among customers and makes them stay longer in the food service facility. Cleanliness of the food service facilities create an image of

comfort and luxury in the customer's mind due to which customers stay for more time in the food service facility and make more purchases. Optimal room temperatures of the food service facility predict customer satisfaction. Too extreme temperatures make hotel facility unpleasant for food consumption. Likewise, too low temperatures likewise make the hotel facility uncomfortable to stay in. Noise and sound of music also affect customers' emotions in restaurants; when music or ambient noise is loud, fast, or discomforting, people are likely to spend less time in a facility

It was found that the coefficient of space positively and significantly influences customer satisfaction in selected universities. The null hypothesis that spaceof food service facilitieshas no significant influence on customer satisfaction in selected universities, Nairobi Kenya was thus rejected and conclusion made that there is significant influence of spaceof food service facilitieson customer satisfaction in selected universities, Nairobi Kenya. The study makes a conclusion that space availability at the food service facility is vital in enhancing customer comfort. The amount of space between equipment is an important dimension as it affects the ease with which consumers who enter and exit the facility. If the space is too narrow, attendance would be difficult, thus causing unnecessary service delay hence consumer dissatisfaction. A well-designed layout with adequate moving space significantly enhances the perception of the facility and increase rate of the repetitive customers. Good furnish influences the customer satisfaction of institutional consumers eating in the university food service facilities and thus enhance perception of a quality service and positive attitude towards the services.

Results of the study revealed that communicators positively and significantly influence customer satisfaction in selected universities. The null hypothesis that communicators of food service facilities no significant influence on customer

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satisfaction in selected universities, Nairobi Kenya was thus rejected and conclusion made that there is significant influence of communicators of food service facilities on customer satisfaction in selected universities, Nairobi Kenya. A conclusion is that communicators are vital components of service satisfaction at food service facilities. Signage can play an important part in communicating hotel images and symbols. Communicators in the context of this study comprised signage and menu. However, some of the signage was not clearly and properly placed in areas easily visible to all customers. Signage is meant to communicate some important information to customers or users of a particular service or product, serve as warning and safety signs to customers. Signage also conveys directional information within the food service facility. Menu design and display highlights the nature of hospitality services and products being offered in a food service facility. The menus at any food facility should be well designed clearly showing the type of food and drinks available against their pricing.

The interview revealed that ambient conditions particularly temperature, visual aesthetic, cleanliness and audio help in creating physical comfort and emotional of consuming a particular product or service and thus motivate the customers to spend more of their time in this university food service facility. They are also been keen in ensuring that the food service facility is always clean. Eating area, kitchens and washrooms are cleaned with cleaning detergents. Walls of the food facility are also periodically wiped to remove dust.

The internal temperatures of the food facilities in this university are regulated by use of open window. The walls of the food facility are also made of materials that minimize loud sounds from external. Some universities food facilities have clear signage to help guide customers around the facility while others did not have clear signage and labels. The eating tables, food service areas, directions to washrooms, exit and entry doors are clearly labeled. The menus in this food facility are well designed clearly showing the type of food and drinks available against their pricing.

However, it was established that space in some university food service facility is often a problem especially when all schools are open and drive some customers to seek the service from elsewhere because of too much congestion. In the food service facilities, seats and eating tables should be properly arranged, in a way to create adequate walking space for our customers.

#### **5.4 Recommendations**

The recommendations made in this study entailed recommendations tomanagerial, Recommendations for Further Research and Contribution of the Current Study are also suggested.

#### 5.4.1 Recommendations to Management

- i. The study found that ambient conditions influence customer satisfaction in selected universities, Nairobi Kenya. A recommendation is made to the food service facilities at the university in regard to continuous improvement of ambient conditions features like setting up proper lighting, undertaking periodic color painting of the food service facility and rebuilding food facility floors and ceilings with aim of promoting aesthetic value.
- ii. The study found that space influences customer satisfaction in selected universities, Nairobi Kenya. Some of vital dimensions identified in the study include layout, equipment and furnishing. Food service facilities at the selected

universities need to enhance the arrangement of eating tables and chairs with aim of enhancing movement. The management of food service facilities at the university may also need to modernize the food service facility equipment and furnishing with the aim of improving facility service delivery leading customer satisfaction.

iii. Communicators are vital components of service satisfaction at food service facilities. A recommendation is made for the food service facilities at the universities to installed or printed signs and directions and appropriately place them within the food service area, visible to all customers. Menu boards/cards need to be up to date indicating the type of products and services available at the food service against the pricing. The menus at university food facilities should be well designed clearly showing the type of food and drinks available against their pricing.

### **5.4.2 Recommendations for Further Research**

Further research should be undertaken to:

- i. The study only focused on all university food service facilities. Future research should entail a comparative study of food service facility on customer satisfaction in private and public universities in Kenya.
- The current study on physical servicescape focused on interior design of the selected universities. Further study needs to be carried out focusing on the exterior environment.

## **5.4.3** Contributions to Knowledge

- i. The stakeholders in universities could use information on services cape to improve the food service facilities so that it achieves the goal of enhancing customer satisfaction.
- ii. Study also boosts literature on physical servicescape in the Kenyan context.
- iii. The study provides new and additional knowledge in the area of physical servicescape within the university context.
- iv. The study also act as a reference document for scholars wishing to carry out further researches on physical servicescape in future.

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#### APPENDICES

### **Appendix I: Questionnaire for the consumers**

I am Emmariline M. Maghanga, a Masters student from Moi University School. I am carrying out a research on the *"Perceived Influence of Physical Servicescape on Customer Satisfaction among consumers in the food service facilities of selected universities in Nairobi County, Kenya"*. Your participation in this survey is voluntary, but very important. I would really appreciate if you could spare a few minutes to respond to the following questionnaire. All respondents will remain anonymous and the information given will remain confidential will be used for academic purposes only.

## Part A: Background information

Please fill in the demographic data by ticking  $(\sqrt{})$  as appropriate in the choices provided.

1. Gender

(a)Male [] (b)Female []

2. Age

(a) 18 – 25 years [ ] (b) 26 – 33 years []

```
(c) 34 –41 years [] (d) 42 – years -49 []
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(e) 50 years and above [ ]

## 3. Main consumers

(a) Students [] (b) Staff [] (c) Other []Specify

4. Highest level of education attained

(a) Certificate	[]	(b)Diploma	[]

(c)Undergraduate [] (d)Postgraduate []

5. How often do you visit the University food service facilities?

(a) Once per week [] (b) Twice per week []

(b) Thrice a week [] (d)More than thrice a week[]

6. Which meals do you take in the food service facility?

(a) Breakfast [] (b) Lunch [] (c)Dinner [] (d) Both [] (e) Others (Specify)[]

## Part B: Ambient Conditions of the food service facility

In the following statements, kindly provide your opinions about the ambient conditions of this food service facility. For each statement, please use the following scale: 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Unsure (U) 4 = Agree (A), 5= Strongly Agree (SA). Please tick ( $\sqrt{}$ ) on the number that best describes your opinion.

Ambient Conditions	SD	D	U	A	SA
Visual aesthetic					
There is enough lighting in the food service facility					
Light creates a warm atmosphere					
Lighting makes me feel welcome					
Lighting creates a comfortable atmosphere					
The colors painting of the food service facility is attractive.					
Colors used makes me feel calm.					
Colors used creates a warm atmosphere.					
Colors used creates a comfortable atmosphere.					
The structural shape of the food service facility is attractive.					
Carpeting /flooring is attractive.					
Carpeting /flooring makes me feel comfortable.					
Ceiling décor is attractive.					
Wall décor is visually appealing.					
Plants /flowers makes me feel welcome					
Painting /pictures are attractive.					
Cleanliness					
The detergents used to wash the food service facility has					
pleasant scent					
The beautiful fragrance/scent from the food service facility					
makes me to stay more in the facility					
The food service facility maintains clean food service areas					
The food service facility maintains clean rest rooms					
The food service facility maintains clean walkaways, corridors					
		•			

and exits				
Scent /odor in the food service facility is pleasant				
Aroma in the food service facility is enticing.				
The quality of the air conditioning makes me comfortable in				
the food service facility.				
Air quality in the restaurant is fresh				
The staff of this food service facility are always wearing clean				
appropriate catering attire				
Clean employees make me feel welcome				
Overall, the facility s clean				
Temperature				
The food service facility is hot				
The food service facility is cold				
The food service facility is warm				
The temperature in the food service facility is comfortable				
The air temperature in food service facility is good				
Music				
The music in the food service facility thus makes my stay				
comfortable.				
Background music is pleasing.				
Background music makes me want to stay longer.				
Background music relaxes me.				
Any other comments about the ambience of this food serve	ico foc	:1;+v2		
Any other comments about the ambience of this food serve		iiity ?	 	

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## Part C: Space of the food service facility

Please tick ( $\sqrt{}$ ) on the number that best describes your opinion about the spatial layout of the food service facility. For each statement, please use the following scale: 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Unsure (U) 4 = Agree (A), 5= Strongly Agree (SA).

Space	SD	D	U	Α	SA
Layout					
The layout of this food service facility makes it easy for me to					
move around.					
The layout of this food service facility is appealing to the eyes.					
The layout of the food service facility makes it easy to get to the					
food service area.					
The layout of the food service facility makes it easy to get to the					
sitting area.					
The layout gives enough space.					
The facility layout makes it easy to get to the restrooms.					
The seating arrangement in the food service facility gives me					
enough space to move around.					
Thisfood service facility hassufficient and appropriate walkways					
to allow easy movement in and out of the facility					
Equipment					
The sinks are well positioned for easy washing of hands					
The spacing between eating tables is adequate for easy					
movement					
The payment counters are strategically positioned with adequate					
space allowing easy making of payments					
The service area is sufficiently large enough with minimal					
congestion					
The arrangement of equipment's is appropriate enhancing					
comfort in this food service facility					
Furnishing					
The furnishing in the food service facility enhances my comfort					
ability.					
The design of the furniture can accommodate all sorts of persons					
(gender sensitive, children and disable).					
The furnishing design food service facility is attractive.					
Seats and dining tables are comfortable.					
Seating arrangements gives enough space					
There are sufficient chairs and tables in the food service facility					

Any other comments about the space layout and furniture of this food service facility?

## Part D: Communicators at the food service facility

Please tick ( $\sqrt{}$ ) on the number that best describes your opinion about the communicators in the food service facility. For each statement, please use the following scale: 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Unsure (U) 4 = Agree (A), 5= Strongly Agree (SA).

Communicators	SD	D	U	Α	SA
Signage					
There are sufficient directional signs to entrance, exit and					
washrooms.					
The directional signs given in this food service facility are easy					
to comprehend and follow					
Directional signs give guidelines of how to move in the food					
service facility					
The guidelines in this food service facility are visually visible to					
be seen.					
There are rules of engagement in this food service facility					
The rules of engagement in this food service facility are					
understandable.					
Menu					
Menu board/card/brochures are attractive.					
The names of menu items are clear and detailed					
Menu items are appealing to the eye.					
There is variety of food items in the menu					
The menu design in the food service facility is eye appealing					
Diversity and difference in menus designs affects customer					
satisfaction					
Food presentation is visually attractive					
Menu design is appealing to the eye.					
	1	1	1	1	1

Any other comments about the signage, and menu in this food service facility?

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# Part E: Customer Satisfaction

Please tick ( $\sqrt{}$ ) on the number that best describes your opinion regarding customer satisfaction. For each statement, please use the following scale: 1 = Not at all (NA), 2 = Rare (R), 3 = Neutral (N) 4 = Sometimes (S), 5= Always (A).

Customer Satisfaction	NA	R	Ν	S	Α
Customer loyalty					
I trust the nature of services offered in this food facility					
I will always visit this food facility to take my meals					
I am not ready to change from consuming services and products					
from this food facility to another					
I enjoy spending time in this restaurant					
Repeat visits					
I will be pleased to visit this food facility again to purchase					
products and services					
I will be pleased to visit this food service facility again because it					
puts me in a good mood					
Overall, I am satisfied with this food service facility products					
and services					
Customer Recommendations					
The services offered in this food facility are satisfactory					
I shall talk good of this food facility since the services and					
products offer met my desired standard of quality					
I will endorse my friends to this food facility					

<u>END</u>

# THANK YOU

## **Appendix II: Interview Schedule for the Catering Officers**

- 1. Who decides on the servicescape features in this food service facility that is colour, lighting, music; layout, equipment and furnishing; signage as well as the menu cards.
  - (a) Management { } (d) Employees { }
  - (b) Interior designer { } (e) Other, specify { }
  - (c) Customers { }
- 2. How are ambient conditions of the food service facility influencing customer satisfaction in the university?

(Probe: Visual aesthetic, Temperature, Cleanliness and Audio)

.....

- .....
- 3. How is space influencing customer satisfaction in the university?

(Probe: layout, equipment's and furnishing)

.....

4. What are the type of communicators available in this food service facility and how are the communicators influencing customer satisfaction in the university? (Probe: signage, menu)

.....

5. How important do you consider servicescape dimension in relation to customer satisfaction? ------

6. What has been the reaction of customers to the servicescape dimensions in this food service facility? ------

-----

7. (a) Do you think this is an area food facility manager need to put a lot of emphasis?

(a)Yes [ ] (b) No [ ]

(b) If yes, briefly explain why------

\_\_\_\_\_

# THANK YOU FOR YOUR PARTICIPATION

# Appendix III: Observation Check List

Name of the food service facility------

_	-	

	Construct	Attributes	Comments
1.	Temperature	Thermal conditions cold, warm or	
		hot	
2.	Visual aesthetic	Nature of light (adequate	
		illumination) Lighting fixtures,	
		nature and type of colour painting.	
3.	Cleanliness	Scent, detergent, fragrance, Staff	
		appearance in neatness; wearing	
		uniform, Appearance of food	
		service facility.	
4.	Audio	rhythm, nature of music played, is	
		sound loud, soft	
5.	Space	Nature of layout, equipment's and	
		nature of furnishing, Distance	
		between rows of tables &	
		chairs. Arrangement matching with	
		restaurant theme.	
6.	Communicators	clear understandable signage and	
		menu	

### **Appendix IV: Letter of Authorization**



#### MOI UNIVERSITY SCHOOL OF TOURISM, HOSPITALITY & EVENTS MANAGEMENT

Telephone: 0771-296270/07900l50990 Fax: (053) 43047 E-mail: deansthe@mu.ac.ke Box 3900 ELDORET Kenya

Ref: MU/STHE/SGS/23

16<sup>th</sup> March, 2020

#### TO WHOM IT MAY CONCERN

Dear Sir/Madam,

#### RE: <u>RECOMMENDATION LETTER FOR – EMMARILINE MANYAMA MAGHANGA</u> <u>STHE/PGH/005/18</u>

The above named is a bonafide student of Moi University, School of Tourism, Hospitality and Events Management. She is pursuing a Master of Hospitality Management degree in the Department of Hotel and Hospitality Management.

She has successfully completed her course work and has defended her proposal titled "Perceived influence of Physical Servicescape on Customer Satisfaction among Consumers in the Main Food Service Facilities of selected Universities in Nairobi, Kenya.". Ms. Maghanga has been allowed to proceed to the field for data collection.

Any assistance accorded to her will be appreciated.

YOURS faithfully, PROF. DAMIANNAH KIETI DEAN, SCHOOL OF TOURISM, HOSPITALITY MOI UNIVERSITY DEAN, SCHOOL OF TOURISM, HOSPITALITY & EVENTS MANAGEMENT



# Appendix V: Research Permit

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This is to Certify that Miss EMMARILINE MANYAMA MAG research in Nairobi on the topic: PERCEIVED INFLUENCE OF SATISFACTION AMONG CONSUMERS IN FOOD SERVICE CITY COUNTY KENYA for the period ending - 28/March/2021	F PHYSICAL SERVICESCAPE ON CUSTOMER FACILITIES OF SELECTED UNIVERSITIES IN NAIROBI
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