

## **A Study on Impact of Servicescape Dimensions on Perceived Quality of Customer with Special Reference to Restaurant Services in Kanpur**

**Durgesh Agnihotri,**

Department of Business Administration,  
PSIT College of Management,  
Kanpur,UP, India

**Pallavi Chaturvedi,**

Department of Business Administration,  
PSIT College of Engineering,  
Kanpur,UP, India.

### **ABSTRACT**

*Physical evidences are very much important to support any service. People create an image of any brand on the basis of certain physical evidences. Most of the restaurants are focusing on various physical evidences such as ambience, space, functional conditions, signage, décor, Uniform, tagline & name of the place instead of focusing on food quality only. The purpose of the paper is to find out the impact of these servicescape dimensions on quality perception in restaurant business in more inclusive way.*

*This paper has developed a new model for analyzing the impact of servicescape dimensions based on service quality Gap model. This model has specific focus upon increased use of tangibility in services. Data is collected on the basis of questionnaire method. Conclusive research design is preferred along with probability sampling technique.*

*The result shows that servicescape is considered to be very important factor but it is not the only factor which will have huge impact on quality perception of customer. The result shows as service tangibility leads to influx of new customers but retention is based on food quality. The result also shows as how servicescape dimensions are playing vital role in determining customer's perceived service quality.*

*Outcome of the study is based on food industry/restaurant business only as it can be utilized in very precise manner in future. This study is also limited to certain region as it might be applicable to similar type of places only where demographic or geographic similarities exist. Price paid towards services can also be considered as a constraint as more prices paid for a service may lead to increase in perceived service quality expectation.*

*This study might help various restaurants in Kanpur to find out the exact utility of servicescape as it needs a lot of money to invest .Service provider must consider these servicescape dimensions seriously as ambient conditions, functional conditions, sign and symbol artifacts can play vital role in increasing customer foot fall and retention.*

*Most of the previous researches based on servicescape are general in nature. Choice of specific region and specific sector makes this research more appropriate and genuine. This paper provides better assessment of perceived service quality of customer towards service provider.*

**Keywords:** Servicescape, Service Quality Gap Model, tangibility, Physical Evidences.

### **INTRODUCTION:**

As it is said first impression is the last impression, you will never get another chance for first impression. People who are visiting a restaurant for the very first time will frame an opinion about the place on the basis of their experience at the place. Most of the restaurant owners are taking help of various dimensions of servicescae to make customer's experience delightful. Income level of people is increasing so the quality of service by the service providers. Customers perceive the quality on the basis of their spending and if they don't get perceived

quality they will frame a negative opinion about the place. Restaurant business is highly labour intensive, but availability of trained staff and workers are very less as per requirement. There is huge gap in requirement and availability. This gap somehow leads to dissatisfaction among customer and restaurant loses its customers forever. Similarly concept of theme restaurant is also increased which has grabbed attention of customers like anything. While India has always been a food-loving country with each region having its own special cuisine, Indians have never been very big on eating out. But all that is changing now. The restaurant industry in India has been growing at a rapid pace over the last decade or so and the growth story is set to continue for the next foreseeable future. The restaurant industry has gone through a revolution where a lot of theme based niche restaurants got introduced and grabbed attention of customers with the help of their uniqueness such as theme, layout, signage, ambiance etc.

## **REVIEW OF LITERATURE:**

### **Servicescape:**

The concept of Servicescape was developed by Booms and Bitner (1981) to represent the totality of physical environment of service establishments. They defined it as “all of the objective physical factors that can be controlled by the firm to enhance (or constrain) employee and customer actions

However, a research by Countryman & Jang found that colours and lighting have significantly influence customers’ perception on service providers. Thus, they suggest that colours and lighting are part of the physical environment or servicescape (Countryman & Jang, 2006).

A significant relationship has been identified between servicescape manipulation and shopping behavior (Turley & Milliman, 2000); it has been found that the role of servicescape is very important in the service delivery process (Hoffman & Turley, 2002).

A clearer definition from Zeithaml et al. (2009) defines servicescape as “the environment in which a service is delivered and in which the firm and the customer interact, and any tangible commodities that facilitate performance or communication of the service”. Here Zeithaml et al. reinforce Bitner’s idea with the thought that servicescape acts as a facilitator. Later, Rosenbaum and Massiah (2011) complete Bitner’s and Zeithaml’s definitions, explaining that servicescape includes several dimensions: a physical, a social, a socially-symbolic and a natural dimension. As it is shown, servicescape is a complete concept which includes a wide range of variable

Shin-Seok Lee, 2014 investigated the effects of servicescape on perceived service quality and behavioral intention. The four main factors of servicescape selected for this study were attractiveness, cleanliness, layout, and comfort; the two perception indicators were service quality and satisfaction; and the behavioral outcome measures were loyalty and public service facility revisit intentions.

### **Ambient Conditions:**

**Lightening:** According to Custers et al. (2010) lighting takes into account several variables: brightness, contrast, glare and sparkle, decorative lighting and lighting installation. They explain in their article that lighting can not only influence emotions, moods, and cognition but also the atmosphere and the spatial impression. Some studies show that customers are drawn toward the light but also that light can draw the attention to particular products. Indeed according to Quartier, Vanri and Van Cleempoel, (2014) lighting can increase the attractiveness of a product in a store.

### **Music:**

Musicscape is a term used by Jain and Badgare (2011) to talk about the musical environment; it is an important part of numerous studies in the retail and restaurant environment context. Music is used in restaurant for several reasons: relaxation, peace, association, remembrance, and because it can also have an impact on the customers’ dining experiences. It can influence consumption act, cognitive and affective evaluation, evaluation of the service and therefore consumer responses. According to Kotler (2012) there can be a 65% chance of mood change when someone is exposed to a positive sound. Hence, background music is used to produce some specific attitudes and behaviours among employees and consumers

### **Odor:**

According to Kotler (2012) 75% of emotions during the day are influenced by smell. Odours can mix emotions (sadness, monotony) or have a comforting effect (happiness, contentment, pleasure). They can call up memories or relieve stress. Indeed, unconsciously customers can associate a good or a bad feeling to odors. Many studies

(Schiffman, 1995; Ludwigson et al, 1989; Knasko, 1995, cited by Dreyfuss et al., 2007) show that human behaviours are driven by the sense of smell, and that pleasant odours can improve mood.

### DESIGN & LAYOUT:

According to Zijlstra and Mobach, (2011) the design of a facility gathers all the non-human elements which may have an impact on human cognition, emotion and behavior. For example, the ‘space’ element refers to the influence of the physical machineries, equipment, furnishing and design on the approach-avoidance decision, and the exchange process within a service (Rasbaum and Massiah, 2011) Aesthetic attractiveness refers to architectural design, décor, color, etc. Once customers enter a facility, they often observe the interior aesthetics, which is likely to affect their attitudes toward the facility (Baker et al., 1986)

According to the study made by Zijlstra and Mobach (2011), design and layout should be focused on maximizing the positive and meaningful impact for the customer.

### Objectives:

- To find out the impact of servicescape dimensions on customer satisfaction.
- To analyze the impact of servicescape dimensions on customer’s perceived quality.
- To find out the impact of ambient conditions on perceived quality of customer.
- To find out the impact of staffscape on customer’s perceived quality.
- To find out the impact of functional/space aspects on perceived quality of customer.
- To analyze the impact of dinescape factors on customer’s perceived quality.

### RESEARCH METHODOLOGY:

Data for this study was collected in various restaurants in Kanpur as well as Lucknow. It was decided that a survey intercept technique would be most appropriate. This was a logical approach as it allowed us to sample individuals who had used the service in the time immediately before completing the survey. Questioners were students who were trained and observed. They were instructed to interview dinners just after finishing their meals.

Random sampling is used by taking 500 respondents as sample size. For the collection of data a structured questionnaire is formed, which is containing topic related questions. Along with that various books, journals (international/ national), magazines and websites are also considered for the collection of data. The collected data is further analyzed by using various tools. Duration of the study would lie from March 2018 to mid of May 2018.

The study has examined the impact of various servicescape factors on customer’s perceived quality in a restaurant from the sample of 500 respondents who have filled the questionnaire. Data is validated on the basis of certain formulated hypothesis mentioned below

### HYPOTHESIS:

**H01:** There is no significant impact of ambient condition on perceived quality of a customer

**H02:** There is no significant impact of servicescape factors on customer satisfaction

**H03:** There is no significant impact of space (artifacts/aesthetics) on customer’s perceived quality

**H04:** There is no significant impact of dinescape factors on customer’s perceived quality.

**H05:** There is no significant impact of staffscape on customer’s perceived quality

### CONCEPTUAL MODEL OF THE RESEARCH:

#### Hypothesis Testing:

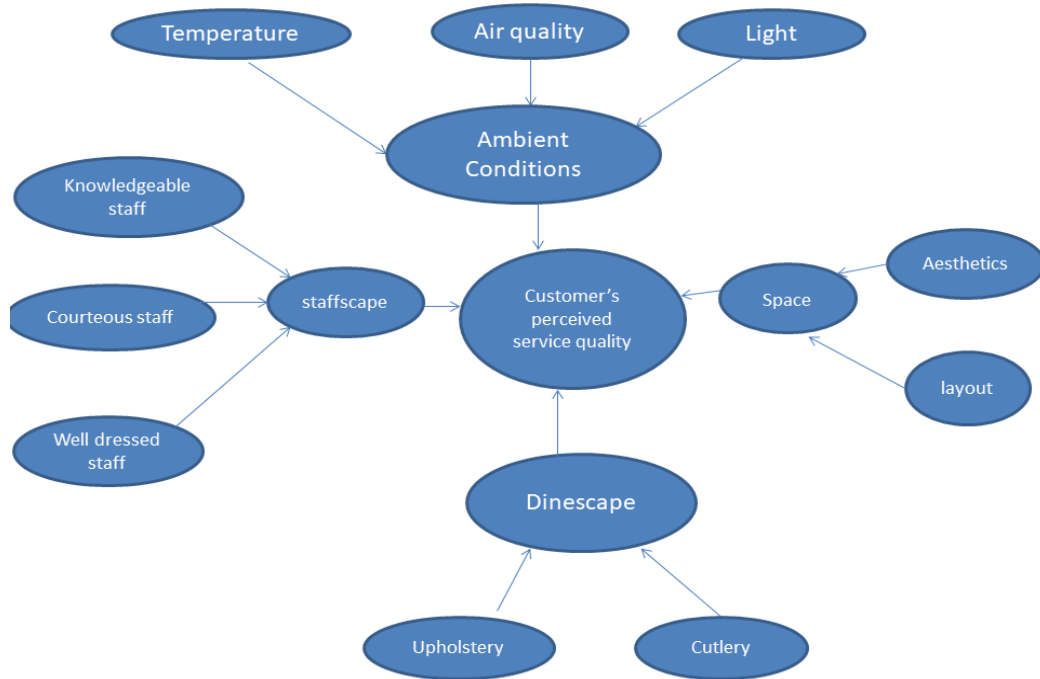
**H01:** There is no significant impact of ambient condition on perceived quality of a customer

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.607 <sup>a</sup>	.368	.364	.93842

**a. Predictors:** (Constant), Light , air quality of the restaurant, Temperature of the restaurant

**b. Dependent Variable:** Perceived quality of customer for Ambient Conditions



ANOVA <sup>a</sup>					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	254.409	3	84.803	96.299	.000 <sup>b</sup>
1 Residual	436.791	496	.881		
<b>Total</b>	<b>691.200</b>	<b>499</b>			

a. Dependent Variable: Perceived quality of customer for Ambient Conditions

b. Predictors: (Constant), Light, air quality of the restaurant, Temperature of the restaurant

As it is observed value of  $\alpha=.05$  is higher than p value. Thus null hypothesis is rejected and there would be a significant impact of ambient condition on customer's perceived quality.

**H02: There is no significant impact of servicescape factors on customer satisfaction:**

Multiple Regressions was used to test the interrelationship of variables. The result can be used to find out the relationship among eleven servicescapes dimensions (independent variable) and Overall Customer Satisfaction (dependent variable).

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.601 <sup>a</sup>	.361	.348	.78303

**a. Predictors:** (Constant), I prefer a place with good cutlery, I prefer a place where staff is courteous, I prefer a place with good ambience, air quality of the restaurant, I prefer a place which is artistic, Light, I prefer a place with fancy layout, I prefer a place where staff is knowledgeable, Tempeture of the restaurant, I prefer a place where staff is well dressed.

**b. Dependent Variable:** are you satisfied with restaurant services

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	169.706	10	16.971	27.678	.000 <sup>b</sup>
	Residual	299.822	489	.613		
	<b>Total</b>	<b>469.528</b>	<b>499</b>			

**a. Dependent Variable:** are you satisfied with restaurant services

**b. Predictors:** (Constant), I prefer a place with good cutlery, I prefer a place where staff is courteous, I prefer a place with good ambience, air quality of the restaurant, I prefer a place which is artistic, Light, I prefer a place with fancy layout, I prefer a place where staff is knowledgeable, Temperature of the restaurant, I prefer a place where staff is well dressed

As it is observed value of  $\alpha=.05$  is higher than p value. Thus null hypothesis is rejected and there would be a significant impact of servicescape factors on customer satisfaction.

**H03:** There is no significant impact of space (artifacts/aesthetics) on customer's perceived quality

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.684 <sup>a</sup>	.467	.464	.828

a. Predictors: (Constant), I prefer a place with good equipment, I prefer a place which is artistic , I prefer a place with fancy layout

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	298.216	3	99.405	145.001	.000 <sup>b</sup>
	Residual	340.032	496	.686		
	<b>Total</b>	<b>638.248</b>	<b>499</b>			

**a. Dependent Variable:** I prefer a place with fancy layout

**b. Predictors:** (Constant), I prefer a place with good equipment, I prefer a place which is artistic , I prefer a place with fancy layout

As it is observed value of  $\alpha=.05$  is higher p value. Thus null hypothesis is rejected and there would be a significant impact of space (artifacts/aesthetics) on customer's perceived quality

**H04:** There is no significant impact of dinescape factors on customer's perceived quality.

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.670 <sup>a</sup>	.449	.446	.66750

**a. Predictors:** (Constant), I prefer a place which has premium upholstery, I prefer a place with good cutlery

**b. Dependent Variable:** PERCIEVED service quality by customer

ANOVA <sup>a</sup>					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	180.129	2	90.064	202.142	.000 <sup>b</sup>
1 Residual	221.439	497	.446		
<b>Total</b>	<b>401.568</b>	<b>499</b>			

a. **Dependent Variable:** PERCIEVED service quality by customer

b. **Predictors:** (Constant), I prefer a place which has premium upholstery, I prefer a place with good cutlery

As it is observed value of  $\alpha=.05$  is higher than p value. Thus null hypothesis is rejected and there would be a significant impact of dinescape factors on customer’s perceived quality.

**H05:** There is no significant impact of staffscape on customer’s perceived quality.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.641 <sup>a</sup>	.411	.408	.70598

a. **Predictors:** (Constant), I prefer a place where staff is well dressed, I prefer a place where staff is knowledgeable, I prefer a place where staff is courteous

b. **Dependent Variable:** Perceived quality of customer for staff

ANOVA <sup>a</sup>					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	172.748	3	57.583	115.533	.000 <sup>b</sup>
1 Residual	247.210	496	.498		
<b>Total</b>	<b>419.958</b>	<b>499</b>			

a. **Dependent Variable:** Perceived quality of customer for staff

b. **Predictors:** (Constant), I prefer a place where staff is well dressed, I prefer a place where staff is knowledgeable, I prefer a place where staff is courteous

As it is observed value of  $\alpha=.05$  is higher than p value. Thus null hypothesis is rejected and there would be a significant impact of staffscape on customer’s perceived quality

**DISCUSSION & RESULT:**

The principle component factor analysis with varimax was conducted on 11 statements. After running it, there were four factors: Ambient Conditions, dinescape, staffscape and Space. The value of Kaiser-Meyer Olkin Measure of Sampling Adequacy (KMO) is higher than 0.6 (KMO=0.763), and the Barlett’s Test of Sphericity is significant (Sig. value=.000), therefore factor analysis is appropriate.

**Table 1**

KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.763
Bartlett's Test of Sphericity	Approx. Chi-Square
	df
	Sig.

The KMO measures the sampling adequacy (which determines if the responses given with the sample are adequate or not) which should be close than 0.5 for a satisfactory factor analysis to proceed. Kaiser (1974) recommend 0.5 (value for KMO) as minimum (barely accepted), values between 0.7-0.8 acceptable, and values above 0.9 are superb. Looking at the table 1 , the KMO measure is 0.763, which is more than 0.5 and therefore it is satisfactory and accepted.

**Table 2**

Communalities	
	Extraction
Temperture of the restaurant	.819
air quality of the restaurant	.780
Light	.812
I prefer a place which is artistic	.805
I prefer a place with fancy layout	.835
I prefer a place with good ambience	.525
I prefer a place where staff is courteous	.877
I prefer a place where staff is knowledgeable	.859
I prefer a place where staff is well dressed	.896
I prefer a place with good cutlery	.756
I prefer a place which has premium upholstery	.750
<b>Extraction Method:</b> Principal Component Analysis.	

The next item from the output is a table of communalities which shows how much of the variance (i.e. the communality value which should be more than 0.5 to be considered for further analysis. Else these variables are to be removed from further steps factor analysis) in the variables has been accounted for by the extracted factors. For instance over 89.6% of the variance in “preference towards a place where staff is well dressed” is accounted for, while 87.7% of the variance in “preference towards a place where staff is courteous” is accounted for (Table: 2)

**Table 3**

Total Variance Explained						
Component	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.882	35.294	35.294	2.671	24.286	24.286
2	2.122	19.295	54.588	2.390	21.729	46.015
3	1.510	13.728	68.317	2.143	19.479	65.494
4	1.199	10.905	79.221	1.510	13.728	79.221
<b>Extraction Method:</b> Principal Component Analysis.						

**Total variance explained:**

The Eigenvalue table has been divided into three sub-sections, i.e. Initial Eigen Values, Extracted Sums of Squared Loadings and Rotation of Sums of Squared Loadings. For analysis and interpretation purpose we are only concerned with Extracted Sums of Squared Loadings. The first factor accounts for 35.294% of the variance, the second 19.295%, third 13.728% and fourth 10.905. (Table 3 )

Rotated Component Matrix <sup>a</sup>				
	Component			
	1	2	3	4
Temperature of the restaurant		.821		
air quality of the restaurant		.864		
Light		.865		
I prefer a place which is artistic			.894	

Rotated Component Matrix <sup>a</sup>				
	Component			
	1	2	3	4
I prefer a place with fancy layout			.910	
I prefer a place having fine equipment's			.687	
I prefer a place where staff is courteous	.927			
I prefer a place where staff is knowledgeable	.881			
I prefer a place where staff is well dressed	.910			
I prefer a place with good cutlery				.869
I prefer a place which has premium upholstery				.864

**Extraction Method:** Principal Component Analysis.  
**Rotation Method:** Varimax with Kaiser Normalization. a. Rotation converged in 5 iterations. Table 4

The impression of rotation is to reduce the number factors on which the variables under investigation have high loadings. Rotation does not actually make any change but makes the interpretation of the analysis easier. Looking at the table 4, we can see that temperature; air quality and light are substantially loaded on Factor (Component) 2 while artistic, fancy layout and good ambiance are substantially loaded on Factor 3. Dinescape variables are substantially loaded on Factor (component) 4. These factors can be used as variables for further analysis

**Reliability:**

Factor 1 known as ambient conditions contained 3 items temperature (.821), air quality (.864) and light (.865) and their reliability is .874 and explained variance was 24.286%

Reliability Statistics	
Cronbach's Alpha	N of Items
.874	3

Factor 2 known as space / function contained 3 items artistic looks(.894), fancy layout(.910) and equipment (.687) and their reliability is .789. Total variance explained 21.729%

Reliability Statistics	
Cronbach's Alpha	N of Items
.789	3

Factor 3 known as staffscape contained 3 items courteous staff (.927), knowledgeable staff (.881) and well-dressed staff(.910) and their reliability is .926. Total variance explained 19.479.

Reliability Statistics	
Cronbach's Alpha	N of Items
.926	3

Factor 4 known as dinescape contained 2 items cutlery (.869) and upholstery (.864) and their reliability is .669 and total variance explained 13.728

Reliability Statistics	
Cronbach's Alpha	N of Items
.669	2



**Reliability Test on all the servicescape dimension and customer satisfaction:**

Reliability Statistics	
Cronbach's Alpha	N of Items
.794	12

Reliability test was conducted in both servicescapes dimensions and overall customer satisfaction in order to prove their reliability for further analysis. Apart from the servicescape dimensions discussed above, Customer Satisfaction (0.770) was also considered to be reliable and internally consistent, with Cronbach's Alpha greater than 0.7.

- From first hypothesis it is observed that value of  $\alpha=.05$  is higher than  $p=.0000$  value. Thus null hypothesis is rejected and there would be a significant impact of ambient condition on customer's perceived quality. Results have shown that people agree that servicescape give information about the general quality of a restaurant and that a pleasant environment is a symbol of quality The effect of air quality, temperature and light is significant and It already has been proved that ambience may have an impact on consumers (Cockrill, Goode and Emberson, 2008; Bitner 1992; Rosenbaum and Massiah, 2011).and According to Custers et al. (2010) lighting covers several variables: brightness, contrast, glower and sparkle, decorative lighting and lighting installation. They explain in their article that lighting can play part in influencing emotions, moods, and cognition but also the atmosphere and the spatial impression. Indeed according to Quartier, Vanri and Van Cleempoel, (2014) lighting is good enough to increase the attractiveness of food in a restaurant.
- As it is observed value of  $\alpha=.05$  is higher  $p=.000$  value. Thus null hypothesis is rejected and there would be a significant impact of servicescape factors on customer satisfaction As it is shown, servicescape is a complete concept which includes a wide range of variables. In this research 4 servicescape factors are studied and impact of these factors on customer satisfaction was analyzed. Effect of all four factors is found significant
- As it is observed value of  $\alpha=.05$  is higher  $p=.000$  value there would be a significant impact of space (artifacts/aesthetics) on customer's perceived quality. Effect of artistic layout, equipment is found significant
- As it is observed value of  $\alpha=.05$  is higher than  $p=0.000$  value. Thus null hypothesis is rejected and there would be a significant impact of dinescape factors on customer's perceived quality. In this study two dinescape categories are analyzed. Cutlery and upholstery are considered to be most important factors for dinescape. Effect of dinescape factors is found significant
- As it is observed value of  $\alpha=.05$  is higher than  $p=.000$  value. Thus null hypothesis is rejected and there would be a significant impact of staffscape on customer's perceived quality. S Harris and Ezeh (2008) found that the appearance of staff in the servicescape was positively related to perceived quality. They also found that furnishings were a determinant of perceived quality. Three factors are considered in staffscape as dress of staff, knowledge of staff and behavior of staff. Effect of these three factors is found significant.

**LIMITATIONS OF RESEARCH:**

The research was limited to a particular time frame. The primary research was spread around 2 months on a sample of 500 participants. To understand the impact of servicescape on customer's perceived quality and satisfaction in restaurant industry on consumer further researches have to be undertaken not only with questionnaire but also through observation, focus groups etc. and on a longer period of time. In addition, this population was principally reached because the questionnaire was provided on social networks along with face to face interaction with few. Moreover, the research was focused on only four dimensions of servicescape, additionally, in the research only few variables were explored, but as it was showed there are 57 variables in servicescape (Ballantine, Jack and Parsons, 2010). It was not possible to study that number of variable at the same time.

**CONCLUSION:**

The purpose of this research was to study the nature of the perception of servicescape by customers within the context of restaurant business. This investigation was undertaken because the researcher noticed a lack of literature and research about servicescape in small cities where population of mixed income group reside. The dimensions of servicescapes have a sturdy connotation with the customer perceived quality. In this research, it showed that space (artifacts & aesthetics)/dinescape is the most important dimension among four in the various restaurants in Kanpur. Respondents prefer the way they are served at a restaurant with good cutlery, premium upholstery etc. staffscape were the second most important dimension among the four in the restaurants in

Kanpur. Most of the respondents have chosen staffscape as most effective dimension which has huge impact on customer's perceived service quality or customer satisfaction. As most of the activities in the restaurants are dependent on staff. Apart from these, ambient conditions are the next important factor. That helps to maintain the environment clean. It should have proper temperature, light, air quality etc. It is advisable to add on more resources for giving a clear path and keeping the environment hygienic and cleanliness as they had a great impact on customer satisfaction. Although every research has certain limitation so it does. Model developed in this research can be further investigated in future for more effective solutions.

Results would be useful for all the restaurants in Kanpur or similar cities to provide excellent services and servicescapes to strengthen the position of catering/food industries.

**REFERENCES:**

- Antje Cockrill, Mark Goode, Daniel Emberson, (2008). Servicescape matters – or does it? The special case of betting shops, *Marketing Intelligence & Planning*, Vol. 26 Issue: 2, pp.189-206
- Baker, J. (1986). *The role of the environment in marketing services: the consumer perspective*. Chicago, IL: American Marketing Association, pp.79-84
- Bitner, M. (1992). Servicescape: The impact of physical surroundings on customers and employees. *Journal of Marketing*, 56(Apr), pp.57-71
- Booms, B., H., and Bitner, M., J., (1981). Marketing strategies and organization structures for service firms, in Donnelly, J., H., and George, W., R., (eds). *Marketing of Services*. Chicago: American Marketing Association.
- Cary C. Countryman, Soo Cheong Jang, (2006). The effects of atmospheric elements on customer impression: the case of hotel lobbies, *International Journal of Contemporary Hospitality Management*, Vol. 18 Issue: 7, pp.534-545,
- Emma Zijlstra, Mark P. Mobach, (2011). The influence of facility layout on operations explored, *Journal of Facilities Management*, Vol. 9 Issue: 2, pp.127-144,
- Harris, L and Ezeh, C. (2008). Servicescape and loyalty intentions: an empirical investigation. *European Journal of Marketing*, 42 (3/4), pp.390-422
- Mark S. Rosenbaum, Carolyn Massiah, (2011). An expanded servicescape perspective, *Journal of Service Management*, Vol. 22 Issue: 4, pp.471-490,
- Quartier, K., Vanri, J. and Van Cleempoel, K. (2014). The mediating role of consumers' perception of atmosphere on emotions and behavior. A study to analyze the impact of lighting in food retailing.
- Turley & Milliman, (2000). Atmospheric Effects on Shopping Behavior: A Review of the Experimental Evidence Elsevier, *Journal of Business Research*, 49 193–211

----