

IMPACT OF SERVICE QUALITY, PHYSICAL ENVIRONMENT, EMPLOYEE BEHAVIOR ON CONSUMER PERCEPTION

Shailja Bhakar

Asst. Professor, Prestige Institute of Management Gwalior

Adarsh Kumar Agrawal

HOD, Training & Placement, Maharaja Agrasen Institute of Management &
Technology, Yamuna Nagar, Haryana

B.K. Suthar

BSNL, Vadodra

Sachin Verma

Faculty, Maharaja Institute of Management & Technology, Gwalior

Amit Verma, Keshav Singhal & Parivartan Singh

Student, Maharaja Agrasen Institute of Management & Technology, Yamuna Nagar,
Haryana

ABSTRACT

Gone are the days when people use to buy services on the basis of quality only the customer now want to have an overall service delivery including the physical environment end employee behavior. This paper throws light on how service quality, physical environment and employee behavior have an impact on consumer perception. Customers of banking services were chosen as the subject. The sample size of 100 respondents was taken based on Purposive Sampling Technique. Based on thorough literature review and after using various analytical tools it was proposed that service organizations should concentrate on service quality, physical environment and employee behavior for convincing consumers to use their services.

Keywords: Service Quality, Physical Environment, Employee Behaviour, Consumer Perception

CONCEPTUAL FRAMEWORK

Service Quality

Quality in business, engineering and manufacturing has a pragmatic interpretation as the non-inferiority or superiority of something. Quality is a perceptual, conditional and somewhat subjective attribute and may be understood differently by different people. Consumers may focus on the specification quality of a product/service, or how it compares to competitors in the marketplace. Producers might measure the conformance quality, or degree to which the product/service was produced correctly.

The common element of the business definitions is that the quality of a product or service refers to the perception of the degree to which the product or service meets the customer's expectations. Quality has no specific meaning unless related to a specific function and/or object. Quality is a perceptual, conditional and somewhat subjective attribute.

Quality of service is a broad term that is used in both customer care evaluations and in technological evaluations. In both applications, the quality of service has to do with measuring the incidence of errors within a process that result in the creation of issues for an end user. The goal of any quality of service evaluation is to minimize the incidence of transmission issues and the error rates that may result.

Mary Jo Bitner (1992) coined the term 'servicescapes' to refer to the physical surroundings in which the delivery of service products takes place, and how these surroundings affect customers and employees in service organisations. The ability of the physical environment to influence behaviors and to create an image is particularly apparent for service businesses such as hotels, restaurants, professional offices, banks and retail stores. The position advanced here is that the physical surroundings are important in service settings because both customers and staff are affected by their surroundings

Zeithaml, (1988) stated that the quality of service is an important consideration in business. Customers perceptions of service quality are often influenced by the actual quality of the customer service delivered and received in relation to the product. Perceived quality is defined as a consumer's appraisal of a product's overall excellence or superiority

A study by Oliva, Oliver, and MacMillan (1992) revealed customer satisfaction and loyalty increased dramatically with increased service quality but satisfaction declined as well as loyalty with minor changes to the same.

Physical Environment

The definition of physical environment is simply the physical characteristics of the room. This refers to things like the size of the room, how dark or light it is, what the temperature is like, whether it has carpeting or just concrete, etc.

The modern work physical environment is characterized by technology; computers and machines as well as general furniture and furnishings (Statt, 1994) which through incessant interaction bombard our brains with sensory information (Kornhauser, 1965; Sutherland & Cooper, 1990).

The definition of physical environment is simply the physical characteristics of the room. This refers to things like the size of the room, how dark or light it is, what the temperature is like, whether it has carpeting or just concrete, etc. The physical environment is a tool that can be leveraged both to improve business results (Mohr, 1996) and employee well-being (Huang, Robertson, & Chang, 2004). Kotler (1973) defined physical environment as the conscious design of space to create certain effects in buyers to enhance purchase likelihood.

Employee Behavior

Employee behavior is increasingly recognized as an important issue in organizations, particularly as instances of stress related illness at work continue to rise (Cooper & Cartwright, 1996).

Guest and Conway (2004, p. 63) define employee behavior in terms of six key areas: a manageable workload; some personal control over the job; support from colleagues and supervisors; positive relationships at work; a reasonably clear role and a sense of control or involvement in changes at the workplace.

Consumer Perception

Customer Perception is when the customer perceives the value and benefit in the product and service you are selling and the value they derive from that matches the price you have set and the experience they receive.

Consumer Perception = How your brand is perceived by your (potential) customers.

Customers' perceptions of service quality are subjective evaluations of a service experience, and customers' expectations are the standards against which such service experiences are judged (Zeithaml, Berry, and Parasuraman 1993).

LITERATURE REVIEW

David McGuire & Lauren McLaren (2007) examined whether employee well-being mediates the relationship between physical environment and employee commitment. They found strong evidence of a mediational effect evidencing the importance of both physical environment and employee well-being to employee commitment. Their study raised important issues for both theory and practice. Their finding suggested that in order to further increase employee commitment, organizations in addition to addressing the physical working environment of employees need to consider employee well-being measures. Even this research indicated that a supportive culture can reduce employee stress levels and increase employee commitment (Wayne, Shore, & Liden, 1997). Several other important findings have arisen from the study. First, there exists a strong positive relationship between physical environment and employee commitment. Second, the strong relationship between physical environment and employee well-being confirms research by Sutherland and Cooper (1990) that poor working conditions may lead to poor mental health amongst employees.

Eileen A. Wall and Leonard L. Berry's (2007) in their finding has supported the conceptualization of the restaurant environment as an implicit service promise, with the potential to influence customers' expectations of service (Zeithaml, Berry, and Parasuraman 1993). Their findings have strengthened the conviction that consistent application of mechanic and humanic clues is the ideal. Their findings, even suggested the essential importance of positive humanic clues. Negative humanic clues cannot overcome positive mechanic clues, but positive humanic clues can—to a degree—overcome negative mechanic clues. This research goes beyond examining the individual effects of mechanic and humanic clues to investigating their combined effects, and thus the findings are more representative of the customer's actual experience.

Joost W.M. Verhoeven, Marcel E. Pieterse, Ad Th. H. Pruyn (2007) in their result provided consistent empirical evidence regarding the effects of interior color on patient responses. The hypothesis that blue walls in healthcare settings alleviate anxiety and improve emotion, the evaluation of the physical environment, and perceived service quality, was confirmed. Color can enhance service evaluation by improving customers' affective state and by increasing their evaluation of the physical environment. This may be the result of a halo effect (Thorndike, 1920): because the physical environment is positively evaluated, customers assume that other aspects of the service, such as the diagnosis and the treatment, are of the same, high quality. First, this suggests that the beneficial effects of a blue wall color are not restricted to high-stress encounters, but may also occur under moderately stressful conditions. Secondly, the effect seems to be independent of exposure length.

Michael K. Brady & J. Joseph Cronin Jr. (2001) in their research findings suggested that delivering reliable, responsive, and empathetic service is indeed related to improved service quality perceptions. Their findings indicate that the valence of the service outcome can have an effect on overall perceptions of service quality. Because the factors driving valence tend to be beyond the control of service managers (e.g., bad weather, bad credit, the wrong verdict), more research is needed to identify possible strategies for counteracting these effects. The scale developed in this study can be used to examine each primary dimension of service quality in greater depth. Moreover, our findings indicate that the importance of the dimensions may vary depending on industry characteristics.

Srivastava (2008) examined the effect of two factors of work environment mainly; physical and psychosocial on employees' job satisfaction and performance, and organizational effectiveness. The results reflect that psycho-social environment, as compared to physical environment of workplace show higher impact on employees' job behavior and organizational effectiveness. In this study the effect of physical work environment was found to be bi-directional in its effect on employees' job satisfaction and performance. The study further concluded that adequate physical environment enhances employees' job satisfaction, while perceived inadequacy in work environment adversely affect job satisfaction of the employees. Their study has also demonstrated positive relationship between perceived physical environment and organizational effectiveness. The observation may be attributed to the fact that adequate and favorable features of physical and social environment of the organization are major constituents and as well as determinants of overall effectiveness of the organization. This study, instead of analyzing molecular, examined the molar effect of physical environment on employees' job behavior and organizational effectiveness, which may be considered as a distinct feature of the study.

Hong Qin (2008) found that this research fills a gap in the healthcare service literature by developing a new urgent care service quality instrument. The results of this research will contribute to urgent care center management and quality improvement. Specifically, this research has addressed three areas relevant to these issues: (1) development of an instrument to measure perceived service quality in the urgent care industry; (2) establishment of a research model examining the dimensions of perceived service quality, and determinants of patient satisfaction; and (3) examination of the relationship between service quality and satisfaction in the context of urgent care

J. Joseph Cronin, JR., G. Tomas M. Hult, Michael K. Brady's (2000) findings indicate that both service quality and service value lead to satisfaction. Thus, their findings add weight to Bagozzi's (1992) suggestion that cognitive evaluations precede emotional responses. Their results also provided empirical support for Woodruff's (1997) conceptualization of value and satisfaction. In addition, they suggested that service quality perceptions are also an important determinant of customer satisfaction. Their findings support's the position and justify the efforts to improve quality, value, and satisfaction collectively as a means of improving customer service perceptions.

Ching-Fu Chen (2005) in his research paper has presented a relationship model between service quality, perceived value, overall satisfaction, and behavioral intentions for international airlines. From the evidence in Taiwan, the analysis shows that both perceived value and overall satisfaction are found to have direct influences on passengers' behavioral intentions, and perceived performance is found to have an indirect rather than a direct effect on overall satisfaction as moderated by perceived value. Unless it leads to an increase in perceived value, service quality is not guaranteed to lead to a customer's overall satisfaction. In turn, the benefit brought about by positive behavioral intentions or loyalty is also uncertain. Their research has suggested that perceived value plays an important role in affecting a customer's satisfaction and future behavioral intentions in the airline service context.

Spangenberg, Crowley, and Henderson (1996) found that the physical environment can powerfully influence people's cognition, emotions, and behavior. People rely on the environment for meaning about their world and for behavioral guidance. In addition, an environment can influence feelings, which may among other reactions encourage people to remain in the environment or to leave it (Mehrabian and Russell 1974). As an attention-creating medium, Physical environment can make a store or restaurant distinctive through design, color, motion, or sound.

Research in services marketing has shown that in inseparable services where both the customer and service provider must be present, such as those found in restaurants and hotels, the physical environment where the service is performed influences customers' perception of service quality (Baker, Grewal, and Parasuraman 1994; Bitner 1990).

Berry and Lampo (2004) found that employee behavior was, by far, the most influential factor in shaping customers' perceptions of their high- and low-preference brands. They also argued that labor-intensive service brands can be only as strong as the customers' satisfaction with the people performing the service, because customers' actual service experiences are most influential in establishing brand meaning.

Hui and Zhou (1996) distinguished between two methods to improve the perception of the wait. The first is to enable the customer to accept the wait, for example by providing information about the reason and the duration (e.g. Hui, Tse & Zhou, 2006). The second method is to shorten the perceived duration of the wait by, for example, distracting the customer by an absorbing, useful or interesting environment (e.g. Katz, Larson & Larson, 1991).

OBJECTIVE

1. To develop and standardized a measure for physical environment, consumer perception, service quality, employee behavior.
2. To develop a relationship between service quality, physical environment and employee behavior with consumer perception.
3. To open new vistas for finishes research
4. To fulfill these objectives the following hypothesis are developed:

Hypothesis H0 (1): There is no effect of service quality, physical environment and employee behavior on consumer perception where service quality, physical environment and employee behavior are taken as independent variable and consumer perception as dependent variable

Hypothesis H0 (2): There is no effect of service quality on consumer perception where service quality is taken as independent variable and consumer perception as dependent variable

Hypothesis H0 (3): There is no effect of physical environment on consumer perception where physical environment is taken as independent variable and consumer perception as dependent variable

Hypothesis H0 (4): There is no effect of employee behavior on consumer perception where employee behavior is taken as independent variable and consumer perception as dependent variable

RESEARCH METHODOLOGY

The study: The study was causal in nature with survey method being used for data collection.

Sampling design:

Population: The population include customer's firm Gwalior region

Sample size: Sample size was 100 respondents.

Sample elements: Individual respondent was the sample elements.

Sampling techniques: Purposive sampling technique was used to select the sample.

Tools for data collection: Self designed questionnaire will be used to find combined effect of physical environment and employee behavior on consumer perception of service quality. Data will be collected on a 7 point Likert type scale. Where 1 will indicate minimum agreement and 7 will be maximum agreement.

Tools for data analysis: Item to total correlation was applied to check the internal consistency of the questionnaire. Cronbach's Reliability test was applied to find out the reliability of the questionnaire. Factor analysis was applied to find out the underlying factors of the questionnaires. Multiple Regression was applied to find out the combined effect of service quality, physical appearance and employee behavior on consumer perception. Linear Regression was applied to find out the individual effect of service quality on consumer

perception, physical appearance on consumer perception and employee behavior on consumer perception

RESULTS AND DISCUSSION

Service Quality

Reliability test was carried out on service quality questionnaire using SPSS software and the result of Cronbach Alpha reliability test is given below

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.837	.843	8

Reliability test is carried out on questionnaires to evaluate whether the questionnaire is reliable for conducting the study or not. If the value of reliability test is found to be more than 0.7 the questionnaire is considered reliable. Here from the table it can be seen that the value of Cronbach Alpha reliability test is .837 which is more than 0.7 therefore the service quality questionnaire was considered reliable for conducting the study.

Kaiser- Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.772
Bartlett's Test of Sphericity	Approx. Chi-Square	268.345
	Df	28
	Sig.	.000

Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy: The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is an index used to examine the appropriateness of factor analysis. High values (between 0.5 and 1.0) indicate factor analysis is appropriate. Values below 0.5 imply that factor analysis may not be appropriate. The Kaiser - Meyer - Olkin Measure of Sampling Adequacy value for the purchase intention measure was 0.772 indicating that the sample was adequate to consider the data suitable for factor analysis.

Bartlett's test of Sphericity: Bartlett's test of sphericity is a test statistic used to examine the hypothesis that the variables are uncorrelated in the population. In other words, the population correlation matrix is an identity matrix; each variable correlates perfectly with itself ($r = 1$) but has no correlation with the other variables ($r = 0$). The Bartlett's Test of Sphericity was tested through Chi-Square value having a value of 268.345, which is significant at 0% level of significance. Therefore, the above hypothesis is rejected, indicating that the data was suitable for factor analysis.

Factor Analysis

Principle component factor analysis with varimax rotation and Kaiser Normalization was applied. The factor analysis converged on 2 factors after three iterations. The details about the factors, the factor name, variable number, variable convergence and their Eigen value is given in the table given below:

S. No	Factor	Eigen	% of Variance	Items	Item
-------	--------	-------	---------------	-------	------

	Name	Value			Loading
1	Need Fulfillment	2.483	31.040	6 The full range of services is delivered to meet your changing needs	.771
				5 The required level of service is delivered, with clearly stated terms and conditions	.762
				8 Specific opportunities and support for you to attain your personal goals are provided	.720
				3 A flexible service is provided to meet your individual needs	.650
2	Reliable	2.459	30.732	2.Accurate and secure records are maintained	.846
				4.The service and materials are accessible to you	.773
				7. A dependable service which does not vary over time is provided	.721
				1 The terms and conditions of your right to services are negotiated	.544

Physical Environment

Reliability test was carried out on physical environment questionnaire using SPSS software and the result of Cronbach Alpha reliability test is given below:

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.913	.912	9

Reliability test is carried out on questionnaires to evaluate whether the questionnaire is reliable for conducting the study or not. If the value of reliability test is found to be more than 0.7 the questionnaire is considered reliable. Here from the table it can be seen that the value of Cronbach Alpha reliability test is .913 which is more than 0.7 therefore the physical environment questionnaire was considered reliable for conducting the study.

Kaiser- Meyer-Olkin Measure of Sampling Adequacy and Bartlett’s Test of Sphericity

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.851
Bartlett's Test of Sphericity	Approx. Chi-Square	495.769
	Df	36
	Sig.	.000

Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy: The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is an index used to examine the appropriateness of factor analysis. High values (between 0.5 and 1.0) indicate factor analysis is appropriate. Values below 0.5 imply that factor analysis may not be appropriate. The Kaiser - Meyer - Olkin Measure of Sampling Adequacy value for the purchase intention measure was 0.851 indicating that the sample was adequate to consider the data suitable for factor analysis.

Bartlett's test of Sphericity: Bartlett's test of sphericity is a test statistic used to examine the hypothesis that the variables are uncorrelated in the population. In other words, the population correlation matrix is an identity matrix; each variable correlates perfectly with itself ($r = 1$) but has no correlation with the other variables ($r = 0$). The Bartlett’s Test of Sphericity was tested through Chi-Square value having a value of 495.769, which is significant at 0% level of

significance. Therefore, the above hypothesis is rejected, indicating that the data was suitable for factor analysis.

Factor Analysis

Principle component factor analysis with varimax rotation and Kaiser Normalization was applied. The factor analysis converged into one factors therefore it can be considered all the questions were representing physical environment only.

Employee Behavior

Reliability test was carried out on employee behavior questionnaire using SPSS software and the result of Cronbach Alpha reliability test is given below:

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.941	.942	12

Reliability test is carried out on questionnaires to evaluate whether the questionnaire is reliable for conducting the study or not. If the value of reliability test is found to be more than 0.7 the questionnaire is considered reliable. Here from the table it can be seen that the value of Cronbach Alpha reliability test is .941 which is more than 0.7 therefore the employee behavior questionnaire was considered reliable for conducting the study.

Kaiser- Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.887
Bartlett's Test of Sphericity	Approx. Chi-Square	778.060
	Df	66
	Sig.	.000

Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy: The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is an index used to examine the appropriateness of factor analysis. High values (between 0.5 and 1.0) indicate factor analysis is appropriate. Values below 0.5 imply that factor analysis may not be appropriate. The Kaiser - Meyer - Olkin Measure of Sampling Adequacy value for the purchase intention measure was 0.887 indicating that the sample was adequate to consider the data suitable for factor analysis.

Bartlett's test of Sphericity: Bartlett's test of sphericity is a test statistic used to examine the hypothesis that the variables are uncorrelated in the population. In other words, the population correlation matrix is an identity matrix; each variable correlates perfectly with itself ($r = 1$) but has no correlation with the other variables ($r = 0$). The Bartlett's Test of Sphericity was tested through Chi-Square value having a value of 778.060, which is significant at 0% level of significance. Therefore, the above hypothesis is rejected, indicating that the data was suitable for factor analysis.

Factor Analysis

Principle component factor analysis with varimax rotation and Kaiser Normalization was applied. The factor analysis converged into one factors therefore it can be considered all the statements were representing employee behavior only.

Consumer Perception

Reliability test was carried out on consumer perception questionnaire using SPSS software and the result of Cronbach Alpha reliability test is given below:

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.911	.911	10

Reliability test is carried out on questionnaires to evaluate whether the questionnaire is reliable for conducting the study or not. If the value of reliability test is found to be more than 0.7 the questionnaire is considered reliable. Here from the table it can be seen that the value of Cronbach Alpha reliability test is .911 which is more than 0.7 therefore the consumer perception questionnaire was considered reliable for conducting the study.

Kaiser- Meyer-Olkin Measure of Sampling Adequacy and Bartlett’s Test of Sphericity

KMO and Bartlett’s Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.864
Bartlett’s Test of Sphericity	Approx. Chi-Square	567.527
	Df	45
	Sig.	.000

Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy: The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is an index used to examine the appropriateness of factor analysis. High values (between 0.5 and 1.0) indicate factor analysis is appropriate. Values below 0.5 imply that factor analysis may not be appropriate. The Kaiser - Meyer - Olkin Measure of Sampling Adequacy value for the purchase intention measure was 0.864 indicating that the sample was adequate to consider the data suitable for factor analysis.

Bartlett's test of Sphericity: Bartlett's test of sphericity is a test statistic used to examine the hypothesis that the variables are uncorrelated in the population. In other words, the population correlation matrix is an identity matrix; each variable correlates perfectly with itself ($r = 1$) but has no correlation with the other variables ($r = 0$). The Bartlett’s Test of Sphericity was tested through Chi-Square value having a value of 567.527, which is significant at 0% level of significance. Therefore, the above hypothesis is rejected, indicating that the data was suitable for factor analysis.

Factor Analysis

Principle component factor analysis with varimax rotation and Kiser normalization was applied. The factor analysis converged on 2 factors after three iterations. The details about the factors, the factor name, variable number, variable convergence and their Eigen value is given in the table given below:

S. No.	Factor Name	Eigen Value	% of Variance	Items	Item Loading
--------	-------------	-------------	---------------	-------	--------------

1	Overall service Delivery	3.663	36.627	9 Equity of overall service delivery	.910
				7 Competence in overall service delivery	.862
				8 Reliability of overall service delivery	.842
				10 Tangibles: up-to-date range of physical facilities	.760
				6. Enabling/ Empowerment of your development	.540
2	Staff Behavior	3.451	34.508	4 Humaneness in dealing with you	.900
				3 Communication style and information provision	.825
				2 Responsiveness to your needs	.788
				1 Access to overall services	.647
				5 Security of your care	.625

Multiple Regression

Multiple regression was carried out between service quality, physical environment and employee behavior and consumer perception taking service quality, physical environment and employee behavior as independent variable and consumer perception as dependent variable. The result of multiple regression is as follows:

Hypothesis H0 (1): There is no effect of service quality, physical environment and employee behavior on consumer perception where service quality, physical environment and employee behavior are taken as independent variable and consumer perception as dependent variable

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.877 ^a	.769	.761	4.79476
a. Predictors: (Constant), EmployeeBehavior, ServiceQuality, PhysicalEnvironment				
b. Dependent Variable: ConsumerPerception				

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6353.534	3	2117.845	92.122	.000 ^a
	Residual	1908.144	83	22.990		
	Total	8261.678	86			
a. Predictors: (Constant), EmployeeBehavior, ServiceQuality, PhysicalEnvironment						
b. Dependent Variable: ConsumerPerception						

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.760	2.973		2.274	.026
	ServiceQuality	.205	.101	.158	2.034	.045
	PhysicalEnvironment	-.096	.103	-.091	-.933	.353
	EmployeeBehavior	.659	.078	.833	8.396	.000
a. Dependent Variable: ConsumerPerception						

$$Y = a + bx + cx + dx$$

$$Y = 6.760 + .205x + (-.096)x + .659x$$

Where,

X= Service quality, physical environment and employee behavior (independent variable)

Y= Consumer Perception (dependent variable)

The model having service quality, physical environment and employee behavior as independent variable and consumer perception as dependent variable has good fit as indicated by F-test value which is 92.122 significant at .000 level of significance. The result of regression table from the coefficient table indicates that service quality, and employee behavior has significant cause and effect relationship with consumer perception having beta values of .158 and .833 tested through t-test having t-value of 2.034 and 8.396 which are significant at .045 and .000 level of significance whereas it was found that physical environment has a negative cause and effect relationship with consumer perception having beta value of -.091 tested through t test having t-value of -.933 at .353 level of significance indicating no significant effect of physical environment on consumer perception. The model summary table indicates that service quality, physical environment and employee behavior in combination has 76.1% effect on consumer perception since the adjusted r square value of table is .761, therefore the null hypothesis is rejected indicating that there is a significant cause and effect relationship between service quality, physical environment and employee behavior are taken as independent variable and consumer perception as dependent variable

Linear Regression

Hypothesis H0 (2): There is no effect of service quality on consumer perception where service quality is taken as independent variable and consumer perception as dependent variable

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.685 ^a	.469	.463	7.18335
a. Predictors: (Constant), ServiceQuality				
b. Dependent Variable: ConsumerPerception				

ANOVA ^b						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3875.633	1	3875.633	75.108	.000 ^a
	Residual	4386.045	85	51.601		
	Total	8261.678	86			
a. Predictors: (Constant), ServiceQuality						
b. Dependent Variable: ConsumerPerception						

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	13.544	4.223		3.207	.002
	ServiceQuality	.889	.103	.685	8.667	.000
a. Dependent Variable: ConsumerPerception						

Y= a+ bx

Y= 13.544 + .889x

Where,

X= Service Quality (independent variable)

Y= Consumer Perception (dependent variable)

The model having service quality as independent variable and consumer perception as dependent variable has good fit as indicated by F-test value which is 75.108 significant at .000 level of significance. The result of regression table from the coefficient table indicates that service quality has very high cause and effect relationship with consumer perception having beta value of .685 tested through t-test having t-value of 8.667 which is significant at .000 level of significance. The model summary table indicates that service quality has 46.9% effect on consumer perception since the r square value of table is .469, therefore the null hypothesis is rejected indicating that there is a significant cause and effect relationship between service quality as independent variable and consumer perception as dependent variable.

Hypothesis H0 (3): There is no effect of physical environment on consumer perception where physical environment is taken as independent variable and consumer perception as dependent variable

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.706 ^a	.499	.493	6.97725
a. Predictors: (Constant), PhysicalEnvironment				
b. Dependent Variable: ConsumerPerception				

ANOVA ^b						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4123.710	1	4123.710	84.707	.000 ^a
	Residual	4137.968	85	48.682		
	Total	8261.678	86			
a. Predictors: (Constant), PhysicalEnvironment						
b. Dependent Variable: ConsumerPerception						

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	14.805	3.846		3.849	.000
	PhysicalEnvironment	.751	.082	.706	9.204	.000
a. Dependent Variable: ConsumerPerception						

Y= a+ bx

Y= 14.805 + .751x

Where,

X= Physical Environment (independent variable)

Y= Consumer Perception (dependent variable)

The model having physical environment as independent variable and consumer perception as dependent variable has good fit as indicated by F-test value which is 84.707 significant at .000 level of significance. The result of regression table from the coefficient table indicates that service quality has very high cause and effect relationship with consumer perception having beta

value of .706 tested through t-test having t-value of 9.204 which is significant at .000 level of significance. The model summary table indicates that physical environment has 49.9% effect on consumer perception since the r square value of table is .499, therefore the null hypothesis is rejected indicating that there is a significant cause and effect relationship between physical environment as independent variable and consumer perception as dependent variable

Hypothesis H0 (4): There is no effect of employee behavior on consumer perception where employee behavior is taken as independent variable and consumer perception as dependent variable

Model Summary^a				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.870 ^a	.757	.754	4.85912
a. Predictors: (Constant), EmployeeBehavior				
b. Dependent Variable: ConsumerPerception				

ANOVA^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6254.741	1	6254.741	264.908	.000 ^a
	Residual	2006.937	85	23.611		
	Total	8261.678	86			
a. Predictors: (Constant), EmployeeBehavior						
b. Dependent Variable: ConsumerPerception						

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.873	2.552		3.477	.001
	EmployeeBehavior	.688	.042	.870	16.276	.000
a. Dependent Variable: ConsumerPerception						

$Y = a + bx$

$Y = 8.873 + .688x$

Where,

X= Employee Behavior (independent variable)

Y= Consumer Perception (dependent variable)

The model having employee behavior as independent variable and consumer perception as dependent variable has good fit as indicated by F-test value which is 264.908 significant at .000 level of significance. The result of regression table from the coefficient table indicates that employee behavior has very high cause and effect relationship with consumer perception having beta value of .870 tested through t-test having t-value of 16.276 which is significant at .000 level of significance. The model summary table indicates that employee behavior has 75.7% effect on consumer perception since the r square value of table is .757 therefore the null hypothesis is rejected indicating that there is a significant cause and effect relationship between employee behavior as independent variable and consumer perception as dependent variable.

CONCLUSION

Self designed questionnaires were developed for evaluating service quality, physical environment, employee behavior and consumer perception.

Different test were applied on the data which was collected through questionnaire such as Item to total correlation which identifies the internal consistency of the questionnaire, reliability tests cron bach alpha was applied to check the reliability of the questionnaire, factor analysis was applied to find out the underlying factors of the questionnaire.

Linear regression as well as multiple regression was applied to find out the relationship between different variables of the study and it was found that service quality, physical environment, employee behavior has a significant effect on consumer perception in combination and individually.

In the end from the results it can be concluded that service organizations should concentrate on service quality, physical environment and employee behavior for convincing consumers to use their services.

REFERENCES

- A.K. Srivastava (2008). Banaras Hindu University, Varanasi Effect of Perceived Work Environment on Employees' Job Behaviour and Organizational Effectiveness, *Journal of the Indian Academy of Applied Psychology*, 34(1), 47-55.
- Bagozzi, Richard P. (1992). The Self-regulation of Attitudes, Intentions, and Behavior, *Social Psychology Quarterly*, 55, 178-204.
- Baker, J., D. Grewal, and A. Parasuraman. (1994). The influence of store environment on quality inferences and store image. *Journal of the Academy of Marketing Science* 22 (4), 328-39.
- Berry, L. L., and S. S. Lampo. (2004). Branding labour-intensive services. *Business Strategy Review*, 15(1), 18-25.
- Bitner, M. J. (1990). Evaluating service encounters: The effects of physical surroundings and employee responses. *Journal of Marketing* 54, 69-82.
- Bitner, Mary Jo (1992), Service scapes: The Impact of Physical Surroundings on Customers and Employees, *Journal of Marketing*, 56(2).
- Ching-Fu Chen (2005). Investigating structural relationships between service quality, perceived value, satisfaction, and behavioral intentions for air passengers: Evidence from Department of Transportation & Communication Management Science, National Cheng Kung University, Tainan 701, Taiwan, ROC, 709-717
- Cooper, C. L., & Cartwright, S. (1996). *Mental Health and Stress in the Workplace: A Guide for Employers*. London: HMSO.
- Eileen A. Wall and Leonard L. Berry (2007). The Combined Effects of the Physical Environment and Employee Behavior on Customer Perception of Restaurant Service Quality Cornell Hotel and Restaurant. *Administration Quarterly*, 48 -59
- Eric R. Spangenberg, Ayn E. Crowley and Pamela W. Henderson (1996). Improving the store environment: Do olfactory cues affect Evaluations and Behavior. *Journal of Marketing*, 60, 67-80
- Guest, D., & Conway, N. (2004). Employee Well-Being and the Psychological Contract, *A Research Report*. London: CIPD

- Hong Qin (2008). Determinants of Customer-Perceived Service Quality in Fast-Food Restaurants and their relationship to Customer Satisfaction and Behavioral Intention. *Quality Management Journal*, 15(2), 35-50
- Huang, Y. H., Robertson, M. M., & Chang, K. I. (2004). The role of environmental control on environmental satisfaction, communication, and psychological stress: effects of office ergonomics training. *Environment and Behavior*, 36(1), 617-638.
- Hui, Michael K. – Alan C. Tse-Lianxi Zhou (2006). Interaction between two types of information on reactions to delays. In: *Market Lett.* (151-162).
- Hui, Michael K. & David K. Tse (1996). What to tell Consumers in Waits of Different Lengths: An Integrative Model of Service Evaluation. *Journal of Marketing*. 60, 81-90.
- J. Joseph Cronin, JR. Florida State University, Michael K. Brady Boston College, G. Tomas M.Hult Florida State University (2000) Assessing the Effects of Quality, Value, and Customer Satisfaction on Consumer Behavioral Intentions in Service Environments. *Journal of Retailing*, 76(2), 193–218.
- Joost W.M. Verhoeven, Ad Th. H. Pruyn, Marcel E. Pieterse, Effects of Joost W.M. Verhoeven, Marcel E. Pieterse, Ad Th. H. Pruyn. (2006). University of Twente Effects of Interior Color on Healthcare Consumers: A 360 degree Photo Simulation Experiment. *Advances in Consumer Research*, 33, 293
- Katz, K. L., B. M. Larson, and R. C. Larson. (1991). Prescription for the waiting-in-line blues: Entertain, enlighten and engage. *Sloan Management Review* 32 (2), 44-53.
- Kornhauser, A. (1965). *Mental Health of the Industrial Worker*. New York: Wiley. Kotler, P. 1973. Atmospherics as a marketing tool. *Journal of Retailing* 49 (4), 48-64
- Kotler, P. (1973). Atmospherics as a marketing tool. *Journal of Retailing*, 49(4), 48-65
- Oliva, T. A., Oliver, R. L. and MacMillan, I.C. (1992). A catastrophe model for developing service satisfaction strategies. *Journal of Marketing*. 56 (July), 83-95
- McGuire, D. & McLaren, L. (2007). The Impact of Physical Environment on Employee Commitment in Call Centres: The Mediating Role of Employee Well-Being, Presented at the Academy of Human Resource Development Conference, Indianapolis, Indiana, 1 - 4th March 2007.
- Mehrabian, A., and J. A. Russell. (1974). *An approach to environmental psychology*. Cambridge, MA: MIT Press. Spangenberg, E. R., A. E. Crowley, and P. W. Henderson. 1996. Improving the store environment: Do olfactory
- Michael K. Brady & J. Joseph Cronin Jr. (2001). Some New Thoughts on Conceptualizing Perceived Service Quality. *A Hierarchical Approach Journal of Marketing*, 65, 34–49
- Mohr, R. (1996). Office Space is a Revenue Enhancer, Not an Expense. *National Real Estate Investor*, 38(7), 46-47.
- Statt, D. A. (1994). *Psychology of Work*. London: Macmillan
- Sutherland, Valerie J. and Cooper, Cary L. (1990) *Understanding stress: A psychological perspective for health professionals*, Stress management; Stress (Psychology), Chapman and Hall (London and New York), 1st edition Book (ISBN 0412339307) 307 p.
- Thorndike, E. L. (1920). A constant error in psychological ratings. *Journal of Applied Psychology*, 4, 25-29.
- Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal*, 40(1), 82.
- Woodruff, Robert B. (1997). Customer Value: The Next Source for Competitive Advantage, *Journal of the Academy of Marketing Science*, 25 (Spring): 139–153
- Zeithaml, V. A., L. L. Berry, and A. Parasuraman. 1993. The nature and determinants of customer expectations of service. *Journal of the Academy of Marketing Science*, 21:1-12.
- http://en.wikipedia.org/wiki/Quality_of_service

- <http://www.enotes.com/enotes-teachers/q-and-a/what-definition-importance-physical-environment-147171>
- <http://www.google.co.in/search?hl=en&q=%22Consumer+Perception%22&meta=>
- www.marketingprofs.com/ea/qst_question.asp?qstID=8556